

1 **SUPPLEMENTARY INFORMATION**

2 **for**

Analysis of *Arabidopsis thaliana* Redox Gene Network Indicates Evolutionary

Expansion of Class III Peroxidase in Plants

3

4

5 Authors: Raffael Azevedo de Carvalho Oliveira^{1,2}; Abraão Silveira de Andrade¹; Danilo

6 Oliveira Imparato¹; Juliana Gabriela Silva de Lima²; Ricardo Victor Machado de Almeida²;

7 João Paulo Matos Santos Lima^{1,2}; Matheus Augusto de Bittencourt Pasquali^{3,4,5}; Rodrigo

8 Juliani Siqueira Dalmolin^{1,2*}

10 ¹Bioinformatics Multidisciplinary Environment - IMD, Federal University of Rio Grande do
11 Norte, Natal, Brazil;

12 ²Department of Biochemistry, Federal University of Rio Grande do Norte, Natal, Brazil.

13 ³Institute of Tropical Medicine, Federal University of Rio Grande do Norte, Natal, Brazil.

14 ⁴Unidade Acadêmica de Engenharia de Alimentos, UAEALI, UFCG

15 ⁵Programa de Pós-graduação em Recursos Naturais, PPGRN, UFCG

16

17

18 * Corresponding author

19

20

Rodrigo Juliani Siqueira Dalmolin

21

BioME – Bioinformatics Multidisciplinary Environment.

22

Address: Rua Odilon Gomes de Lima, 1722, Natal – RN. Brazil. Zip code 59078-400.

23

e-mail: rodrigo.dalmolin@imd.ufrn.br

24

25

Contents

SUPPLEMENTARY RESULTS AND DISCUSSION.....	3
Network clusters connectivity.....	3
Evolutionary roots of all network nodes.....	3
Class III peroxidase orthologs abundance.....	3
<i>Marchantia polymorpha</i> orthologs.....	4
Evolutionary trees of orthologous groups.....	4
SUPPLEMENTARY FIGURES LEGENDS.....	5
SUPPLEMENTARY TABLES LEGENDS.....	7

27 1. SUPPLEMENTARY RESULTS AND DISCUSSION

28 1.1. Network clusters connectivity

29 Supplementary Figure S1 shows the node degree distribution of the network clusters.
30 In (a) is depicted node degree distribution of all proteins from *class III peroxidase* cluster
31 (red continuous line) *versus* the node degree distribution of all proteins in the network
32 (black dotted line), disregarding chemical compounds; In (b) is depicted node degree
33 distribution of all proteins from *general* cluster (blue continuous line) *versus* the node
34 degree distribution of all proteins in the network (black dotted line), disregarding chemical
35 compounds. This result shows that connectivity is higher in the *general* cluster than *class*
36 *III peroxidase* cluster; the latter cluster is composed solely by class III peroxidases, which
37 have few connections between each other, whilst proteins of *general* cluster are well
38 connected.

39

40 1.2. Evolutionary roots of all network nodes

41 In order to assess evolutionary roots of every gene present in the network, the
42 *geneplast* R/Bioconductor was used. As described in Methods, it calculates the
43 evolutionary root based on orthology information. Supplementary Figure S2 shows the
44 eukaryote species tree from STRINGdb (a), and the redox network of *A. thaliana* (b). This
45 figure is like the one presented in Figure 3, but with evolutionary root information about
46 every gene in the analysis. Colored diamonds on root labels are linked to node color in the
47 network: color code range from blue (more ancient root) to orange (more recent root). It is
48 noteworthy that almost all proteins that emerged in root 9 (which represents the last
49 common ancestor of land plants) belong to the *class III peroxidase* cluster. Supplementary
50 Figure S3 depicts a projection of the network, showing the emergence of new nodes at
51 each root of the species tree. Most of the *general* cluster emerged at the roots of
52 eukaryotes.

53

54 1.3. Class III peroxidase orthologs abundance

55 The following analysis were made to verify the abundance of class III peroxidases in
56 the 20 species of land plants (present on STRINGdb v10). Supplementary Figure S4
57 shows a boxplot of class III peroxidase orthologs abundance, which was calculated by the
58 mean of:

$$\frac{\text{Number of CIII Prx orthologs}}{\text{Total gene count}}$$

59

60 for each species. In (a) is depicted the abundance of class III peroxidase orthologs using
61 *A. thaliana* orthologs, and (b) the abundance using *O. sativa* orthologs. The results obtained
62 indicates that the same pattern is present, using different sources of orthologous groups,
63 which corroborates with the established hypothesis.

64

65 **1.4. *Marchantia polymorpha* orthologs**

66 Data regarding annotation of *M. polymorpha* class III peroxidases were obtained from
67 PeroxiBase. Orthogroup annotation from PeroxiBase was used to obtain orthology
68 information of *M. polymorpha*. We identified 8 orthogroups shared by *M. polymorpha*, *A.*
69 *thaliana*, and *O. sativa*, containing 22 *M. polymorpha* orthologs; 1 orthogroup shared by *M.*
70 *polymorpha* and *A. thaliana* (without any *O. sativa* ortholog), containing 1 *M. polymorpha*
71 ortholog; and 1 orthogroup shared by *M. polymorpha* and *O. sativa* (without any *A.*
72 *thaliana* ortholog), containing 2 *M. polymorpha* orthologs. The results are shown in
73 Supplementary Figure S5.

74

75 **1.5. Evolutionary trees of orthologous groups**

76 Finally, Supplementary Figures S6-S125 shows the most parsimonious scenario for
77 the 119 orthologous groups obtained in the analysis. Each tree represents an orthologous
78 group, which contains one or more genes present in the network. All but PER68
79 (AT5G58400) were in the analysis.

80 2. SUPPLEMENTARY FIGURES LEGENDS

81 **Supplementary Figure S1:** Degree distribution of the network clusters, taking into
82 account only protein-protein interaction. (a) Degree distribution of proteins from *class III*
83 *peroxidase* cluster (red). Dotted lines shows degree distribution of whole network,
84 disregarding chemical compounds. (B) Degree distribution (blue line) of proteins from
85 *general* cluster. Dotted lines shows degree distribution of whole network, disregarding
86 chemical compounds.

87

88 **Supplementary Figure S2:** Evolutionary scenario of *Arabidopsis thaliana* redox network.
89 In (a) is depicted the eukaryote species tree from STRING v10.5. Each leaf node denotes
90 an species and their phylogeny is drawn in the tree. Root nodes represents the last
91 common ancestor (LCA) for each taxon. Colored diamonds aside each root node assign
92 color for the network in (b). Supplementary Figure S2 (b) shows the same redox network,
93 but with evolution scenario for all network nodes. Colors range from dark blue (more
94 ancient) to dark orange (more recent). Red nodes have no annotation for evolutionary root.

95

96 **Supplementary Figure S3:** Projection of evolutionary roots in the network. This figure
97 shows how the redox network of *A. thaliana* have arised and organized its connections.
98 Network organization ranging from more ancient proteins (dark blue, root 19) to more
99 recent proteins (root 3, dark orange). Red nodes have no annotation for evolutionary root,
100 and therefore accounted for root 0.

101

102 **Supplementary Figure S4:** Class III peroxidase abundace. (a) Shows a boxplot of the
103 class III peroxidase abundance in each taxon analyzed. Eudicots were analyzed using
104 orthologous groups obtained from STRING v10, using *A. thaliana* class III peroxidases as
105 query. (b) Shows a boxplot of the class III peroxidase abundance in each taxon analyzed.
106 Monocots were analyzed using orthologous groups obtained from STRING v10, using *O.*
107 *sativa* class III peroxidases as query.

108

109 **Supplementary Figure S5:** Class III peroxidase orthologs abundance. Bars indicate the
110 abundance of class III peroxidase isozymes by species of each taxonomic group
111 (*Marchantia polymorpha*, *Physcomitrella patens*, *Selaginella moellendorffii*, Eudicots - 8
112 species, and Monocots - 10 species). Colors indicate whether the OG have *A. thaliana*
113 orthologs (AT orthologous groups - pink), *O. sativa* orthologs (OS orthologous groups -
114 green) or orthologs from both species (Common to AT and OS - blue). Dendrogram at the

115 bottom shows the evolutionary relationship among the groups, and its estimated
116 divergence times (in millions of years – Mya). Abundance is calculated as the mean of
117 number of class III peroxidase orthologs divided by the gene count of each species.

118

119 **Supplementary Figures S6-125:** The figures S6 to S125 shows the evolutionary roots for
120 the 119 COGs obtained in our analysis, built using package *geneplast*. In all figures, green
121 circles represents COG present in that species, and gray circles, absence. Red-hollow
122 diamond represents inferred root for a given COG and the D-score, which estimates
123 stability of the inferred root. P-values are generated by permutation analysis.

124 3. SUPPLEMENTARY TABLES LEGENDS

125 **Supplementary Table S1:** This table brings description of all genes used in our analysis.
126 First column indicates STRING ID for each protein; the second column indicates the locus
127 ID for each protein; third column shows the alias obtained from STRING v10; fourth
128 column shows alias obtained from PeroxiBase; fifth column shows the defined name
129 shown in the networks; sixth column indicates protein class (whether is a peroxidase
130 (PRX), thiol-redox (TR), SOD or other oxido-reductase); the seventh column indicates
131 protein annotation obtained from STRING v10; eighth column indicates the orthologous
132 group that each gene is part of; ninth column indicates the inferred evolutionary root
133 calculated by *geneplast* for each orthologous group; tenth column shows the D-score for
134 each root; eleventh column shows the adjusted P-value of the *geneplast* analysis, and the
135 twelfth column shows whether the gene was found only in the GO search (our), PeroxiBase
136 search (peroxibase), or in both (intersect).

137

138 **Supplementary Table S2:** This table describes the 15 chemical compounds used in our
139 network analysis. The first column indicates the chemical element name, followed in the
140 second column by its formula. The third and fourth columns show identifiers for different
141 databases: KEGG and PubChem. Hydride and Ozone did not have entries in KEGG
142 database, therefore have empty values.

143

144 **Supplementary Table S3:** This table shows information regarding the 77 genes that not
145 connect with the network main component. The first column indicates STRING ID for each
146 protein; the second column indicates the locus ID for each protein; third column shows the
147 alias obtained from STRING v10; fourth column shows alias obtained from PeroxiBase;
148 fifth column shows the defined name shown in the networks; sixth column indicates protein
149 class (whether is a peroxidase (PRX), thiol-redox (TR), SOD or other oxido-reductase);
150 the seventh column indicates protein annotation obtained from STRING v10; eighth
151 column indicates the orthologous group that each gene is part of; ninth column indicates
152 the inferred evolutionary root calculated by *geneplast* for each orthologous group; tenth
153 column shows the D-score for each root; eleventh column shows the adjusted P-value of
154 the *geneplast* analysis, and the twelfth column shows whether the gene was found only in
155 the GO search (our), PeroxiBase search (peroxibase), or in both (intersect).

156

157 **Supplementary Table S4:** This table provides information about gene abundance of the
158 whole network, using orthology information obtained from *A. thaliana* OGs. The OGs were

159 divided according to the function related to. In total, 44 COGs class III peroxidase-related;
160 8 peroxidase-related; 4 SOD-related, 28 thiol-redox related, and 35 COGs related to other
161 oxido-reductases. Each column represents one of the 20 land plant species. The STRING
162 identifier for each species is provided above its name.

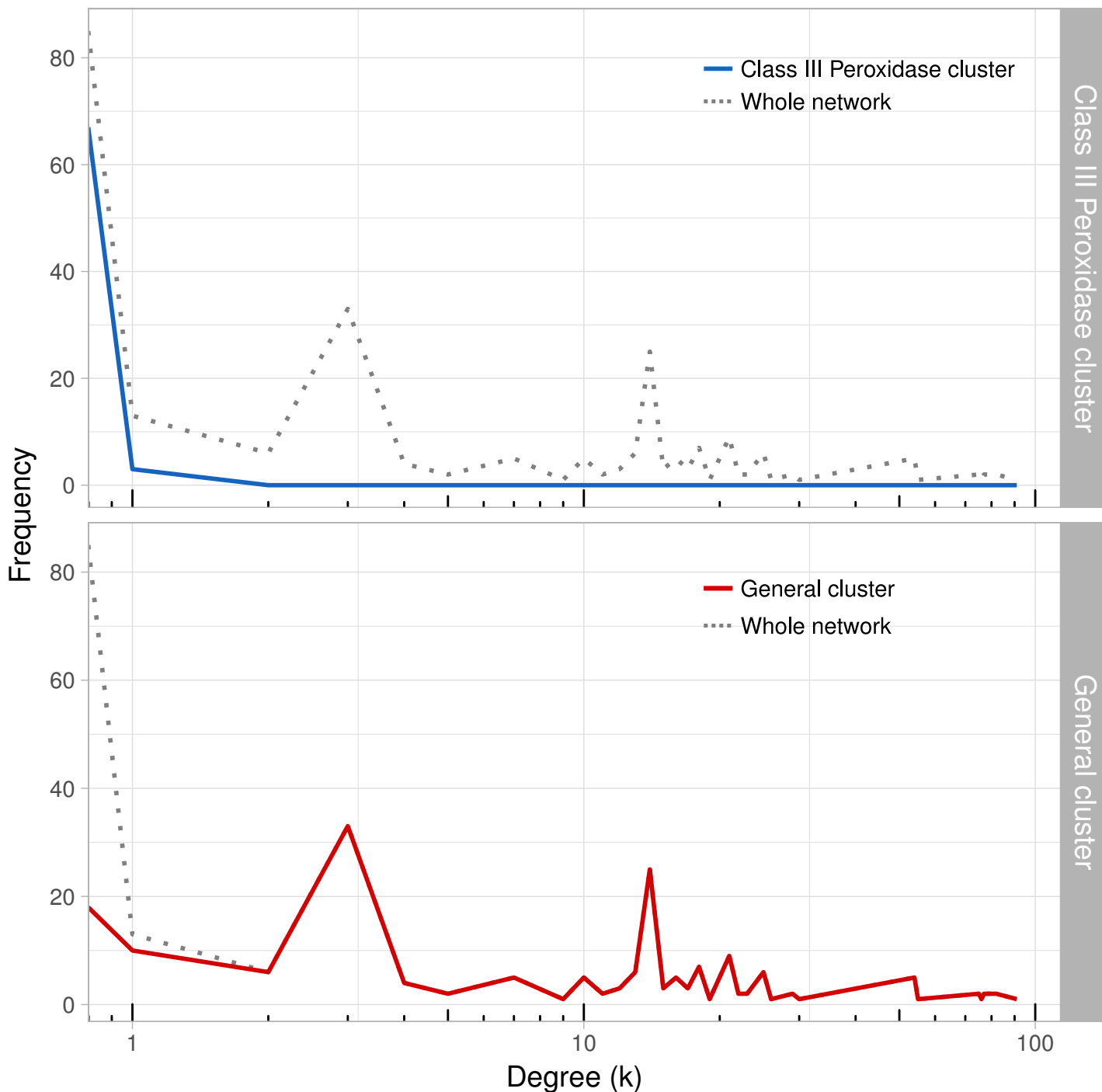
163

164 **Supplementary Table S5:** This table provides information of class III protein abundance,
165 using orthology information obtained from *O. sativa* COGs. 44 COGs were used in this
166 table. Each column represents one of the 20 land plant species, which are divided based
167 on its taxonomic group. The STRING identifier for each species is provided above its
168 name. The ortholog count, total of genes and the class III genes ratio is provided for each
169 species in the last lines. This ratio is the total amount of class III orthologs divided by the
170 total number of genes for each species.

