

Supplementary Table 1 Supported Reference Proteome Genomes

Genomes	Total number of genes	Number of genes with PANTHER HMM
<i>Absidia_glauca_ABSGL</i>	14824	10089
<i>Acaryochloris_marina_ACAM1</i>	8171	4209
<i>Accumulibacter_phosphatis_ACCPU</i>	4437	3129
<i>Achromobacter_xylosoxidans_ACHXA</i>	6797	5324
<i>Acidovorax_citrulli_ACIAAC</i>	4601	3232
<i>Acidovorax_sp_ACISJ</i>	4044	2905
<i>Acremonium_chrysogenum_ACRC1</i>	8898	6882
<i>Acromyrmex_echinatior_ACREC</i>	13961	8987
<i>Actinoplanes_missouriensis_ACTM4</i>	8112	5416
<i>Actinoplanes_sp_ACTS5</i>	8248	5201
<i>Actinoplanes_utahensis_ACTUT</i>	7274	4848
<i>Actinosynnema_mirum_ACTMD</i>	6911	4596
<i>Acyrtosiphon_pisum_ACYPI</i>	35809	22455
<i>Aedes_aegypti_AEDAE</i>	15585	12643
<i>Aedes_albopictus_AEDAL</i>	17088	13482
<i>Aeromonas_hydrophila_AERHH</i>	4120	3300
<i>Agaricus_bisporus_AGABU</i>	11203	6319
<i>Agrilus_planipennis_AGRPL</i>	11583	10069
<i>Agrobacterium_fabrum_AGRFC</i>	5343	4040
<i>Agrobacterium_radiobacter_AGRRK</i>	6673	5202
<i>Agrobacterium_vitis_AGRVS</i>	5352	4037
<i>Ailuropoda_melanoleuca_AILME</i>	19343	18972
<i>Ajellomyces_capsulatus_AJEC8</i>	9444	5976
<i>Ajellomyces_capsulatus_AJECG</i>	9213	6012
<i>Ajellomyces_capsulatus_AJECH</i>	9544	5924
<i>Ajellomyces_capsulatus_AJECN</i>	9251	6274
<i>Ajellomyces_dermatitidis_AJEDR</i>	9744	6151
<i>Alcanivorax_dieselolei_ALCDB</i>	4387	3418
<i>Alicyclophilus_denitrificans_ALIDK</i>	4619	3548
<i>Alicyclobacillus_acidoterrestris_ALIAG</i>	4101	2845
<i>Alkaliphilus_metalliredigens_ALKMQ</i>	4466	2995
<i>Alligator_mississippiensis_ALLMI</i>	24655	18326
<i>Alligator_sinensis_ALLSI</i>	18577	18283
<i>Alternaria_alternata_ALTAL</i>	13462	9411
<i>Alteromonas_naphthalenivorans_ALTNA</i>	4341	2981
<i>Amazona_aestiva_AMAAE</i>	16091	14421
<i>Amborella_trichopoda_AMBTC</i>	27358	18958
<i>Amphimedon_queenslandica_AMPQE</i>	43434	22636

