

Additional file 2. Pezizomycotina RefSeq proteomic data included in the 2-way phylogenomic analysis in this study. The 22 species shown in the red text are Sordariomycetes species that are included in the tree construction (Fig. 1B and Additional file 1).

No.	Class	Order	Species	NCBI Genome ID*
1	Sordariomycetes	Magnaporthales-CladeB	<i>Pyricularia grisea</i>	[1]
2	Sordariomycetes	Magnaporthales-CladeB	<i>Macgarvieomyces juncicola</i>	[1]
3	Sordariomycetes	Magnaporthales-CladeB	<i>Pyricularia oryzae</i>	62
4	Sordariomycetes	Magnaporthales-CladeB	<i>Xenopyricularia zizaniicola</i>	[1]
5	Sordariomycetes	Magnaporthales-CladeC	<i>Buergenerula spartinae</i>	[1]
6	Sordariomycetes	Magnaporthales-CladeC	<i>Slopeiomyces cylindrosporus</i>	[1]
7	Sordariomycetes	Magnaporthales-CladeC	<i>Gaeumannomyces graminis</i>	[1]
8	Sordariomycetes	Magnaporthales-CladeC	<i>Nakataea oryzae</i>	[1]
9	Sordariomycetes	Magnaporthales-CladeC	<i>Magnaporthiopsis incrustans</i>	[1]
10	Sordariomycetes	Magnaporthales-CladeC	<i>Magnaporthiopsis panicorum</i>	[1]
11	Sordariomycetes	Magnaporthales-CladeC	<i>Magnaporthiopsis rhizophila</i>	[1]
12	Sordariomycetes	Magnaporthales-CladeC	<i>Omnidemptus affinis</i>	[1]
13	Sordariomycetes	Magnaporthales-CladeC	<i>Pseudophialophora eragrostis</i>	[1]
14	Sordariomycetes	Magnaporthales-CladeC	<i>Pseudophialophora panicorum</i>	[1]
15	Sordariomycetes	Magnaporthales-CladeC	<i>Pseudophialophora schizachyrii</i>	[1]
16	Sordariomycetes	Magnaporthales-CladeC	<i>Bussabanomyces longisporus</i>	[1]
17	Sordariomycetes	Magnaporthales-CladeA	<i>Ophioceras commune</i>	[1]
18	Sordariomycetes	Magnaporthales-CladeA	<i>Ophioceras dolichostomum</i>	[1]
19	Sordariomycetes	Magnaporthales-CladeA	<i>Ophioceras leptosporum</i>	[1]
20	Sordariomycetes	Magnaporthales-CladeA	<i>Pseudohelonectia lignicola</i>	[1]
21	Sordariomycetes	Diaporthales	<i>Cryphonectria parasitica</i>	Cryp1 (JGI)
22	Sordariomycetes	Diaporthales	<i>Diaporthe ampelina</i>	38176
23	Sordariomycetes	Diaporthales	<i>Diaporthe longicolla</i>	14992
24	Sordariomycetes	Diaporthales	<i>Togninia minima (P. aleophilum)</i>	[2]
25	Sordariomycetes	Diaporthales	<i>Valsa mali</i>	35576
26	Sordariomycetes	Ophiostomatales	<i>Grosmannia clavigera</i>	2302
27	Sordariomycetes	Ophiostomatales	<i>Ophiostoma piceae</i>	18073
28	Sordariomycetes	Ophiostomatales	<i>Ophiostoma ulmi</i>	[3]
29	Sordariomycetes	Ophiostomatales	<i>Sporothrix brasiliensis</i>	35789
30	Sordariomycetes	Ophiostomatales	<i>Sporothrix schenckii</i>	22522
31	Sordariomycetes	Hypocreales	<i>Beauveria bassiana</i>	910
32	Sordariomycetes	Hypocreales	<i>Cordyceps militaris</i>	10687
33	Sordariomycetes	Hypocreales	<i>Fusarium graminearum</i>	58
34	Sordariomycetes	Hypocreales	<i>Fusarium pseudograminearum</i>	14399
35	Sordariomycetes	Hypocreales	<i>Nectria haematococca (F. solani)</i>	537
36	Sordariomycetes	Hypocreales	<i>Metarhizium acridum</i>	2443
37	Sordariomycetes	Hypocreales	<i>Metarhizium majus</i>	37185
38	Sordariomycetes	Hypocreales	<i>Metarhizium robertsii</i>	13329
39	Sordariomycetes	Hypocreales	<i>Trichoderma reesei</i>	323
40	Sordariomycetes	Hypocreales	<i>Verticillium alfalfae</i>	21497
41	Sordariomycetes	Hypocreales	<i>Verticillium dahliae</i>	832
42	Sordariomycetes	Hypocreales	<i>Verticillium tricorpus</i>	32535
43	Sordariomycetes	Sordariales	<i>Chaetomium globosum</i>	304
44	Sordariomycetes	Sordariales	<i>Chaetomium thermophilum</i>	2820
45	Sordariomycetes	Sordariales	<i>Myceliophthora thermophila</i>	10695
46	Sordariomycetes	Sordariales	<i>Neurospora crassa</i>	19
47	Sordariomycetes	Sordariales	<i>Neurospora tetrasperma</i>	3646
48	Sordariomycetes	Sordariales	<i>Podospira anserina</i>	[4]
49	Sordariomycetes	Sordariales	<i>Sordaria macrospora</i>	2242
50	Sordariomycetes	Sordariales	<i>Thielavia terrestris</i>	10696
51	Sordariomycetes	Glomerellales	<i>Colletotrichum fioriniae</i>	17405
52	Sordariomycetes	Glomerellales	<i>Colletotrichum gloeosporioides</i>	17739
53	Sordariomycetes	Glomerellales	<i>Colletotrichum graminicola</i>	2138
54	Sordariomycetes	Glomerellales	<i>Colletotrichum higginsianum</i>	11306
55	Sordariomycetes	Glomerellales	<i>Colletotrichum orbiculare</i>	15316
56	Sordariomycetes	Glomerellales	<i>Colletotrichum sublineola</i>	32004