Supplementary Figure S1

Network degree distribution

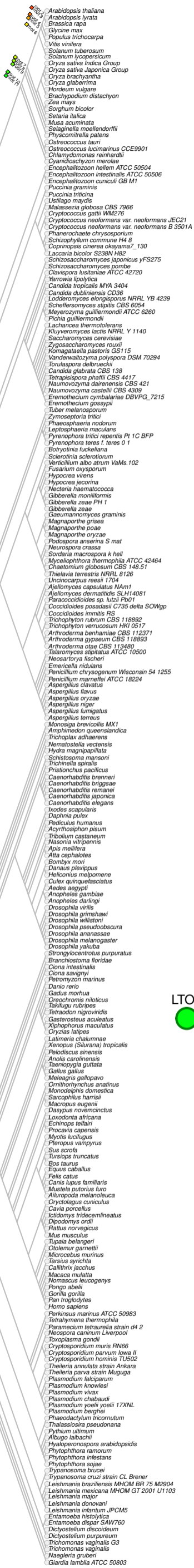
No chemicals



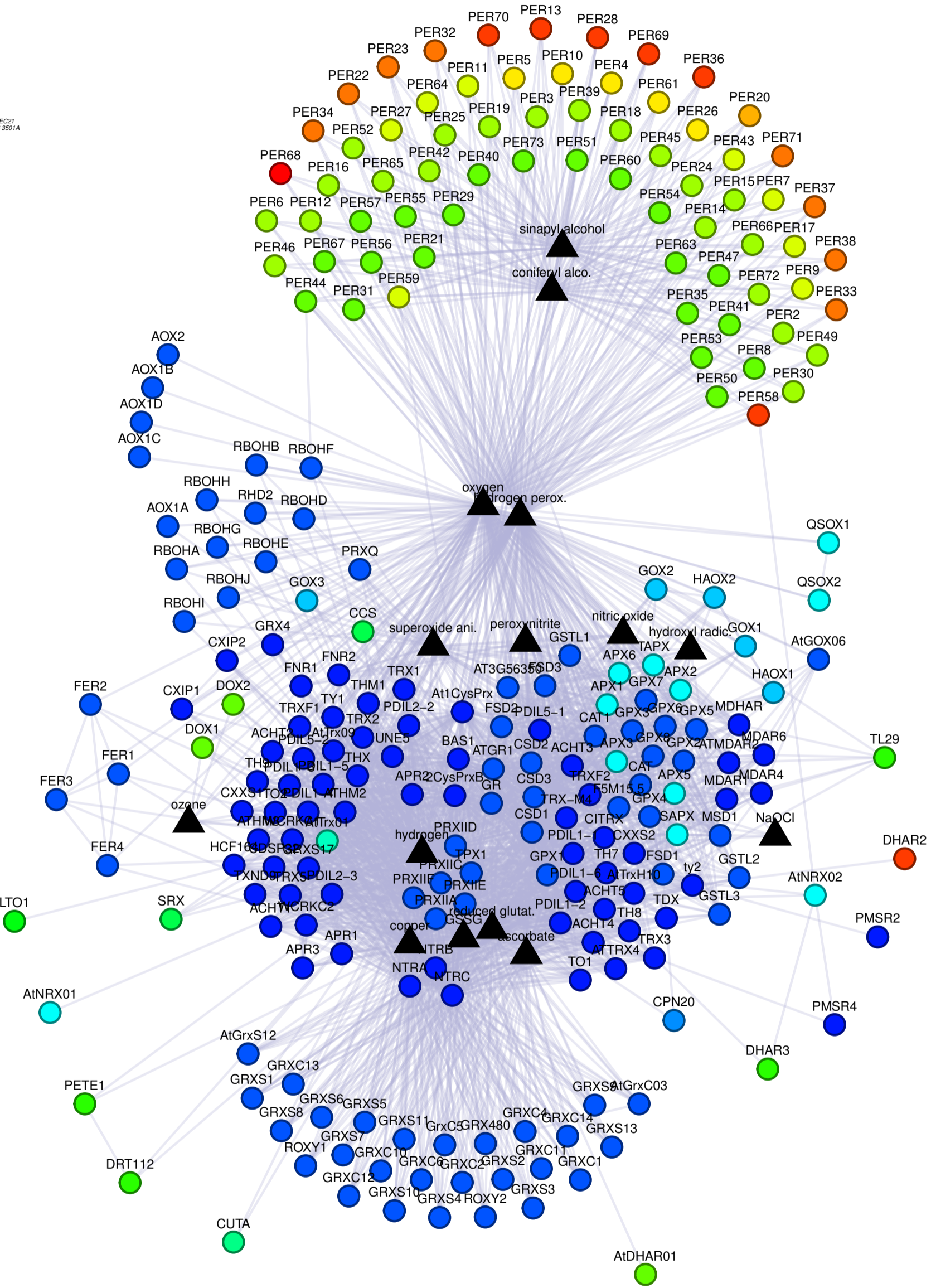
Supplementary Figure S1: Degree distribution of the network clusters, taking into account only protein-protein interaction. (a) Degree distribution of proteins from class III peroxidase cluster (red). Dotted lines shows degree distribution of whole network, disregarding chemical compounds. (b) Degree distribution (blue line) of proteins from general cluster. Dotted lines shows degree distribution of whole network, disregarding chemical compounds.

Supplementa Figure S2

a

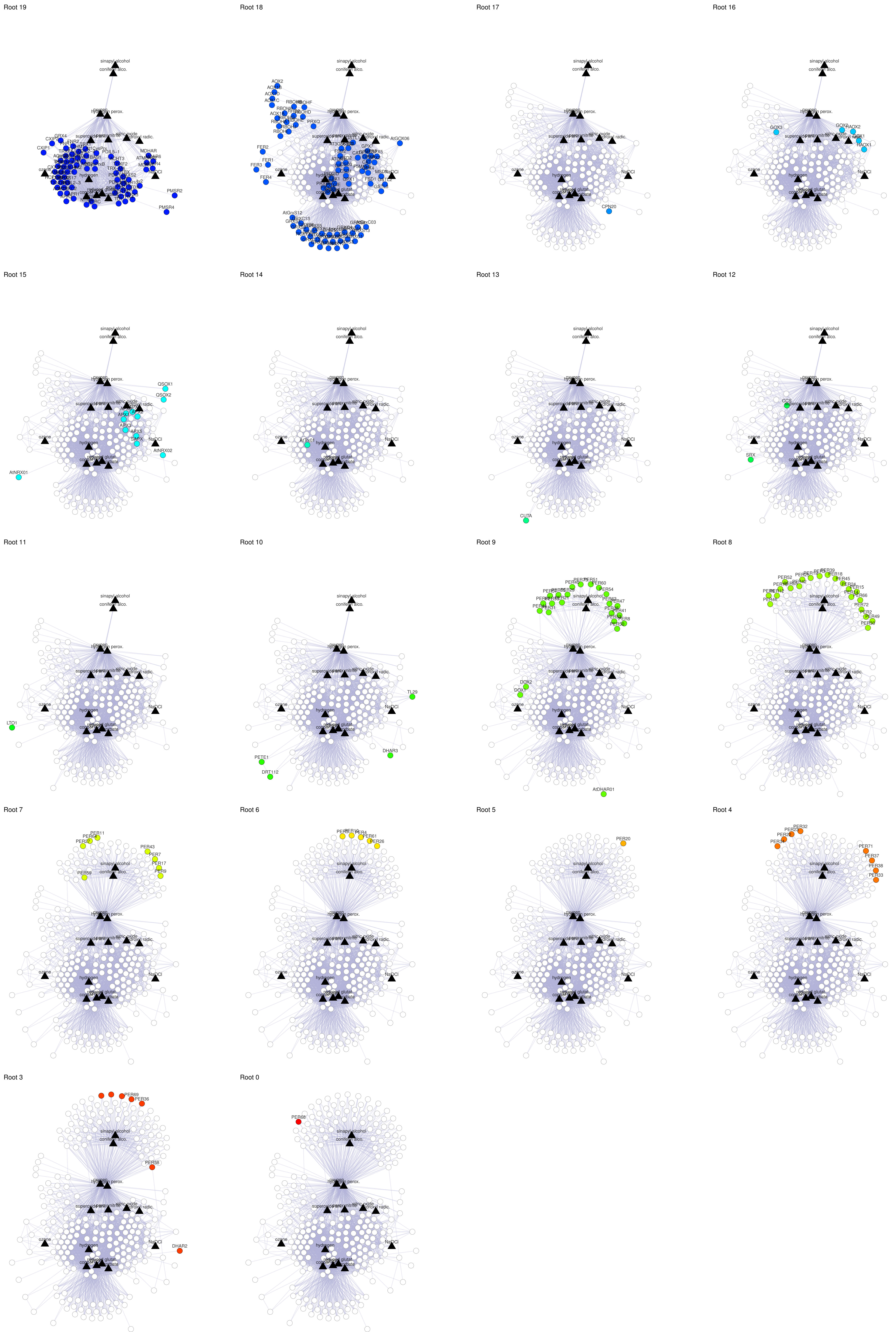


b



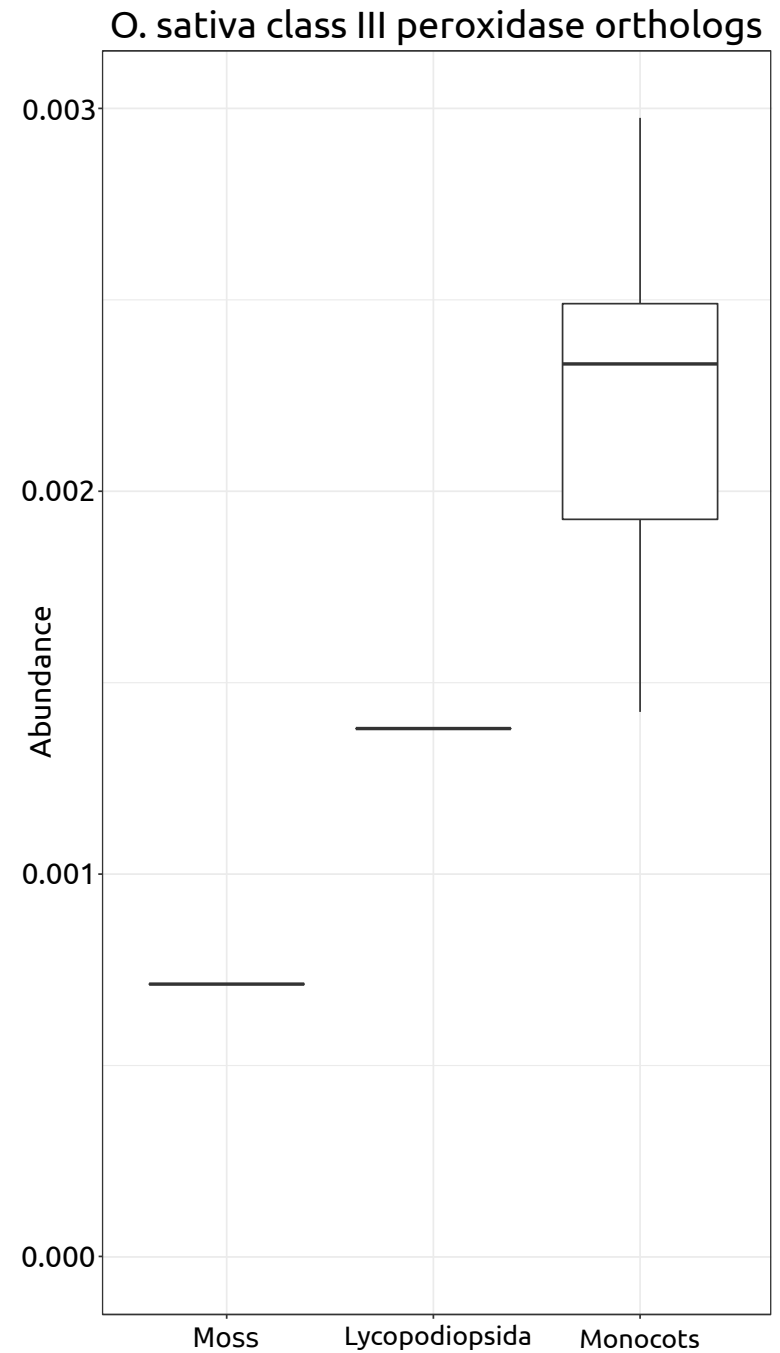
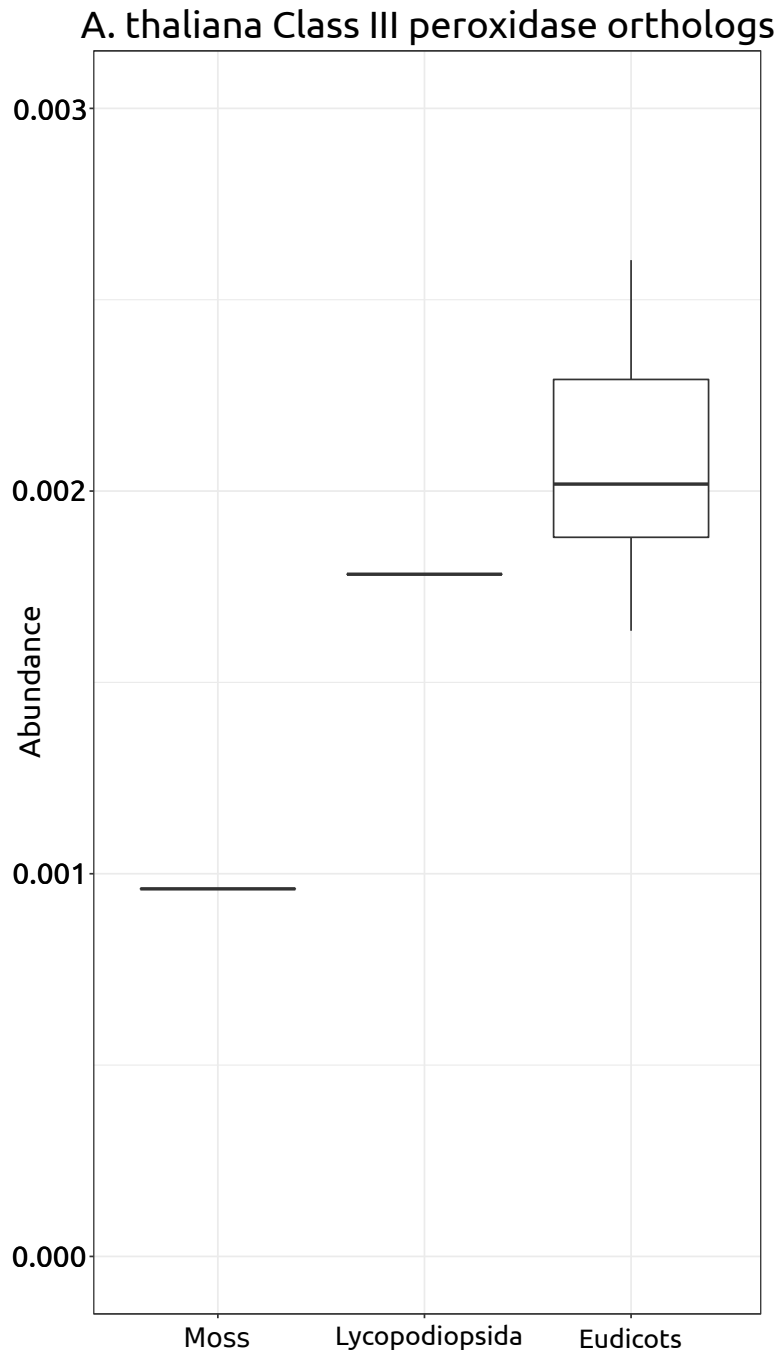
Supplementary Figure S2: Evolutionary scenario of Arabidopsis thaliana redox network. In (a) is depicted the eukaryote species tree from STRING v10.5. Each leaf node denotes an species and their phylogeny is drawn in the tree. Root nodes represents the last common ancestor (LCA) for each taxon. Colored diamonds aside each root node assign color for the network in (b). Supplementary Figure S2 (b) shows the same redox network, but with evolution scenario for all network nodes. Colors range from dark blue (more ancient) to dark orange (more recent). Red nodes have no annotation for evolutionary root.