Amycolatopsis_mediterranei_AMYMS	9550	6547
Anabaena_cylindrica_ANACC	5796	3571
Anaeromyxobacter_dehalogenans_ANADE	4344	3032
Anaeromyxobacter_sp_ANADF	4460	3112
Ananas_comosus_ANACO	23407	21730
Anas_platyrhynchos_ANAPL	15658	14812
Aneurinibacillus_migulanus_ANEMI	5647	3790
Angiostrongylus_cantonensis_ANGCA	14485	9491
Angiostrongylus_costaricensis_ANGCS	13377	9137
Anisakis_simplex_ANISI	20760	12284
Anopheles_albimanus_ANOAL	12280	9405
Anopheles_arabiensis_ANOAR	13720	9875
Anopheles_darlingi_ANODA	10446	9125
Anopheles_funestus_ANOFN	13682	10221
Anopheles_merus_ANOME	13302	9778
Anopheles_quadriannulatus_ANOQN	13717	10269
Anopheles_sinensis_ANOSI	19342	10186
Anopheles_stephensi_ANOST	23125	18133
Antrostomus_carolinensis_ANTCR	8956	8346
Apaloderma_vittatum_APAVI	7902	7477
Apis_mellifera_APIME	15322	9803
Aptenodytes_forsteri_APTFO	13703	12890
Arabidopsis_lyrata_ARALL	32048	26856
Arabis_alpina_ARAAL	21573	18027
Aromatoleum_aromaticum_AROAE	4482	2915
Arthrobacter_sp_ARTS2	4452	3289
Arthrotrys_oligospora_ARTOA	11477	7179
Arthroderma_benhamiae_ARTBC	7975	5918
Arthroderma_gypseum_ARTGP	8920	6484
Arthroderma_otae_ARTOC	8763	6483
Arthrospira_platensis_ARTPN	6008	3140
Ascaris_lumbricoides_ASCLU	18552	8489
Ascaris_suum_ASCSU	9212	6576
Aspergillus_carbonarius_ASPC5	11033	8755
Aspergillus_clavatus_ASACL	9139	7468
Aspergillus_flavus_ASFPA	8430	7056
Aspergillus_flavus_ASFPN	13499	10123
Aspergillus_kawachii_ASPKW	11487	9151
Aspergillus_niger_ASPNA	10946	8950
Aspergillus_niger_ASPNC	14067	9275
Aspergillus_niger_ASPNG	10372	8662
Aspergillus_oryzae_ASPOR	12069	9479
Aspergillus_oryzae_ASPOZ	11428	9454

Aspergillus_parasiticus_ASPPU	8650	7361
Aspergillus_terreus_ASPTN	10416	8439
Astyanax_mexicanus_ASTMX	23015	22584
Atta_cephalotes_ATTCE	10482	9239
Aureococcus_anophagefferens_AURAN	11500	8494
Auricularia_subglabra_AURST	5289	1433
Auxenochlorella_protothecoides_AUXPR	6998	5168
Azorhizobium_caulinodans_AZOC5	4707	3655
Azospirillum_lipoferum_AZOL4	6061	4228
Azospirillum_lipoferum_AZOLI	6617	4844
Azospirillum_sp_AZOS1	6091	4704
Azotobacter_vinelandii_AZOVD	4989	3578
Babesia_bigemina_BABBI	4431	2255
Bacillus_akibai_BACA3	4709	3295
Bacillus_anthraxis_BACAN	5489	3541
Bacillus_atrophaeus_BACA1	4185	2883
Bacillus_badius_BACBA	4478	2736
Bacillus_cellulosilyticus_BACCJ	4252	2820
Bacillus_circulans_BACCI	4948	3567
Bacillus_clausii_BACSK	4081	3092
Bacillus_halodurans_BACHD	4005	2899
Bacillus_licheniformis_BACLD	4163	2996
Bacillus_megaterium_BACMQ	5605	3843
Bacillus_pseudofirmus_BACPE	4309	2810
Bacteroides_fragilis_BACFN	4233	2669
Baudoinia_compniacensis_BAUCO	10507	6971
Beauveria_bassiana_BEAB2	10362	7882
Beutenbergia_cavernae_BEUC1	4194	3139
Biomphalaria_glabrata_BIOGL	30874	314
Blastococcus_saxobsidens_BLASD	4790	3205
Blastocystis_hominis_BLAHO	5819	4171
Blastocystis_sp_BLAHN	6376	4796
Blastomyces_gilchristii_BLAGS	9689	6188
Blumeria_graminis_BLUG1	6485	4843
Bodo_saltans_BODSA	18123	7544
Bombyx_mori_BOMMO	14772	10474
Bordetella_petrii_BORPD	4911	3830
Botryosphaeria_parva_BOTPV	10364	8326
Botryotinia_fuckeliana_BOTF1	11021	8099
Botryotinia_fuckeliana_BOTF4	16337	8391
Bradyrhizobium_elkanii_BRAEL	6819	5055
Bradyrhizobium_sp_BRASO	6700	4716
Brassica_napus_BRANA	60064	48101