57	Dothideomycetes	Capnodiales	<i>Baudoinia panamericana</i>	40216
58	Dothideomycetes	Pleosporales	<i>Bipolaris oryzae</i>	13435
59	Dothideomycetes	Pleosporales	<i>Bipolaris sorokiniana</i>	3236
60	Dothideomycetes	Pleosporales	<i>Bipolaris zeicola</i>	13436
61	Dothideomycetes	Pleosporales	<i>Leptosphaeria maculans</i>	Genbank:GCA_000230375.1
62	Dothideomycetes	Botryosphaeriales	<i>Neofusicoccum parvum</i>	16686
63	Dothideomycetes	Pleosporales	<i>Phaeosphaeria nodorum</i>	456
64	Dothideomycetes	Capnodiales	<i>Pseudocercospora fijiensis</i>	GenBank:AIHZ000000000.1
65	Dothideomycetes	Pleosporales	<i>Pyrenophora teres</i>	2995
66	Dothideomycetes	Pleosporales	<i>Pyrenophora tritici</i>	706
67	Dothideomycetes	Pleosporales	<i>Setosphaeria turcica</i>	12532
68	Dothideomycetes	Incertae sedis	<i>Zymoseptoria tritici</i>	454
69	Eurotiomycetes	Onygenales	<i>Arthroderma benhamiae</i>	887
70	Eurotiomycetes	Onygenales	<i>Arthroderma otae</i>	796
71	Eurotiomycetes	Eurotiales	<i>Aspergillus clavatus</i>	499
72	Eurotiomycetes	Eurotiales	<i>Aspergillus flavus</i>	360
73	Eurotiomycetes	Eurotiales	<i>Aspergillus fumigatus</i>	18
74	Eurotiomycetes	Eurotiales	<i>Aspergillus nidulans</i>	17
75	Eurotiomycetes	Eurotiales	<i>Aspergillus niger</i>	429
76	Eurotiomycetes	Eurotiales	<i>Aspergillus oryzae</i>	526
77	Eurotiomycetes	Eurotiales	<i>Aspergillus terreus</i>	53
78	Eurotiomycetes	Incertae sedis	<i>Blastomyces dermatitidis</i>	255
79	Eurotiomycetes	Chaetothyriales	<i>Capronia coronata</i>	13900
80	Eurotiomycetes	Chaetothyriales	<i>Capronia epimyces</i>	13901
81	Eurotiomycetes	Chaetothyriales	<i>Cladophialophora carrionii</i>	16215
82	Eurotiomycetes	Chaetothyriales	<i>Cladophialophora psammophila</i>	16322
83	Eurotiomycetes	Chaetothyriales	<i>Cladophialophora yegresii</i>	13902
84	Eurotiomycetes	Onygenales	<i>Coccidioides immitis</i>	317
85	Eurotiomycetes	Onygenales	<i>Coccidioides posadasii</i>	88
86	Eurotiomycetes	Onygenales	<i>Coniosporium apollinis</i>	13345
87	Eurotiomycetes	Chaetothyriales	<i>Cyphellophora europaea</i>	14776
88	Eurotiomycetes	Verrucariales	<i>Endocarpon pusillum</i>	24250
89	Eurotiomycetes	Chaetothyriales	<i>Exophiala dermatitidis</i>	2962
90	Eurotiomycetes	Onygenales	<i>Histoplasma capsulatum</i>	243
91	Eurotiomycetes	Onygenales	<i>Microsporium gypseum</i>	800
92	Eurotiomycetes	Eurotiales	<i>Neosartorya fischeri</i>	500
93	Eurotiomycetes	Onygenales	<i>Paracoccidioides brasiliensis</i>	334
94	Eurotiomycetes	Onygenales	<i>Paracoccidioides</i> sp. lutzii	15356
95	Eurotiomycetes	Eurotiales	<i>Penicillium rubens</i>	[5]
96	Eurotiomycetes	Eurotiales	<i>Talaromyces marneffeii</i>	728
97	Eurotiomycetes	Eurotiales	<i>Talaromyces stipitatus</i>	727
98	Eurotiomycetes	Onygenales	<i>Trichophyton rubrum</i>	799
99	Eurotiomycetes	Onygenales	<i>Trichophyton verrucosum</i>	2293
100	Eurotiomycetes	Onygenales	<i>Uncinocarpus reesii</i>	324
101	Lecanoromycetes	Lecanorales	<i>Cladonia grayi</i>	Clagr2 (JGI)
102	Leotiomycetes	Erysiphales	<i>Blumeria graminis</i>	845
103	Leotiomycetes	Helotiales	<i>Botrytis cinerea</i>	494
104	Leotiomycetes	Helotiales	<i>Glarea lozoyensis</i>	11704
105	Leotiomycetes	Helotiales	<i>Marssonina brunnea</i>	14766
106	Leotiomycetes	Helotiales	<i>Sclerotinia sclerotiorum</i>	487
107	Orbiliomycetes	Orbiliales	<i>Dactylellina haptotyla</i>	17457
108	Pezizomycetes	Pezizales	<i>Tuber melanosporum</i>	2215
109	Sordariomycetes	Xylariales	<i>Eutypa lata</i>	16685
110	Sordariomycetes	Xylariales	<i>Pestalotiopsis fici</i>	14981