Supplementary Figure S3



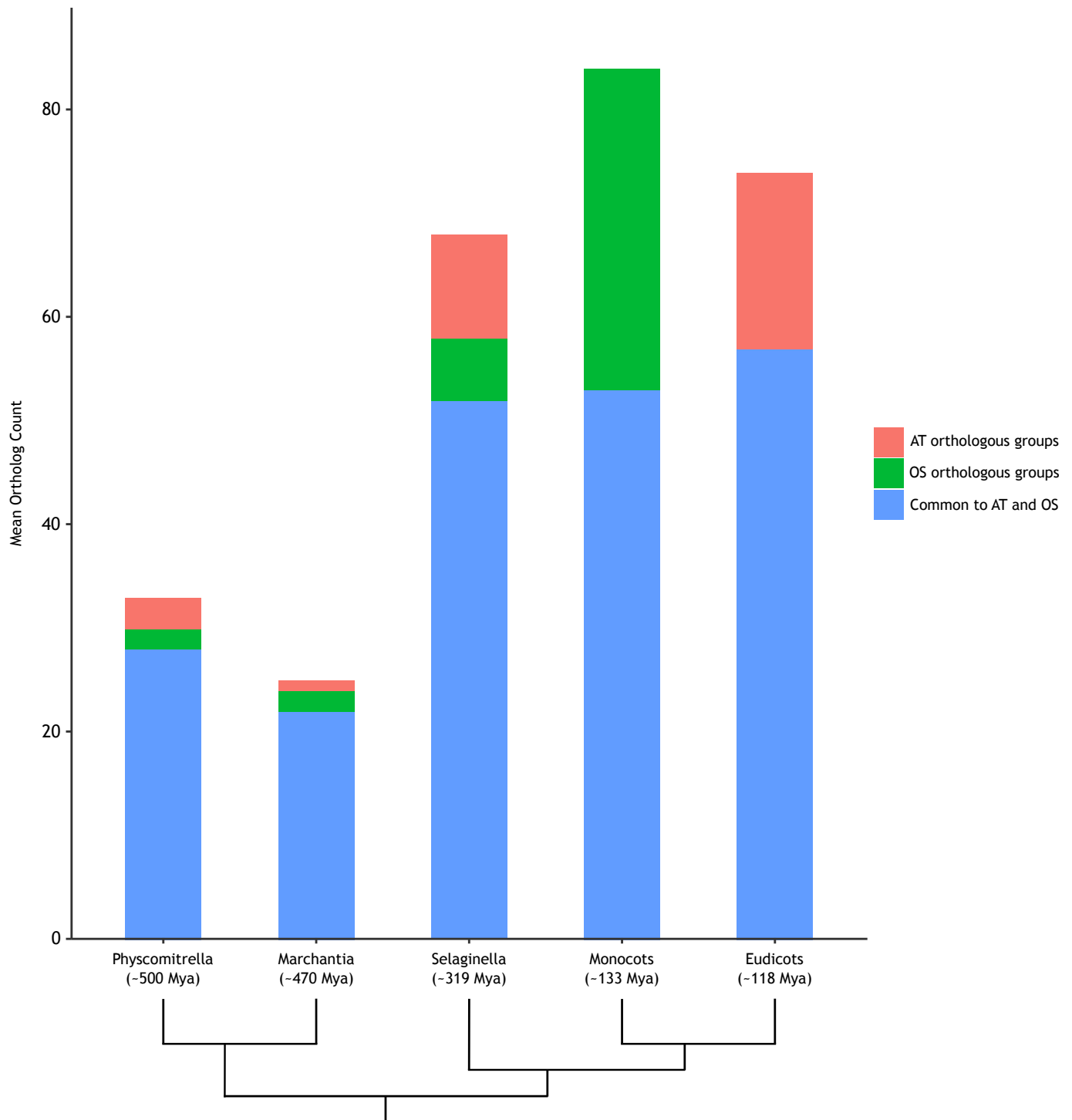
Supplementary Figure S3: Projection of evolutionary roots in the network. This figure shows how the redox network of *A. thaliana* have arisen and organized its connections. Network organization ranging from more ancient proteins (dark blue, root 19) to more recent proteins (root 3, dark orange). Red nodes have no annotation for evolutionary root, and therefore accounted for root 0.

Supplementary Figure S4



Supplementary Figure S4: Class III peroxidase abundance. (a) Shows a boxplot of the class III peroxidase abundance in each taxon analyzed. Eudicots were analyzed using orthologous groups obtained from STRING v10, using *A. thaliana* class III peroxidases as query. (b) Shows a boxplot of the class III peroxidase abundance in each taxon analyzed. Monocots were analyzed using orthologous groups obtained from STRING v10, using *O. sativa* class III peroxidases as query.

Supplementary Figure S5



Supplementary Figure S5: Class III peroxidase orthologs abundance. Bars indicate the abundance of class III peroxidase isozymes by species of each taxonomic group (*Marchantia polymorpha*, *Physcomitrella patens*, *Selaginella moellendorffii*, Eudicots - 8 species, and Monocots - 10 species). Colors indicate whether the OG have *A. thaliana* orthologs (AT orthologous groups - pink), *O. sativa* orthologs (OS orthologous groups - green) or orthologs from both species (Common to AT and OS - blue). Dendrogram at the bottom shows the evolutionary relationship among the groups, and its estimated divergence times (in millions of years - Mya). Abundance is calculated as the mean of number of class III peroxidase orthologs divided by the gene count of each species.

COG0175

- Arabidopsis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyeromyza guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairenensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospora anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Pb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echirips telfairii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluopoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Uctidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

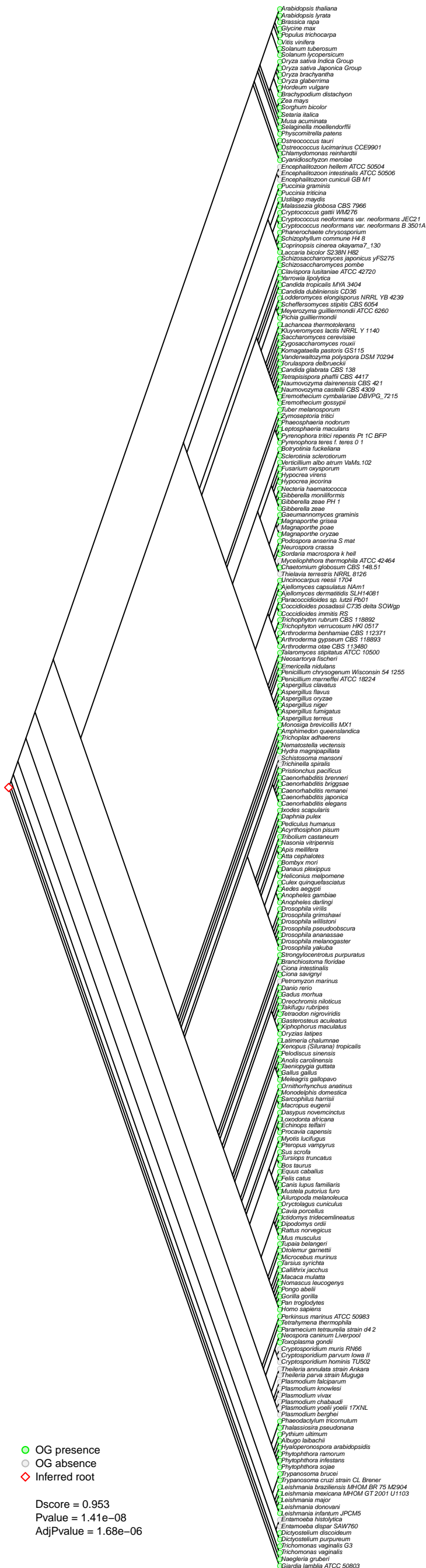
- OG presence
- OG absence
- ◊ Inferred root

Dscore = 0.917

Pvalue = 2.86e-07

AdjPvalue = 3.40e-05

COG0225



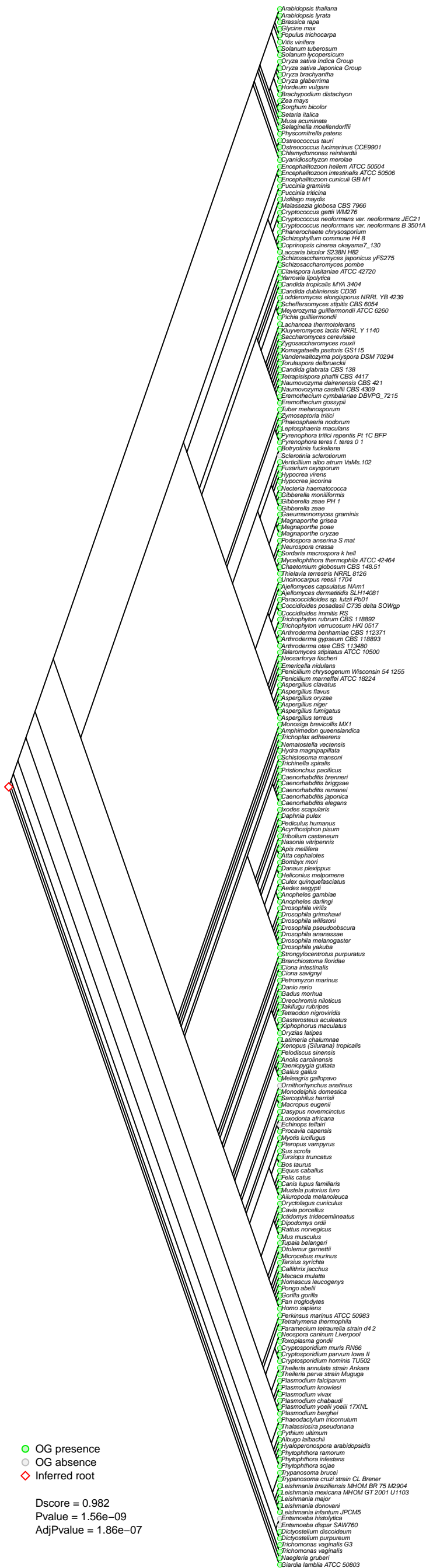
COG0234

- Arabidopsis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Malassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyeromyza guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulaspora delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zygomycetozia tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospora anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Pb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Nodds scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrthosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconia melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Dryzius latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telfairii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Turdus truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluopoda melanoleuca
- Cryptolegus cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupia belangerii
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albigo lalibachii
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dictyostellium discoideum
- Dictyostellium purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

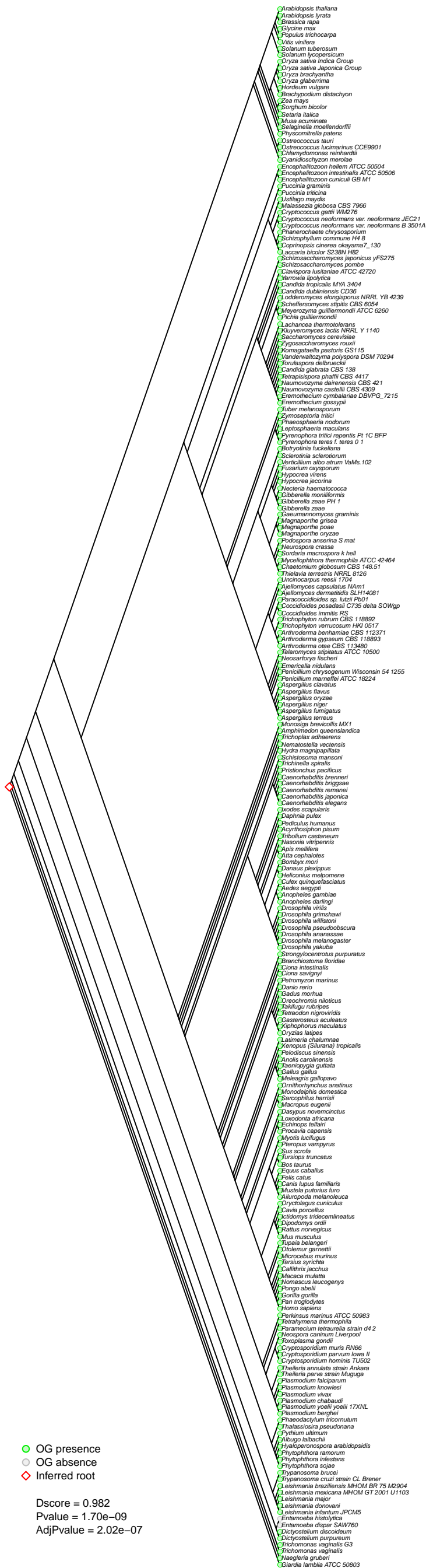
- OG presence
- OG absence
- ◆ Inferred root

Dscore = 0.976
Pvalue = 2.91e-07
AdjPvalue = 3.46e-05

COG0278



COG0369



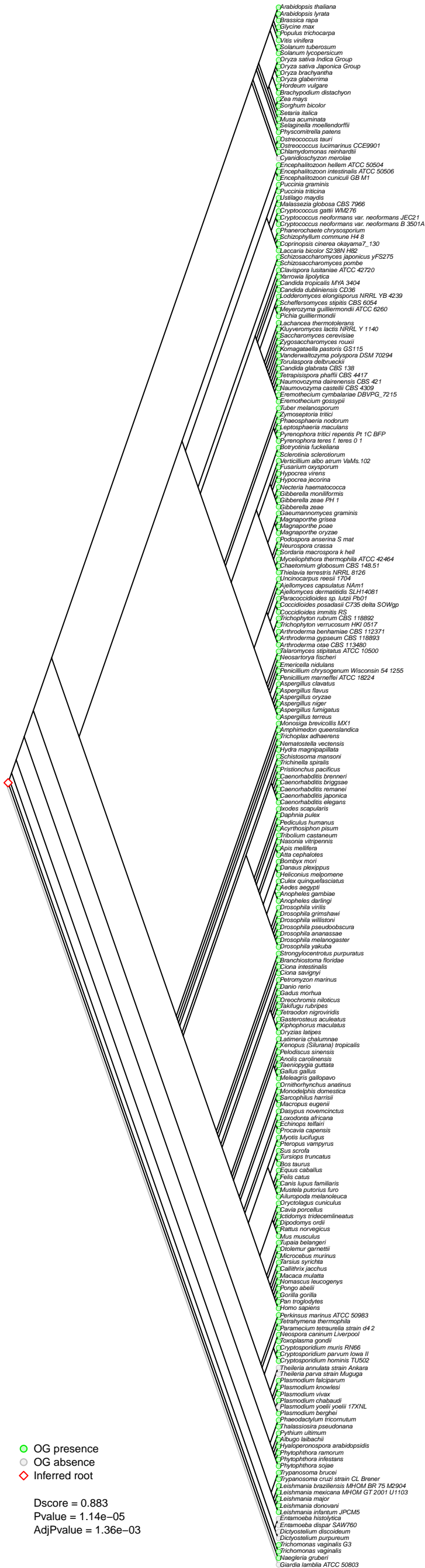
COG0376

- Arabidopsis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyeromyza guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulaspora delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zyoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospora anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Pb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrthosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconia melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telfairii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluopoda melanoleuca
- Cryptolegus cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupia belangeri
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricorutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo falabachii
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dictyostellium discoideum
- Dictyostellium purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