Brassica_rapa_BRARP	40800	36419
Brevibacillus_brevis_BREBN	5886	4032
Brevibacillus_choshinensis_BRECH	5615	4359
Brugia_malayi_BRUMA	11317	8067
Brugia_pahangi_BRUPA	14607	8898
Burkholderia_cenocepacia_BURCJ	6992	5237
Burkholderia_gladioli_BURGS	7350	5466
Burkholderia_glumae_BURGB	5659	4203
Burkholderia_multivorans_BURM1	6039	4582
Burkholderia_pseudomallei_BURPS	5716	4317
Burkholderia_sp_BURSG	5982	4663
Burkholderia_vietnamiensis_BURVG	7408	4813
Bursaphelenchus_xylophilus_BURXY	17485	10555
Byssochlamys_spectabilis_BYSSN	8876	7402
Caenorhabditis_brenneri_CAEBE	29978	20040
Caenorhabditis_japonica_CAEJA	6178	4224
Caenorhabditis_remanei_CAERE	31245	21808
Cajanus_cajan_CAJCA	47179	40989
Caldilinea_aerophila_CALAS	4096	3097
Callipepla_squamata_CALSU	16972	16518
Callithrix_jacchus_CALJA	20989	20292
Calypte_anna_CALAN	13266	12618
Camelus_ferus_CAMFR	20002	17653
Camponotus_floridanus_CAMFO	14786	9924
Candida_glabrata_CANGA	5199	4316
Candida_maltosa_CANMX	5975	4689
Candida_parapsilosis_CANPC	5776	4786
Candida_tenuis_CANTC	5539	4574
Candida_tropicalis_CANTT	6225	4923
Capsaspora_owczarzaki_CAPO3	8737	6915
Capsicum_annuum_CAPAN	31185	28610
Cariama_cristata_CARIC	8693	8270
Catenulispora_acidiphila_CATAD	8908	5988
Cathartes_aura_CATAU	7759	7292
Caulobacter_segnis_CAUST	4135	3066
Caulobacter_sp_CAUSK	5372	3734
Caulobacter_vibrioides_CAUVI	4641	3291
Cavia_porcellus_CAVPO	18253	18061
Cellulophaga_algicola_CELAD	4113	2543
Cellulosilyticum_lentocellum_CELLD	4149	2742
Cephalotus_follicularis_CEPFO	36276	27940
Ceratocystis_fimbriata_CERFI	5619	4589
Ceriporiopsis_subvermispora_CERS8	12076	6995

Chaetomium_globosum_CHAGB	11041	7660
Chaetomium_thermophilum_CHATD	7182	5786
Chamaesiphon_minutus_CHAP6	5814	3442
Charadrius_vociferus_CHAVO	14256	13287
Chelativorans_sp_CHESB	4529	3287
Chelonia_mydas_CHEMY	18959	15901
Chitinophaga_pinensis_CHIPD	7178	4581
Chlorella_variabilis_CHLVA	9830	7835
Chlorocebus_sabaeus_CHLSB	19140	18722
Chondromyces_crocatus_CHOCO	8326	4666
Chromobacterium_violaceum_CHRVO	4396	3206
Cicer_arietinum_CICAR	24568	23526
Ciona_savignyi_CIOSA	11591	8953
Citrobacter_koseri_CITK8	5018	3491
Citrobacter_rodentium_CITRI	4791	3531
Citrus_sinensis_CITSI	28131	25353
Claviceps_purpurea_CLAP2	8813	6386
Clavispora_lusitaniae_CLAL4	5931	4556
Clonorchis_sinensis_CLOSI	13605	8746
Clostridium_beijerinckii_CLOB8	5002	3712
Clostridium_cellulovorans_CLOC7	4210	2888
Clostridium_hungatei_CLOHU	4232	2868
Clostridium_saccharolyticum_CLOSW	4132	2992
Coccidioides_immitis_COCIM	9586	6155
Coccidioides_posadasii_COCPS	10208	6232
Coccomyxa_subellipsoidea_COCSA	9762	7147
Cochliobolus_heterostrophus_COCH5	12851	8777
Cochliobolus_sativus_COCSN	12173	8487
Colinus_virginianus_COLVI	17121	16701
Colius_striatus_COLST	7079	6656
Colletotrichum_gloeosporioides_COLGC	16387	11138
Colletotrichum_gloeosporioides_COLGN	15379	11537
Colletotrichum_graminicola_COLGM	12018	8875
Colletotrichum_higginsianum_COLHI	16109	10912
Colletotrichum_orbiculare_COLOR	13345	9656
Colletotrichum_sublineola_COLSU	12696	9175
Collimonas_fungivorans_COLFT	4428	3447
Colwellia_psychrerythraea_COLP3	4871	3243
Comamonas_testosteroni_COMT2	4779	3658
Conexibacter_woesei_CONWI	5911	4438
Conidiobolus_coronatus_CONC2	10562	6396
Coniosporium_apolloinis_CONA1	9305	7164
Coprinopsis_cinerea_COPC7	13333	7140