* When ID Number is not available in NCBI Genome Database, other source information are provided such as the corresponding publication, Genbank accession number, or JGI genome assemblies.

References

1. Luo J, Qiu H, Cai G, Wagner NE, Bhattacharya D, Zhang N. **Phylogenomic analysis uncovers the evolutionary history of nutrition and infection mode in rice blast fungus and other Magnaporthales.** *Sci Rep.* 2015; **5**:9448.

2. Blanco-Ulate B, Rolshausen P, Cantu D. **Draft genome sequence of the ascomycete *Phaeoacremonium aleophilum* Strain UCR-PA7, a causal agent of the esca disease complex in grapevines.** *Genome Announc.* 2013; **1**. pii: e00390-13
3. Khoshraftar S, Hung S, Khan S, Gong Y, Tyagi V, Parkinson J et al.. **Sequencing and annotation of the *Ophiostoma ulmi* genome.** *BMC Genomics.* 2013; **14**:162.
4. Espagne E, Lespinet O, Malagnac F, Da Silva C, Jaillon O, Porcel BM, Couloux A, Aury JM, Ségurens B, Poulain J, Anthouard V, Grossetete S, Khalili H, Coppin E, Déquard-Chablat M, Picard M, Contamine V, Arnaise S, Bourdais A, Berteaux-Lecellier V, Gautheret D, de Vries RP, Battaglia E, Coutinho PM, Danchin EG, Henrissat B, Khoury RE, Sainsard-Chanet A, Boivin A, Pinan-Lucarré B, Sellem CH, Debuchy R, Wincker P, Weissenbach J, Silar P. **The genome sequence of the model ascomycete fungus *Podospira anserina*.** *Genome Biol.* 2008; **9**:R77.
5. van den Berg MA, Albang R, Albermann K, Badger JH, Daran JM, Driessen AJ, Garcia-Estrada C, Fedorova ND, Harris DM, Heijne WH, Joardar V, Kiel JA, Kovalchuk A, Martín JF, Nierman WC, Nijland JG, Pronk JT, Roubos JA, van der Klei IJ, van Peij NN, Veenhuis M, von Döhren H, Wagner C, Wortman J, Bovenberg RA. **Genome sequencing and analysis of the filamentous fungus *Penicillium chrysogenum*.** *Nat Biotechnol.* 2008; **26**:1161-8.