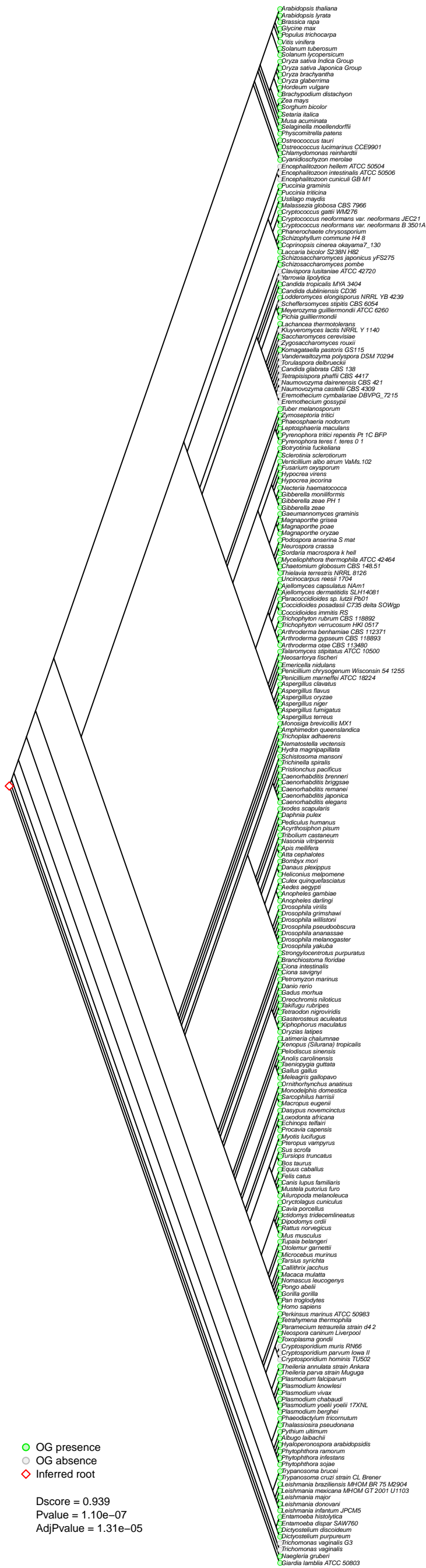
- OG presence
- OG absence
- ◇ Inferred root

Dscore = 0.918
Pvalue = 1.69e-05
AdjPvalue = 2.02e-03

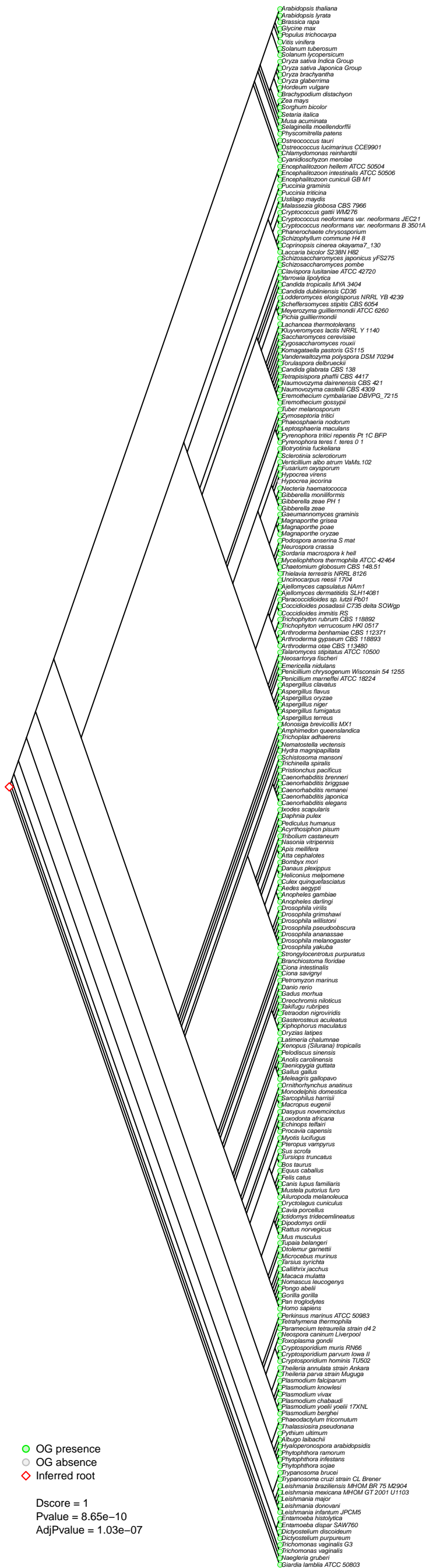
COG0386



COG0446



COG0450



COG0492

- Arabidopsis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitaniae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyeromyza guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulaspora delbrueckii
- Candida glabrata CBS 138
- Tetrapisispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zygomycetozyma tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospora anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Pb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrthosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconia melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telfairii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Turdus truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluopoda melanoleuca
- Cryptolestes cucullatus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricorutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo laibachii
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dictyostellium discoideum
- Dictyostellium purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

● OG presence

○ OG absence

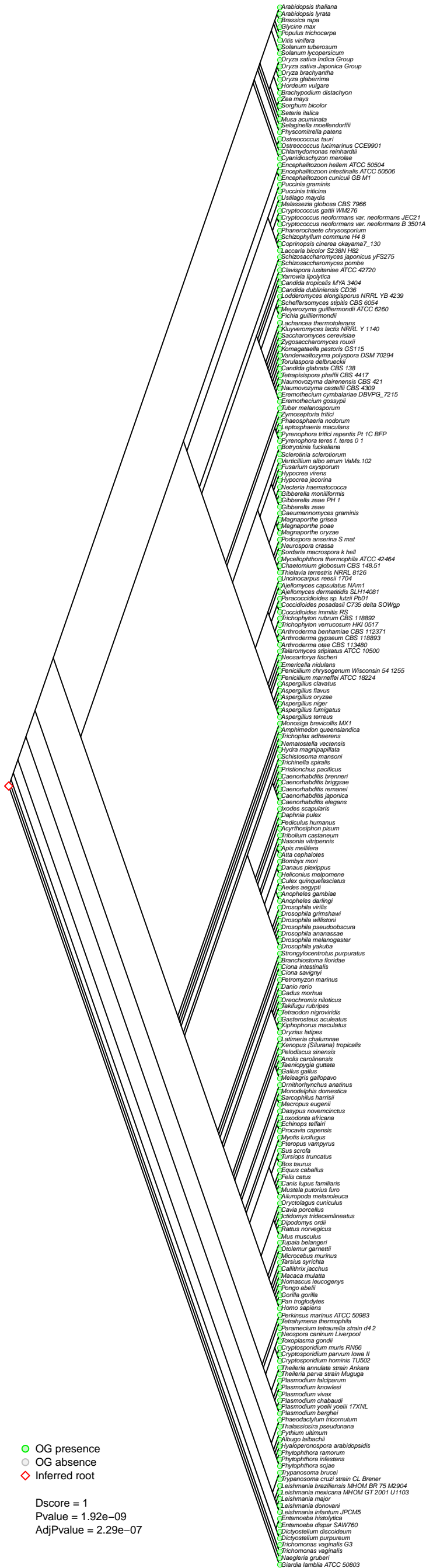
◇ Inferred root

Dscore = 0.846

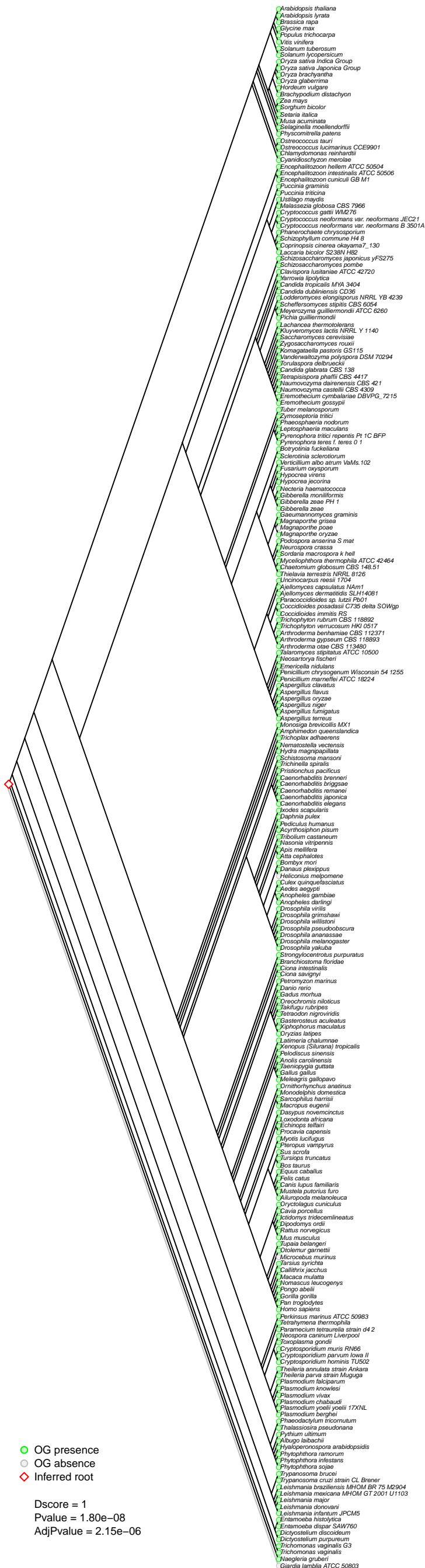
Pvalue = 1.85e-05

AdjPvalue = 2.20e-03

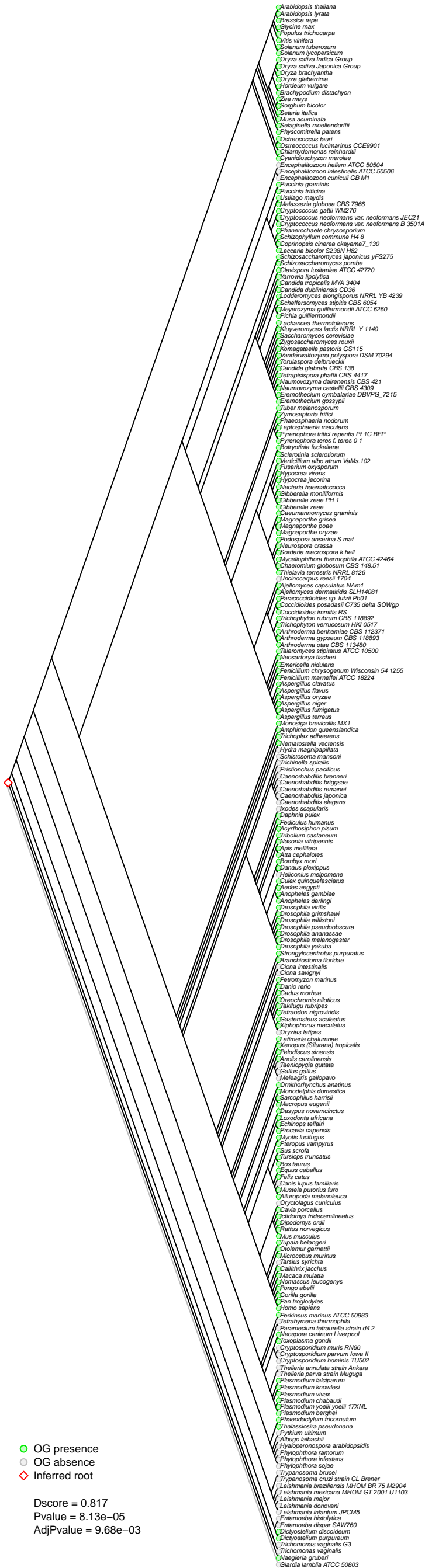
COG0526



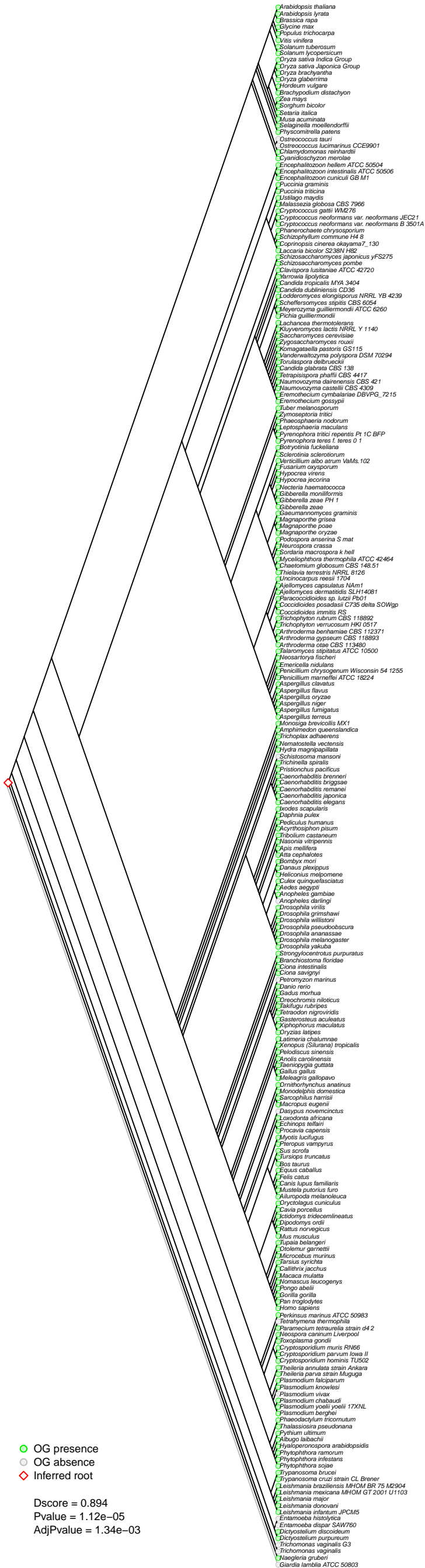
COG0605



COG0678



COG0695

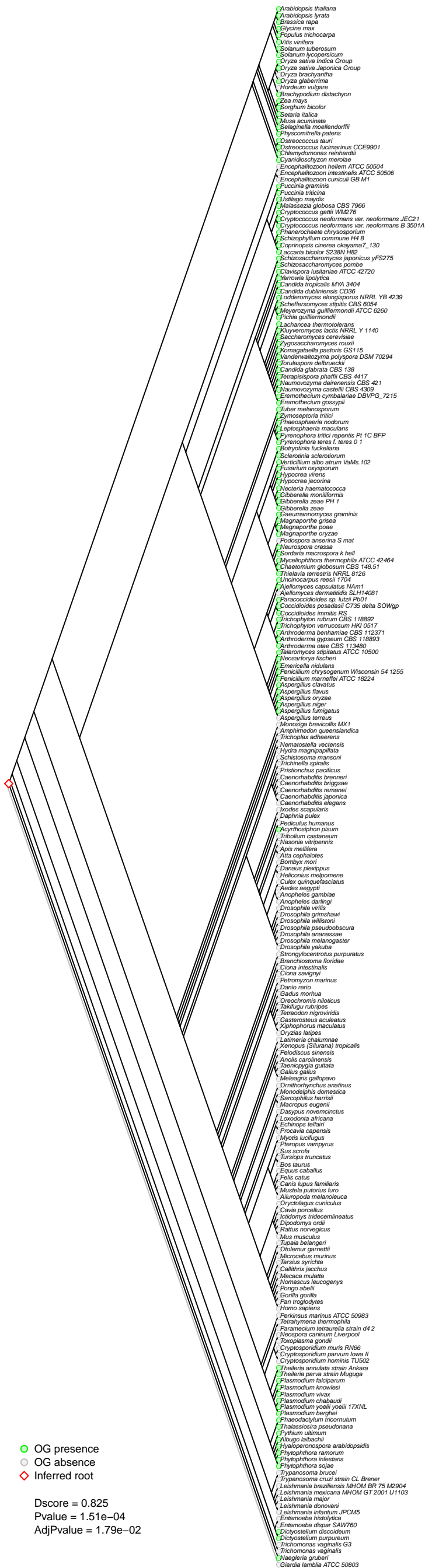


Dscore = 0.894
 Pvalue = 1.12e-05
 AdjPvalue = 1.34e-03

COG0753

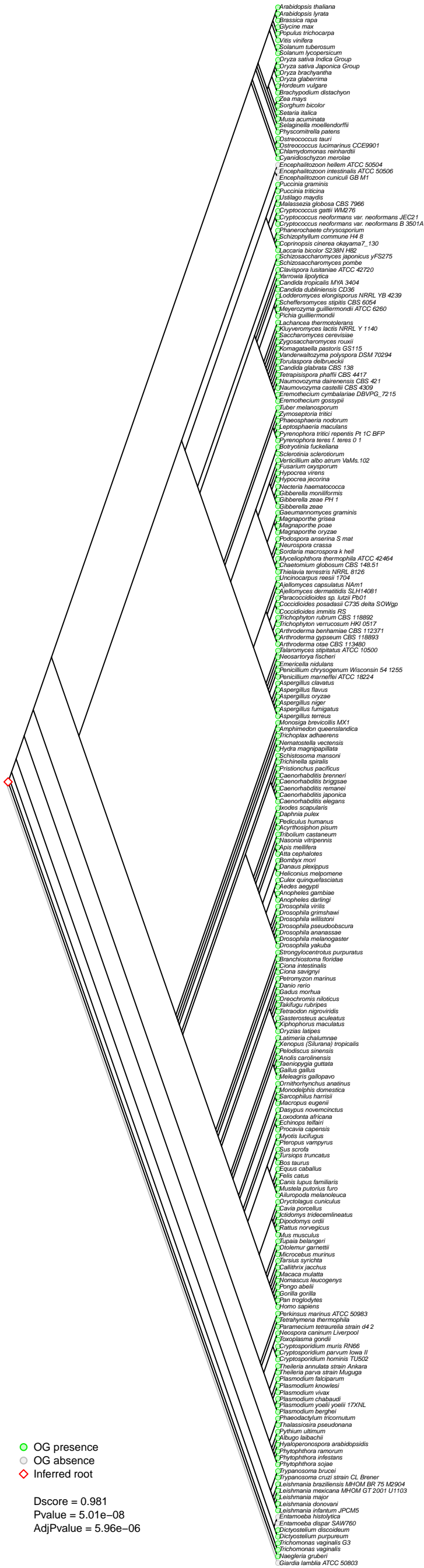


COG1225

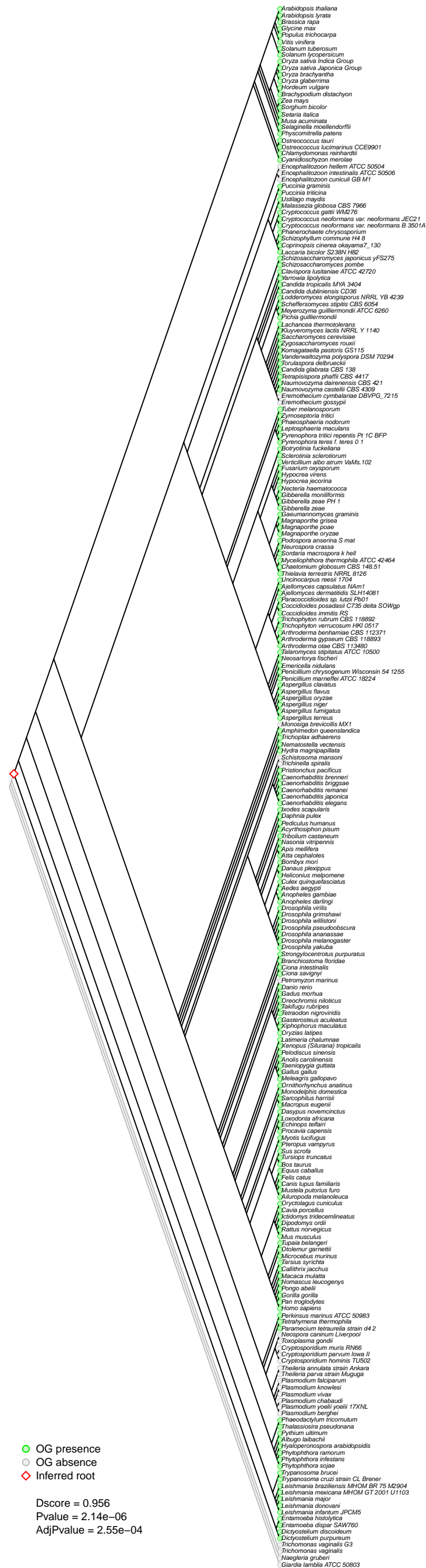


Dscore = 0.825
 Pvalue = 1.51e-04
 AdjPvalue = 1.79e-02

COG1249



COG1304



COG1324

- Arabidopsis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Malassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces lactis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulasporea delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospora anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Pb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis breneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Drosophila melanogaster
- Drosophila yakuba
- Drosophila obscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinosorex tillarii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluorhina melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Urocyon v. tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Diolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo laluchii
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

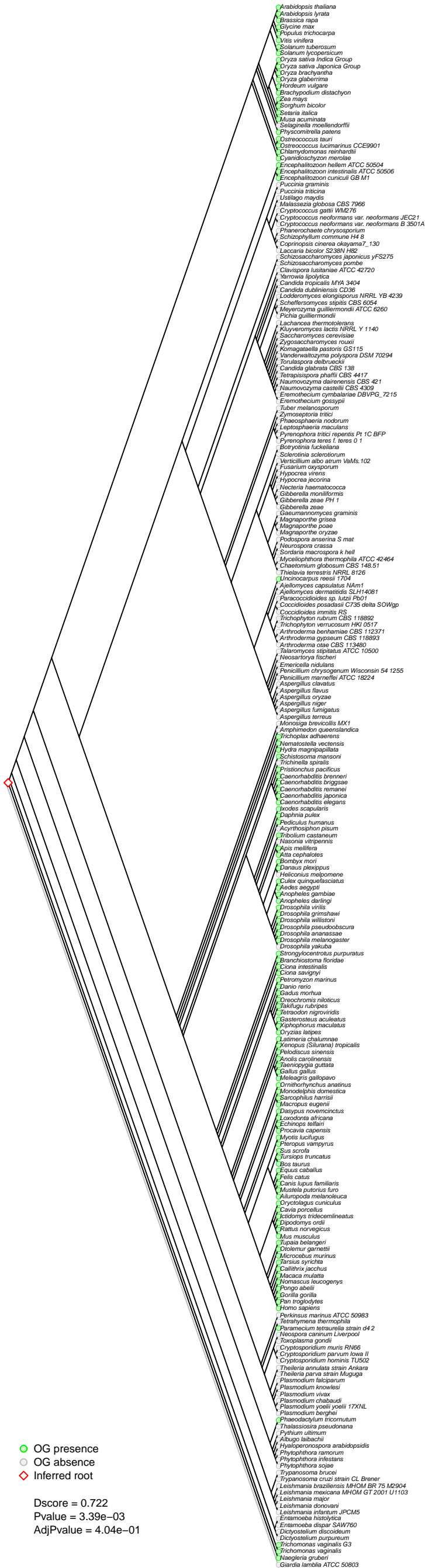
- OG presence
- OG absence
- Inferred root

Dscore = 0.71

Pvalue = 4.58e-04

AdjPvalue = 5.46e-02

COG1528



COG2032



COG2070

- Arabidopsis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyeromyza guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces lactis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulasporea delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus NAM1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Pb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinosys telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluopoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricorutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- ◇ Inferred root

Dscore = 0.826

Pvalue = 1.18e-04

AdjPvalue = 1.41e-02

COG2608

- Arabidopsis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Malassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyeromyza guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces lactis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospora anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus NAM1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Pb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Hodles scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconia melpomene
- Culex quinquefasciatus
- Hodles aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinosorex tillarii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolegus cuniculus
- Cavia porcellus
- Uctidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangerii
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.844
Pvalue = 1.27e-04
AdjPvalue = 1.51e-02

COG3794

- Arabidopsis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitaniae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyeromyza guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulaspora delbrueckii
- Candida glabrata CBS 138
- Tetrapisispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospora anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis breneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrthosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telfairii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cucullatus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dictyostellium discoideum
- Dictyostellium purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- ◊ Inferred root

Dscore = 0.989

Pvalue = 1.03e-05

AdjPvalue = 1.22e-03

COG4243

- Arabidopsis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Streptococcus tauri
- Streptococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Malassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyeromyza guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairenensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospora anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis breneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrthosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telitarii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cucullatus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricoratum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dictyostellium discoideum
- Dictyostellium purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- ◆ Inferred root

Dscore = 0.956

Pvalue = 2.11e-05

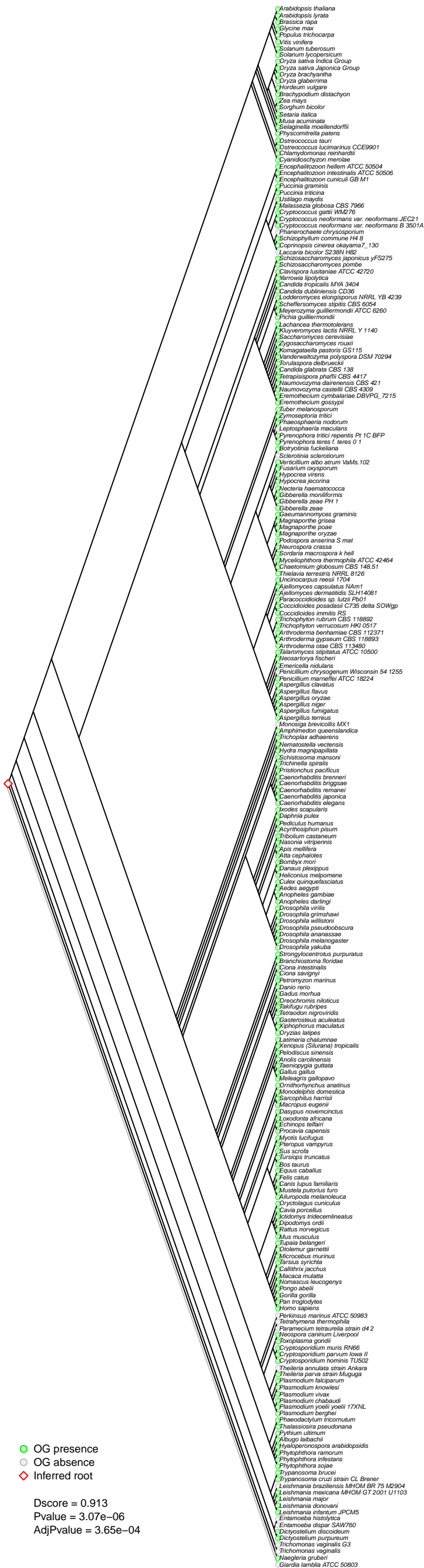
AdjPvalue = 2.51e-03

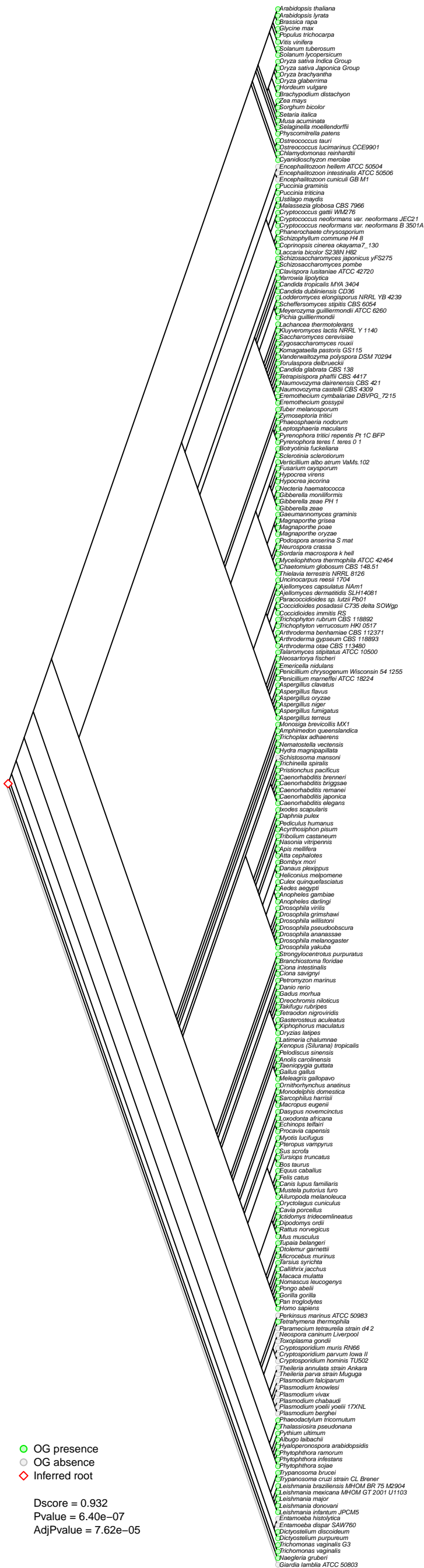
- Arabidopsis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Malassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyeromyza guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces lactis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairenensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospora anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Pb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Xodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconia melpomene
- Culex quinquefasciatus
- Xodes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinosorex tillarii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolegus cuniculatus
- Cavia porcellus
- Mictodymys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangerii
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo laluchii
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

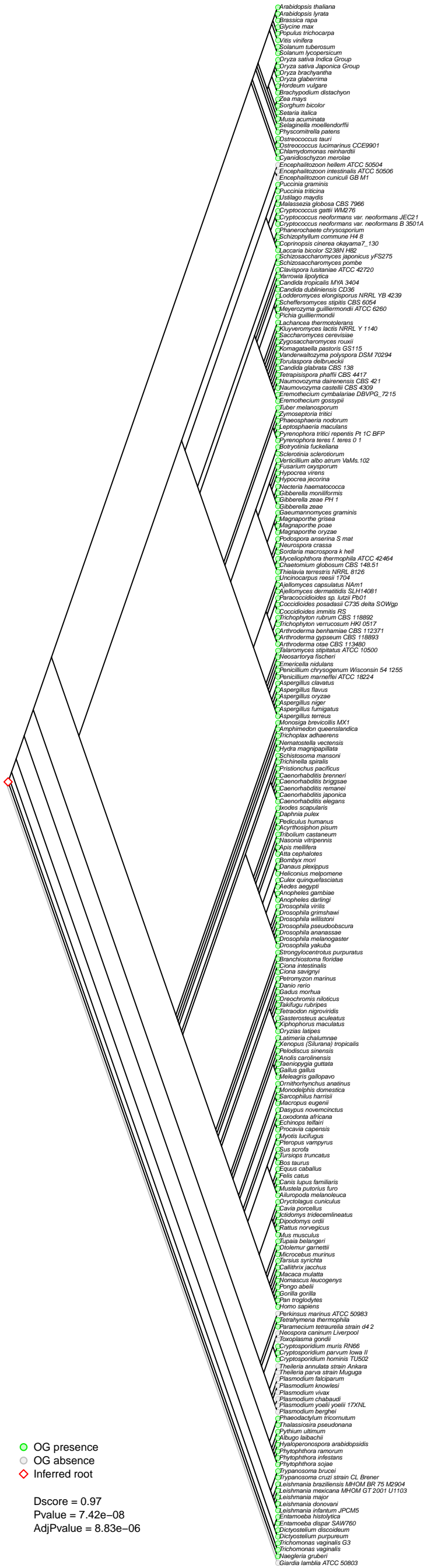
- OG presence
- OG absence
- Inferred root

Dscore = 0.793
Pvalue = 6.78e-04
AdjPvalue = 8.07e-02

COG5601





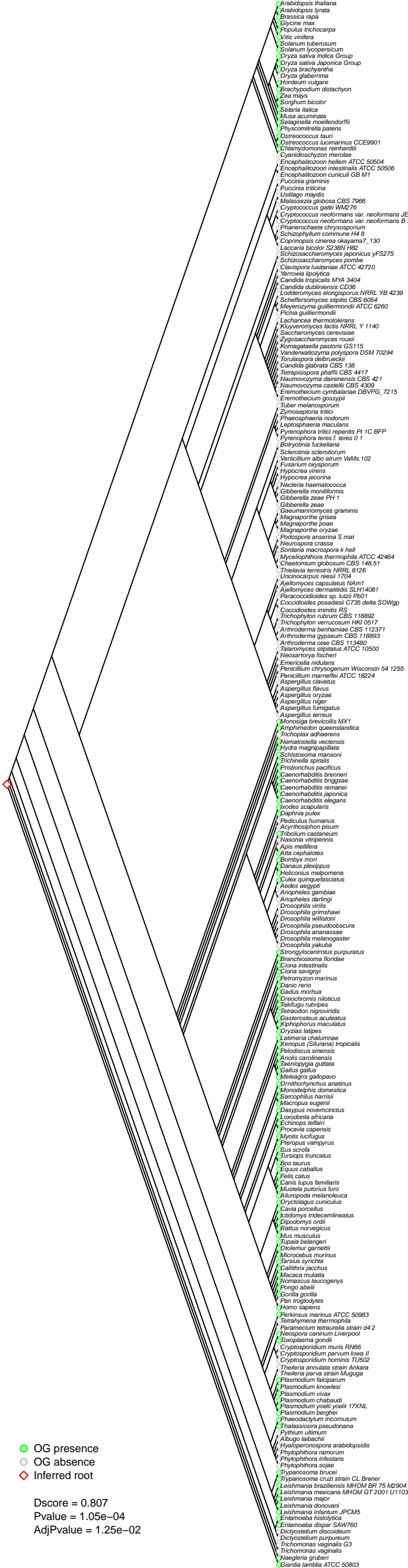


- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Malassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zyoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Ectryzia fackeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospora anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Oxodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconia melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Dryas latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinosorex tillarii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolepis canaliculatus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.73
Pvalue = 1.36e-03
AdjPvalue = 1.62e-01

NOG04600

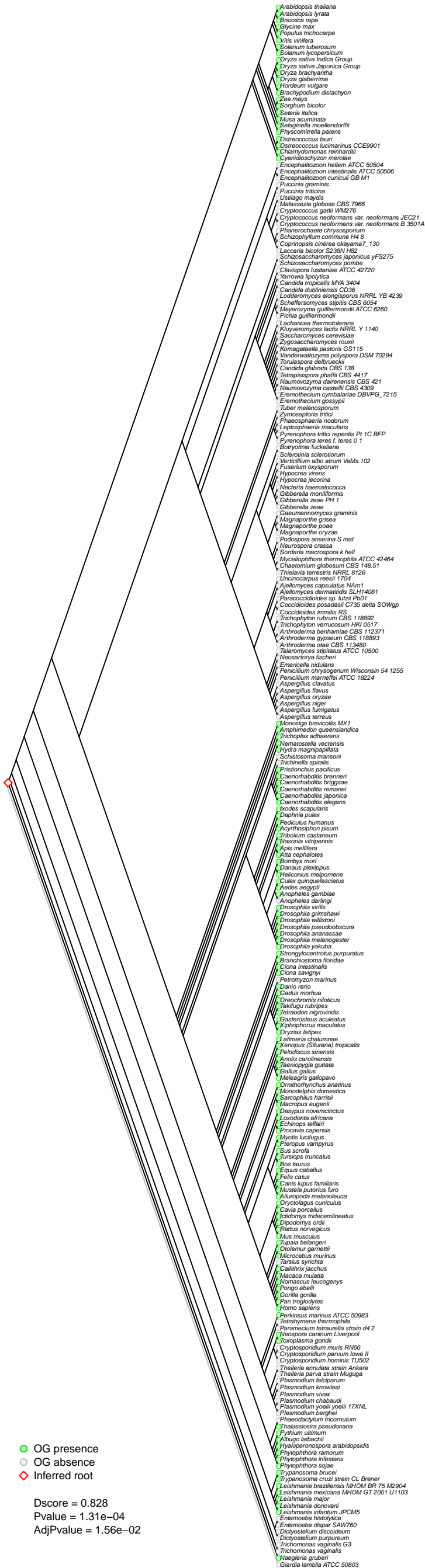


- OG presence
- OG absence
- ◆ Inferred root

Dscore = 0.807
 Pvalue = 1.05e-04
 AdjPvalue = 1.25e-02

Arabidopsis thaliana
Arabidopsis lyrata
Brassica rapa
Glycine max
Populus trichocarpa
Vitis vinifera
Solanum tuberosum
Solanum lycopersicum
Oryza sativa Indica Group
Oryza sativa Japonica Group
Oryza brachyantha
Oryza glaberrima
Hordeum vulgare
Brachypodium distachyon
Zea mays
Sorghum bicolor
Setaria italica
Musa acuminata
Selaginella moellendorffii
Physcomitrella patens
Ostreococcus tauri
Ostreococcus lucimarinus CCE9901
Chlamydomonas reinhardtii
Cyanidioschyzon merolae
Encephalitozoon hellem ATCC 50504
Encephalitozoon intestinalis ATCC 50506
Encephalitozoon cuniculi GB M1
Puccinia graminis
Puccinia triticina
Ustilago maydis
Malassezia globosa CBS 7966
Cryptococcus gattii WM276
Cryptococcus neoformans var. neoformans JEC21
Cryptococcus neoformans var. neoformans B 3501A
Phanerochaete chrysosporium
Schizophyllum commune H4 B
Coprinopsis cinerea okayama7_130
Laccaria bicolor S238N H82
Schizosaccharomyces japonicus yFS275
Schizosaccharomyces pombe
Clavospora lusitaniae ATCC 42720
Yarrowia lipolytica
Candida tropicalis MYA 3404
Candida dubliniensis CD36
Lodderomyces elongisporus NRRL YB 4239
Scheffersomyces stipitis CBS 6054
Meyerozyma guilliermondii ATCC 6260
Pichia guilliermondii
Lachancea thermotolerans
Kluyveromyces fragilis NRRL Y 1140
Saccharomyces cerevisiae
Zygosaccharomyces rouxii
Komagataella pastoris GS115
Vanderwaltozyma polyspora DSM 70294
Torulasporea delbrueckii
Candida glabrata CBS 138
Tetrapispora phaffii CBS 4417
Naumovozyma dairensis CBS 421
Naumovozyma castellii CBS 4309
Eremothecium cymbalariae DBVPG_7215
Eremothecium gossypii
Tuber melanosporum
Zymoseptoria tritici
Phaeosphaeria nodorum
Leptosphaeria maculans
Pyrenophora tritici repentis Pt 1C BFP
Pyrenophora teres f. teres 0 1
Botryotinia fuckeliana
Sclerotinia sclerotiorum
Verticillium albo atrum VaMs.102
Fusarium oxysporum
Hypocrea virens
Hypocrea jecorina
Nectria haematococca
Gibberella moniliformis
Gibberella zeae PH 1
Gibberella zeae
Gaeumannomyces graminis
Magnaporthe grisea
Magnaporthe poae
Magnaporthe oryzae
Podospora anserina S mat
Neurospora crassa
Sordaria macrospora k hell
Myceliophthora thermophila ATCC 42464
Chaetomium globosum CBS 148.51
Thielavia terrestris NRRL 8126
Uncinocarpus reesii 1704
Ajellomyces capsulatus Nam1
Ajellomyces dermatitidis SLH14081
Paracoccidioides sp. lutzi Pb01
Coccidioides posadasii C735 delta SOWgp
Coccidioides immitis RS
Trichophyton rubrum CBS 118892
Trichophyton verrucosum HKI 0517
Arthroderma benhamiae CBS 112371
Arthroderma gypseum CBS 118893
Arthroderma otae CBS 113480
Talaromyces stipitatus ATCC 10500
Neosartorya fischeri
Emericella nidulans
Penicillium chrysogenum Wisconsin 54 1255
Penicillium marneffei ATCC 18224
Aspergillus clavatus
Aspergillus flavus
Aspergillus oryzae
Aspergillus niger
Aspergillus fumigatus
Aspergillus terreus
Monosiga brevicollis MX1
Amphimedon queenslandica
Trichoplax adhaerens
Nematostella vectensis
Hydra magnipapillata
Schistosoma mansoni
Trichiella spiralis
Pristionchus pacificus
Caenorhabditis brenneri
Caenorhabditis briggsae
Caenorhabditis remanei
Caenorhabditis japonica
Caenorhabditis elegans
Daphnia pulex
Pediculus humanus
Acyrtosiphon pisum
Tribolium castaneum
Nasonia vitripennis
Apis mellifera
Atta cephalotes
Bombyx mori
Danaus plexippus
Heliconius melpomene
Culex quinquefasciatus
Aedes aegypti
Anopheles gambiae
Anopheles darlingi
Drosophila virilis
Drosophila grimshawi
Drosophila willistoni
Drosophila pseudoobscura
Drosophila ananassae
Drosophila melanogaster
Drosophila yakuba
Strongylocentrotus purpuratus
Branchiostoma floridae
Ciona intestinalis
Ciona savignyi
Petromyzon marinus
Danio rerio
Gadus morhua
Oreochromis niloticus
Takifugu rubripes
Tetraodon nigroviridis
Gasterosteus aculeatus
Xiphophorus maculatus
Oryzias latipes
Latimeria chalumnae
Xenopus (Silurana) tropicalis
Pelodiscus sinensis
Anolis carolinensis
Taeniopygia guttata
Gallus gallus
Meleagris gallopavo
Ornithorhynchus anatinus
Monodelphis domestica
Sarcophilus harrisii
Macropus eugenii
Dasyurus novemcinctus
Loxodonta africana
Echinops telfairii
Procavia capensis
Myotis lucifugus
Pteropus vampyrus
Sus scrofa
Tursiops truncatus
Bos taurus
Equus caballus
Felis catus
Canis lupus familiaris
Mustela putorius furo
Alluopoda melanoleuca
Cryptolestes cuniculatus
Cavia porcellus
Uctidomys tridecemlineatus
Dipodomys ordii
Rattus norvegicus
Mus musculus
Tupaia belangeri
Otolomus garrettii
Microcebus murinus
Tarsius syrichta
Callithrix jacchus
Macaca mulatta
Nomascus leucogenys
Pongo abelii
Gorilla gorilla
Pan troglodytes
Homo sapiens
Perkinsus marinus ATCC 50983
Tetrahymena thermophila
Paramecium tetraurelia strain d4 2
Neospora caninum Liverpool
Toxoplasma gondii
Cryptosporidium muris RN66
Cryptosporidium parvum Iowa II
Cryptosporidium hominis TU502
Theileria annulata strain Ankara
Theileria parva strain Muguga
Plasmodium falciparum
Plasmodium knowlesi
Plasmodium vivax
Plasmodium chabaudi
Plasmodium yoelii yoelii 17XNL
Plasmodium berghei
Phaeodactylum tricorutum
Thalassiosira pseudonana
Pythium ultimum
Albugo falabachii
Hyaloperonospora arabidopsidis
Phytophthora ramorum
Phytophthora infestans
Phytophthora sojae
Trypanosoma brucei
Trypanosoma cruzi strain CL Brener
Leishmania braziliensis MHOM BR 75 M2904
Leishmania mexicana MHOM GT 2001 U1103
Leishmania major
Leishmania donovani
Leishmania infantum JPCM5
Entamoeba histolytica
Entamoeba dispar SAW760
Dicystostellum discoideum
Dicystostellum purpureum
Trichomonas vaginalis G3
Trichomonas vaginalis
Naegleria gruberi
Giardia lamblia ATCC 50803

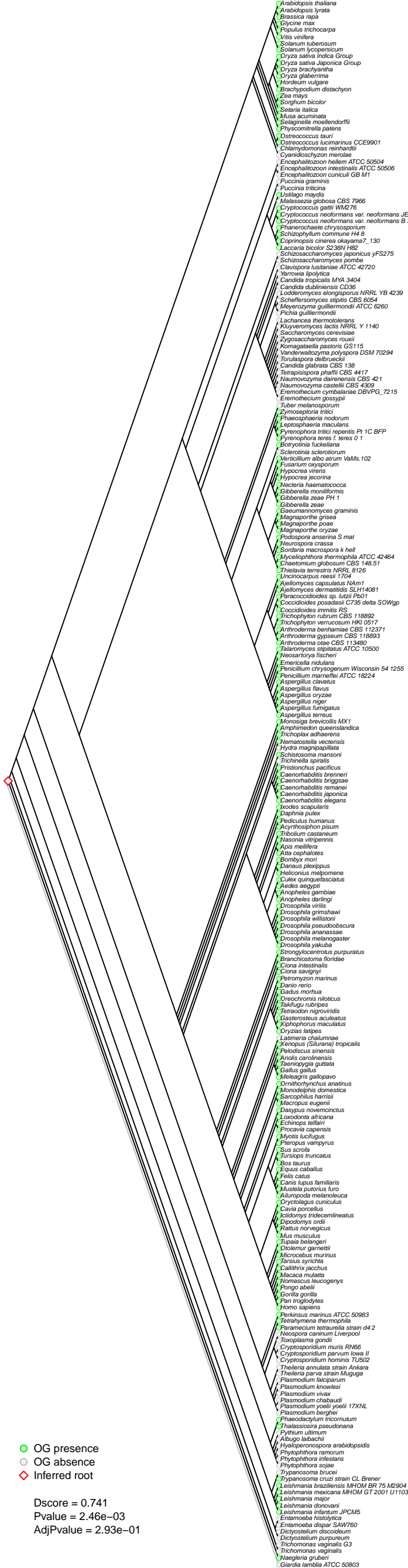
NOG06748



- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyeromyces guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis breneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telitarii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 1
Pvalue = 5.48e-06
AdjPvalue = 6.52e-04



● OG presence
● OG absence
◆ Inferred root

Dscore = 0.741
 Pvalue = 2.46e-03
 AdjPvalue = 2.93e-01

- Arabidopsis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces lactis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulasporea delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repentis Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Pb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echirips telfairi
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluopoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Uctidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricorutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo falabachii
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Malassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis breneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telitarii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.889
Pvalue = 1.03e-04
AdjPvalue = 1.22e-02

- Arabidopsis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Streptococcus tauri
- Streptococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Malassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyeromyces guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospora anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Pb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Dryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Turdus truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluopoda melanoleuca
- Cryptolegus cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricorutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo falabacii
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dictyostellium discoideum
- Dictyostellium purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

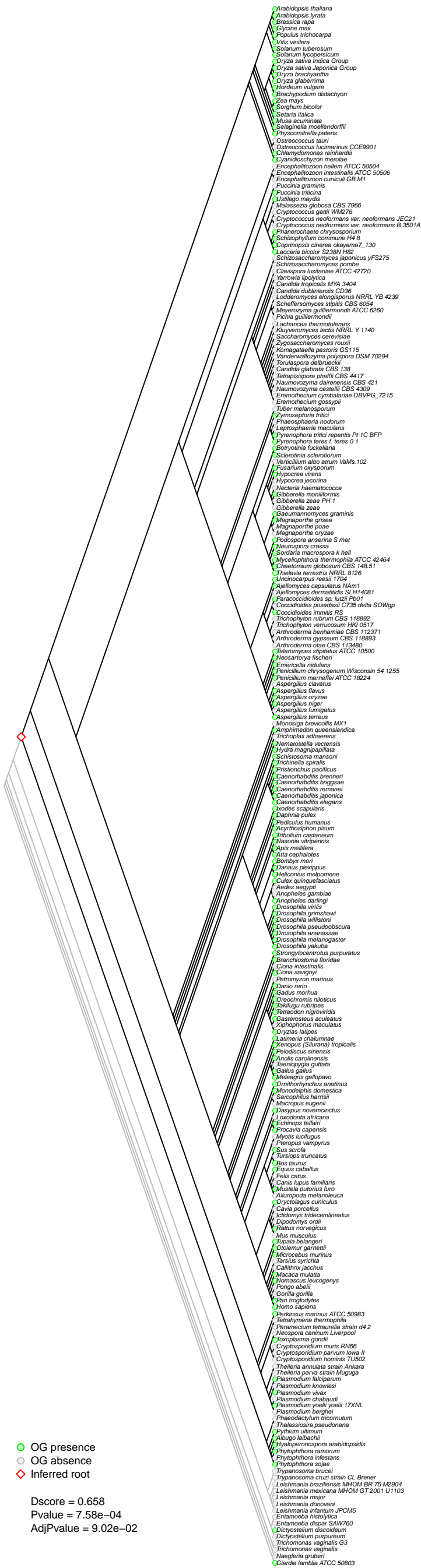
- OG presence
- OG absence
- ◊ Inferred root

Dscore = 0.839

Pvalue = 2.16e-04

AdjPvalue = 2.57e-02

NOG11768



Dscore = 0.658

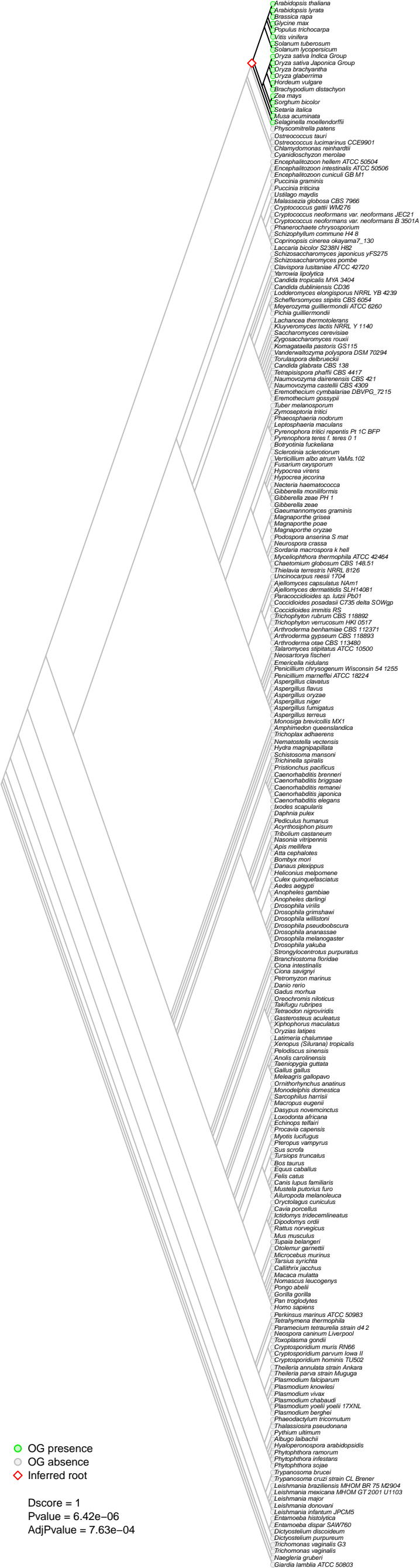
Pvalue = 7.58e-04

AdjPvalue = 9.02e-02

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapisispora phaffii CBS 4417
- Naumovozyma dairenensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolemur garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.944
Pvalue = 1.56e-05
AdjPvalue = 1.86e-03



● OG presence
● OG absence
◆ Inferred root

Dscore = 1
 Pvalue = 6.42e-06
 AdjPvalue = 7.63e-04

- Arabis thaliana
- Arabis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyeromyces guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telfairii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolemur garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitaniae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

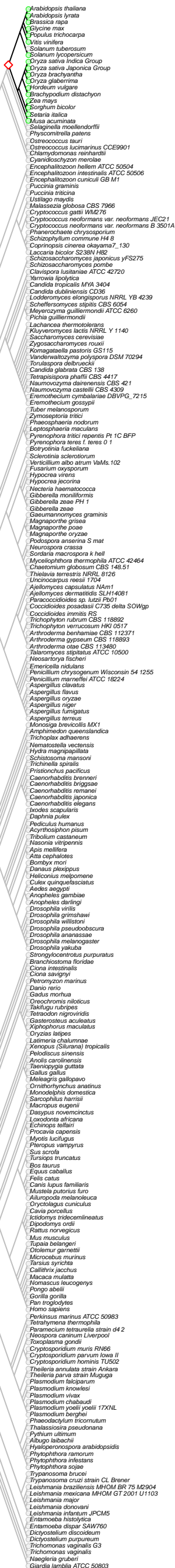
- OG presence
- OG absence
- Inferred root

Dscore = 1
Pvalue = 1.26e-05
AdjPvalue = 1.50e-03

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairenensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinosorex tillarii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.993
Pvalue = 9.81e-06
AdjPvalue = 1.17e-03



● OG presence
 ○ OG absence
 ◆ Inferred root

Dscore = 0.952
 Pvalue = 2.01e-05
 AdjPvalue = 2.39e-03

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis breneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconia melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telitarii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.889
Pvalue = 4.43e-05
AdjPvalue = 5.27e-03

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Salvinella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolemur garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

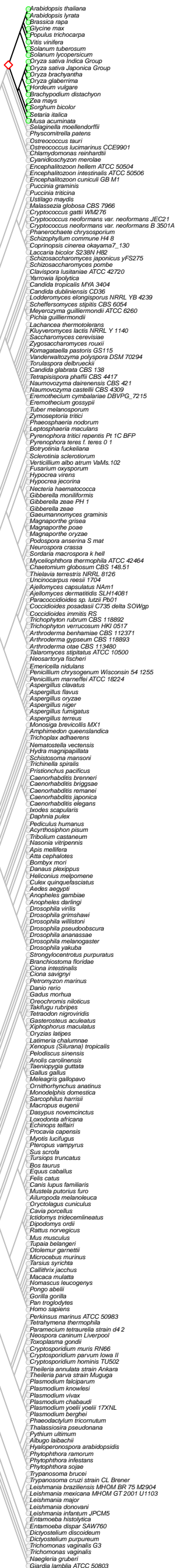
- OG presence
- OG absence
- Inferred root

Dscore = 0.952
Pvalue = 1.06e-05
AdjPvalue = 1.26e-03

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis breneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 1
Pvalue = 1.55e-05
AdjPvalue = 1.85e-03



● OG presence
● OG absence
◆ Inferred root

Dscore = 1
 Pvalue = 6.74e-06
 AdjPvalue = 8.03e-04

Giardia lamblia ATCC 50803

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Salvinella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairenensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telitarii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.819
Pvalue = 1.63e-04
AdjPvalue = 1.94e-02

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Salvinella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolepis cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Urolemur garnettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.952
Pvalue = 1.31e-05
AdjPvalue = 1.56e-03



Dscore = 0.984
 Pvalue = 4.85e-06
 AdjPvalue = 5.77e-04

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis breneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconia melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.852
Pvalue = 1.34e-04
AdjPvalue = 1.60e-02

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinosorex tillarii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 1

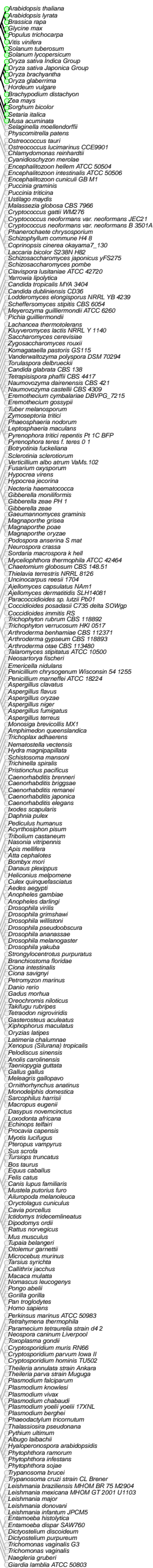
Pvalue = 1.27e-05

AdjPvalue = 1.51e-03

- Arabidopsis thaliana
- Arabidopsis lyrata
- ◆ Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitaniae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyeromyces guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulaspora delbrueckii
- Candida glabrata CBS 138
- Tetrapisispora phaffii CBS 4417
- Naumovozyma dairenensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospora anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrthosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telfairii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cucullatus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dictyostellium discoideum
- Dictyostellium purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- ◆ Inferred root

Dscore = 0.788
Pvalue = 2.13e-05
AdjPvalue = 2.53e-03



● OG presence
 ○ OG absence
 ◆ Inferred root

Dscore = 0.992
 Pvalue = 4.34e-06
 AdjPvalue = 5.16e-04

- Arabis thaliana
- Arabis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairenensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Urolemur garnettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.987
Pvalue = 9.37e-06
AdjPvalue = 1.12e-03

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis breneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolemur garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.988
Pvalue = 1.08e-05
AdjPvalue = 1.28e-03

NOG13059

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Salvinella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis breneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconia melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinosorex tillamii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricoratum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.956

Pvalue = 1.23e-05

AdjPvalue = 1.47e-03

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairenensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinosorex tillarii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 1
Pvalue = 4.63e-06
AdjPvalue = 5.52e-04

- Arabis thaliana
- Arabis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Salvinella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyeromyces guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.854
Pvalue = 3.2e-05
AdjPvalue = 3.8e-03

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Salvinella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telfairii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolepis cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolemur garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.992
Pvalue = 7.34e-06
AdjPvalue = 8.74e-04

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zyoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconia melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.978
Pvalue = 1.02e-05
AdjPvalue = 1.22e-03

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconia melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

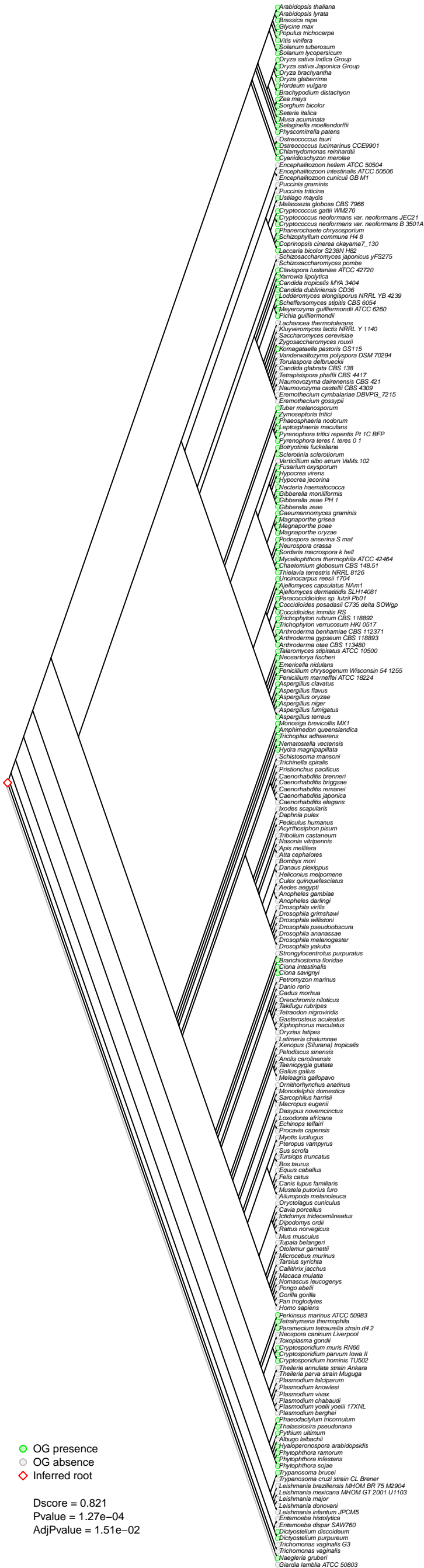
Dscore = 0.975
Pvalue = 8.4e-06
AdjPvalue = 1.0e-03

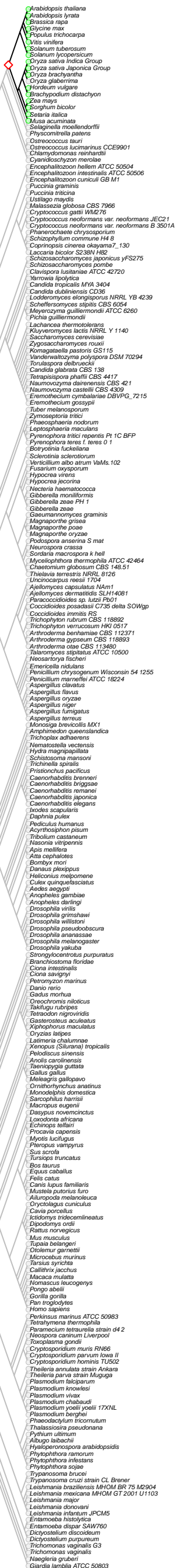
- Arabis thaliana
- Arabis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Salvinella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconia melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolemur garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.833
Pvalue = 1.32e-04
AdjPvalue = 1.57e-02

NOG13193





● OG presence
 ○ OG absence
 ◆ Inferred root

Dscore = 0.992
 Pvalue = 4.80e-06
 AdjPvalue = 5.71e-04

NOG135096

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis breneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinosorex tillarii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.988

Pvalue = 2.02e-05

AdjPvalue = 2.40e-03

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconia melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.986
Pvalue = 1.53e-05
AdjPvalue = 1.82e-03

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis breneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.889
Pvalue = 1.58e-04
AdjPvalue = 1.88e-02

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis breneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconia melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telfairii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolepis cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolemur garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 1
Pvalue = 8.71e-06
AdjPvalue = 1.04e-03

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Malassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconia melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.898
Pvalue = 1.68e-05
AdjPvalue = 2.00e-03

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Malassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapisispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconia melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolemur garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 1
Pvalue = 4.33e-06
AdjPvalue = 5.16e-04

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Salvinella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolepis cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Urolemus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 1
Pvalue = 5.99e-06
AdjPvalue = 7.13e-04

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis breneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telitarii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.889
Pvalue = 4.82e-05
AdjPvalue = 5.73e-03

NOG144070



Dscore = 0.889
 Pvalue = 6.37e-05
 AdjPvalue = 7.58e-03

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Salvinella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairenensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconia melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Urolemus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.992
Pvalue = 8.45e-06
AdjPvalue = 1.01e-03

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Salvinella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telitarii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Urolemus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.975
Pvalue = 5.10e-06
AdjPvalue = 6.07e-04



● OG presence
 ○ OG absence
 ◆ Inferred root

Dscore = 0.992
 Pvalue = 9.85e-06
 AdjPvalue = 1.17e-03

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Malassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis breneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 1
Pvalue = 6.27e-06
AdjPvalue = 7.46e-04

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Salvinella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zyoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis breneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolumur garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.778
Pvalue = 4.23e-04
AdjPvalue = 5.04e-02

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Salvinella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Urolemus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.937
Pvalue = 2.16e-05
AdjPvalue = 2.57e-03

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis breneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconia melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinosorex tillarii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.994

Pvalue = 1.39e-05

AdjPvalue = 1.65e-03

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Salvinella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconia melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 1
Pvalue = 4.24e-06
AdjPvalue = 5.05e-04

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Malassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinosorex tillarii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

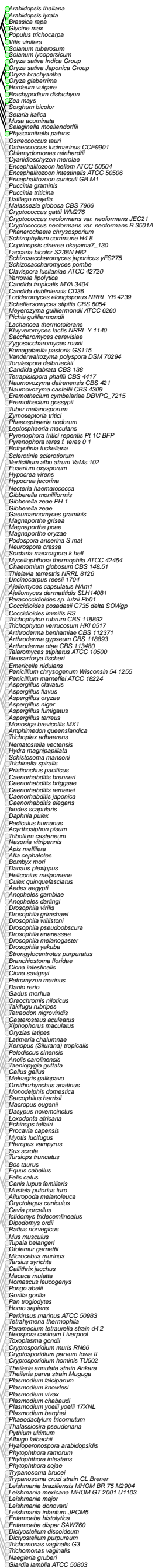
- OG presence
- OG absence
- Inferred root

Dscore = 0.993
Pvalue = 1.13e-05
AdjPvalue = 1.34e-03

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Salvinella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo laluchii
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 1
Pvalue = 3.76e-06
AdjPvalue = 4.48e-04



● OG presence
 ○ OG absence
 ◆ Inferred root

Dscore = 0.869
 Pvalue = 9.18e-05
 AdjPvalue = 1.09e-02

NOG18420

- Arabidopsis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Malassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyeromyza guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairenensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospora anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Mycelophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Pb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Drosophila melanogaster
- Drosophila yakuba
- Drosophila obscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Dryzius latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telfairii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Turdus truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluopoda melanoleuca
- Cryptolegus cuniculatus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupia belangerii
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo falabachii
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dictyostellium discoideum
- Dictyostellium purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- ◇ Inferred root

Dscore = 0.794

Pvalue = 6.79e-04

AdjPvalue = 8.08e-02

- Arabidopsis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- ◆ Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Malassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitaniae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyeromyza guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapisispora phaffii CBS 4417
- Naumovozyma dairenensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospora anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrthosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cucullatus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo falabachii
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dictyostellium discoideum
- Dictyostellium purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- ◆ Inferred root

Dscore = 0.987
Pvalue = 2.91e-06
AdjPvalue = 3.46e-04

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Salvinella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces lactis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapisispora phaffii CBS 4417
- Naumovozyma dairenensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telfairii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.905
Pvalue = 2.19e-05
AdjPvalue = 2.61e-03

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Malassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairenensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolemur garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 1
Pvalue = 8.84e-06
AdjPvalue = 1.05e-03

NOG19390

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Pb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis breneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telfairii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.877

Pvalue = 7.14e-05

AdjPvalue = 8.49e-03

- Arabidopsis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Malassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyeromyces guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospora anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis breneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Dreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Dryzius latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telfairii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Turdus truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolepis cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeadactylum tricorutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo laluchii
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dictyostellium discoideum
- Dictyostellium purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- ◆ Inferred root

Dscore = 0.884

Pvalue = 7.91e-05

AdjPvalue = 9.42e-03

- Arabis thaliana
- Arabis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellium discoideum
- Dicystostellium purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 1
Pvalue = 5.23e-07
AdjPvalue = 6.22e-05

- Arabis thaliana
- Arabis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 1
Pvalue = 2.56e-07
AdjPvalue = 3.05e-05

- Arabis thaliana
- Arabis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Urolemur garnettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo laibachii
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 1
Pvalue = 1.25e-06
AdjPvalue = 1.48e-04

- Arabis thaliana
- Arabis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Malassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolemur garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.667

Pvalue = 2.21e-06

AdjPvalue = 2.63e-04

- Arabis thaliana
- Arabis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Urolemur garnettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 1
Pvalue = 5.17e-07
AdjPvalue = 6.15e-05

- Arabis thaliana
- Arabis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Ailuropoda melanoleuca
- Cryctolopus canaliculatus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 1
Pvalue = 2.67e-07
AdjPvalue = 3.18e-05

- Arabis thaliana
- Arabis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telfairii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 1
Pvalue = 9.40e-07
AdjPvalue = 1.12e-04

- Arabis thaliana
- Arabis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Malassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolemur garnettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 1
Pvalue = 3.53e-07
AdjPvalue = 4.21e-05

- Arabis thaliana
- Arabis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolemur garnettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.667
Pvalue = 3.50e-06
AdjPvalue = 4.16e-04

- Arabis thaliana
- Arabis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitaniae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolemur garnettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 1
 Pvalue = 4.32e-07
 AdjPvalue = 5.14e-05

- Arabis thaliana
- Arabis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.917
Pvalue = 1.52e-06
AdjPvalue = 1.80e-04



- OG presence
- OG absence
- ◆ Inferred root

Dscore = 0.73

Pvalue = 1.55e-03

AdjPvalue = 1.85e-01

Giardia lamblia ATCC 50803

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Salvinella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairenensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis breneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconia melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.915
Pvalue = 5.81e-05
AdjPvalue = 6.91e-03

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis breneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconia melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telfairii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 1
Pvalue = 9.15e-06
AdjPvalue = 1.09e-03

- Arabis thaliana
- Arabis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Malassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichiella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconia melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinosorex tillarii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.667
Pvalue = 4.24e-04
AdjPvalue = 5.04e-02



Dscore = 0.944
 Pvalue = 5.24e-06
 AdjPvalue = 6.23e-04

- Arabis thaliana
- Arabis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitaniae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairenensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telitarii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo laibachii
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.917

Pvalue = 3.18e-06

AdjPvalue = 3.78e-04



Dscore = 1
 Pvalue = 1.67e-06
 AdjPvalue = 1.99e-04

- Arabis thaliana
- Arabis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Malassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zyoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo laibachii
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.917
Pvalue = 1.73e-06
AdjPvalue = 2.06e-04

- Arabis thaliana
- Arabis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 1
Pvalue = 4.05e-07
AdjPvalue = 4.82e-05

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Salvinella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconia melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.647
Pvalue = 2.34e-03
AdjPvalue = 2.78e-01

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Malassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis breneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconia melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolemur garrettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 1
Pvalue = 1.54e-05
AdjPvalue = 1.84e-03

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Salvinella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairenensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telillari
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.875
Pvalue = 3.65e-05
AdjPvalue = 4.35e-03



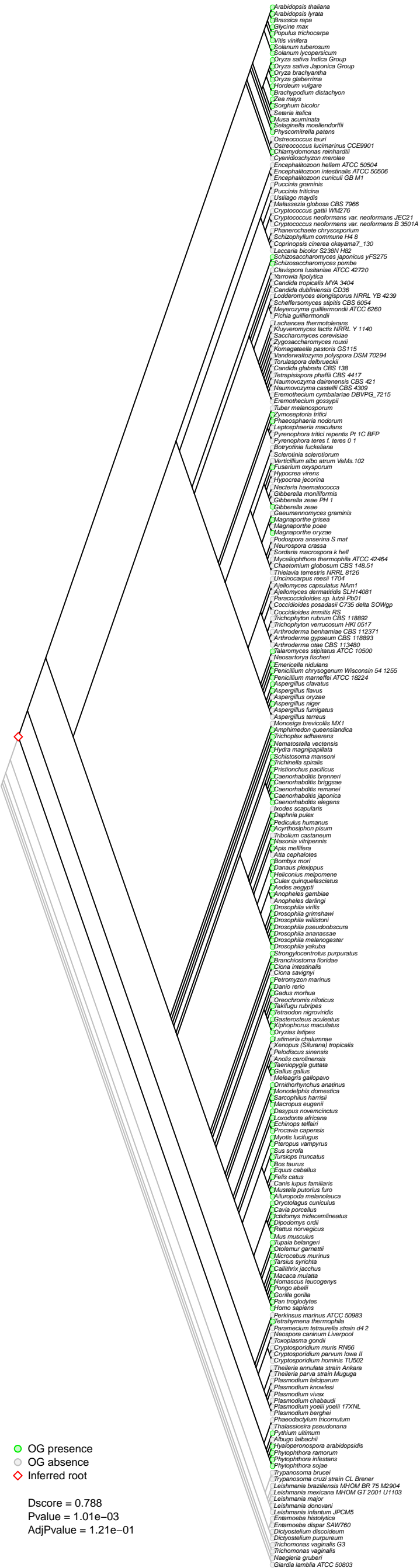
● OG presence
 ○ OG absence
 ◆ Inferred root

Dscore = 0.944
 Pvalue = 1.91e-05
 AdjPvalue = 2.27e-03

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Malassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapisispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emmericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis breneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Oxodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Dryas latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinosorex tillarii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptosporidium parvum I
- Cavia porcellus
- Otidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.795
Pvalue = 3.68e-04
AdjPvalue = 4.39e-02



Dscore = 0.788
 Pvalue = 1.01e-03
 AdjPvalue = 1.21e-01

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Malassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinosorex tillamii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.993
Pvalue = 7.44e-06
AdjPvalue = 8.85e-04

- Arabis thaliana
- Arabidopsis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces fragilis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Fb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis breneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telfairii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Otolomus garretti
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricornutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.995
Pvalue = 2.16e-05
AdjPvalue = 2.57e-03

- Arabis thaliana
- Arabis lyrata
- Brassica rapa
- Glycine max
- Populus trichocarpa
- Vitis vinifera
- Solanum tuberosum
- Solanum lycopersicum
- Oryza sativa Indica Group
- Oryza sativa Japonica Group
- Oryza brachyantha
- Oryza glaberrima
- Hordeum vulgare
- Brachypodium distachyon
- Zea mays
- Sorghum bicolor
- Setaria italica
- Musa acuminata
- Selaginella moellendorffii
- Physcomitrella patens
- Ostreococcus tauri
- Ostreococcus lucimarinus CCE9901
- Chlamydomonas reinhardtii
- Cyanidioschyzon merolae
- Encephalitozoon hellem ATCC 50504
- Encephalitozoon intestinalis ATCC 50506
- Encephalitozoon cuniculi GB M1
- Puccinia graminis
- Puccinia triticina
- Ustilago maydis
- Melassezia globosa CBS 7966
- Cryptococcus gattii WM276
- Cryptococcus neoformans var. neoformans JEC21
- Cryptococcus neoformans var. neoformans B 3501A
- Phanerochaete chrysosporium
- Schizophyllum commune H4 B
- Coprinopsis cinerea okayama7_130
- Laccaria bicolor S238N H82
- Schizosaccharomyces japonicus yFS275
- Schizosaccharomyces pombe
- Clavospora lusitanae ATCC 42720
- Yarrowia lipolytica
- Candida tropicalis MYA 3404
- Candida dubliniensis CD36
- Lodderomyces elongisporus NRRL YB 4239
- Scheffersomyces stipitis CBS 6054
- Meyerozyma guilliermondii ATCC 6260
- Pichia guilliermondii
- Lachancea thermotolerans
- Kluyveromyces lactis NRRL Y 1140
- Saccharomyces cerevisiae
- Zygosaccharomyces rouxii
- Komagataella pastoris GS115
- Vanderwaltozyma polyspora DSM 70294
- Torulopsis delbrueckii
- Candida glabrata CBS 138
- Tetrapispora phaffii CBS 4417
- Naumovozyma dairenensis CBS 421
- Naumovozyma castellii CBS 4309
- Eremothecium cymbalariae DBVPG_7215
- Eremothecium gossypii
- Tuber melanosporum
- Zymoseptoria tritici
- Phaeosphaeria nodorum
- Leptosphaeria maculans
- Pyrenophora tritici repens Pt 1C BFP
- Pyrenophora teres f. teres 0 1
- Botryotinia fuckeliana
- Sclerotinia sclerotiorum
- Verticillium albo atrum VaMs.102
- Fusarium oxysporum
- Hypocrea virens
- Hypocrea jecorina
- Nectria haematococca
- Gibberella moniliformis
- Gibberella zeae PH 1
- Gibberella zeae
- Gaeumannomyces graminis
- Magnaporthe grisea
- Magnaporthe poae
- Magnaporthe oryzae
- Podospira anserina S mat
- Neurospora crassa
- Sordaria macrospora k hell
- Myceliophthora thermophila ATCC 42464
- Chaetomium globosum CBS 148.51
- Thielavia terrestris NRRL 8126
- Uncinocarpus reesii 1704
- Ajellomyces capsulatus Nam1
- Ajellomyces dermatitidis SLH14081
- Paracoccidioides sp. lutzi Pb01
- Coccidioides posadasii C735 delta SOWgp
- Coccidioides immitis RS
- Trichophyton rubrum CBS 118892
- Trichophyton verrucosum HKI 0517
- Arthroderma benhamiae CBS 112371
- Arthroderma gypseum CBS 118893
- Arthroderma otae CBS 113480
- Talaromyces stipitatus ATCC 10500
- Neosartorya fischeri
- Emericella nidulans
- Penicillium chrysogenum Wisconsin 54 1255
- Penicillium marneffei ATCC 18224
- Aspergillus clavatus
- Aspergillus flavus
- Aspergillus oryzae
- Aspergillus niger
- Aspergillus fumigatus
- Aspergillus terreus
- Monosiga brevicollis MX1
- Amphimedon queenslandica
- Trichoplax adhaerens
- Nematostella vectensis
- Hydra magnipapillata
- Schistosoma mansoni
- Trichinella spiralis
- Pristionchus pacificus
- Caenorhabditis brenneri
- Caenorhabditis briggsae
- Caenorhabditis remanei
- Caenorhabditis japonica
- Caenorhabditis elegans
- Ixodes scapularis
- Daphnia pulex
- Pediculus humanus
- Acyrtosiphon pisum
- Tribolium castaneum
- Nasonia vitripennis
- Apis mellifera
- Atta cephalotes
- Bombyx mori
- Danaus plexippus
- Heliconius melpomene
- Culex quinquefasciatus
- Aedes aegypti
- Anopheles gambiae
- Anopheles darlingi
- Drosophila virilis
- Drosophila grimshawi
- Drosophila willistoni
- Drosophila pseudoobscura
- Drosophila ananassae
- Drosophila melanogaster
- Drosophila yakuba
- Strongylocentrotus purpuratus
- Branchiostoma floridae
- Ciona intestinalis
- Ciona savignyi
- Petromyzon marinus
- Danio rerio
- Gadus morhua
- Oreochromis niloticus
- Takifugu rubripes
- Tetraodon nigroviridis
- Gasterosteus aculeatus
- Xiphophorus maculatus
- Oryzias latipes
- Latimeria chalumnae
- Xenopus (Silurana) tropicalis
- Pelodiscus sinensis
- Anolis carolinensis
- Taeniopygia guttata
- Gallus gallus
- Meleagris gallopavo
- Ornithorhynchus anatinus
- Monodelphis domestica
- Sarcophilus harrisii
- Macropus eugenii
- Dasyurus novemcinctus
- Loxodonta africana
- Echinops telfairii
- Procavia capensis
- Myotis lucifugus
- Pteropus vampyrus
- Sus scrofa
- Tursiops truncatus
- Bos taurus
- Equus caballus
- Felis catus
- Canis lupus familiaris
- Mustela putorius furo
- Alluropoda melanoleuca
- Cryptolestes cuniculus
- Cavia porcellus
- Ictidomys tridecemlineatus
- Dipodomys ordii
- Rattus norvegicus
- Mus musculus
- Tupaia belangeri
- Urolemur garnettii
- Microcebus murinus
- Tarsius syrichta
- Callithrix jacchus
- Macaca mulatta
- Nomascus leucogenys
- Pongo abelii
- Gorilla gorilla
- Pan troglodytes
- Homo sapiens
- Perkinsus marinus ATCC 50983
- Tetrahymena thermophila
- Paramecium tetraurelia strain d4 2
- Neospora caninum Liverpool
- Toxoplasma gondii
- Cryptosporidium muris RN66
- Cryptosporidium parvum Iowa II
- Cryptosporidium hominis TU502
- Theileria annulata strain Ankara
- Theileria parva strain Muguga
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium vivax
- Plasmodium chabaudi
- Plasmodium yoelii yoelii 17XNL
- Plasmodium berghei
- Phaeodactylum tricorutum
- Thalassiosira pseudonana
- Pythium ultimum
- Albugo liliaceae
- Hyaloperonospora arabidopsidis
- Phytophthora ramorum
- Phytophthora infestans
- Phytophthora sojae
- Trypanosoma brucei
- Trypanosoma cruzi strain CL Brener
- Leishmania braziliensis MHOM BR 75 M2904
- Leishmania mexicana MHOM GT 2001 U1103
- Leishmania major
- Leishmania donovani
- Leishmania infantum JPCM5
- Entamoeba histolytica
- Entamoeba dispar SAW760
- Dicystostellum discoideum
- Dicystostellum purpureum
- Trichomonas vaginalis G3
- Trichomonas vaginalis
- Naegleria gruberi
- Giardia lamblia ATCC 50803

- OG presence
- OG absence
- Inferred root

Dscore = 0.947
Pvalue = 9.57e-06
AdjPvalue = 1.14e-03