Corallococcus_coralloides_CORCM	8018	4757
Cordyceps_militaris_CORMM	9650	7310
Corvus_brachyrhynchos_CORBR	13620	12644
Crassostrea_gigas_CRAGI	25945	17694
Cricetulus_griseus_CRIGR	23880	18967
Cronobacter_sakazakii_CROS8	4420	3164
Cryptococcus_gattii_CRYGR	6470	5038
Cryptococcus_gattii_CRYGW	6559	5111
Cucumis_melo_CUCME	19472	18898
Cucumis_sativus_CUCSA	23743	19795
Culex_quinquefasciatus_CULQU	18661	14660
Cupriavidus_metallidurans_CUPMC	6363	4500
Cupriavidus_necator_CUPNH	6613	5161
Cupriavidus_necator_CUPNJ	6432	5041
Cyanidioschyzon_merolae_CYAM1	4990	3925
Cyanothece_sp_CYAA5	5238	3176
Cyanothece_sp_CYAP2	6558	3877
Cyanothece_sp_CYAP4	5231	3318
Cyanothece_sp_CYAP7	5655	3487
Cyanothece_sp_CYAP8	4334	2914
Cyberlindnera_fabianii_CYBFA	5506	4567
Cyberlindnera_jadinii_CYBJA	5051	4013
Cyclobacterium_marinum_CYCMS	4982	3223
Dacryopinax_primogenitus_DACPD	10232	6517
Dactylellina_haptotyla_DACHA	10958	7154
Debaryomyces_hansenii_DEBHA	6283	4968
Dechloromonas_aromatica_DECAR	4154	3046
Deinococcus_gobiensis_DEIGI	4328	2647
Deinococcus_peraridilitoris_DEIPD	4163	2735
Delftia_acidovorans_DELAS	5967	4407
Dendroctonus_ponderosae_DENPD	12068	9889
Desulfatibacillum_alkenivorans_DESAA	5197	3591
Desulfitobacterium_hafniense_DESHY	5013	3732
Desulfobacterium_autotrophicum_DESAH	4845	3451
Desulfobacula_toluolica_DESTT	4188	3060
Desulfomonile_tiedjei_DESTA	5411	3499
Desulfosporosinus_acidiphilus_DESAJ	4468	3059
Desulfosporosinus_meridiei_DESMD	4339	3076
Desulfosporosinus_orientis_DESOD	5216	3796
Desulfotomaculum_acetoxidans_DESAS	4015	2508
Desulfovibrio_magneticus_DESMR	4662	3011
Diaphorina_citri_DIACI	18135	13704
Dichomitus_squalens_DICSQ	7182	3886

Dickeya_dadantii_DICD3	4531	3393
Dictyocaulus_viviparus_DICVI	14160	9792
Dictyostelium_fasciculatum_DICFS	12151	7909
Didymella_rabiei_DIDRA	10557	8004
Dinoroseobacter_shibae_DINSH	4085	2948
Dipodomys_ordii_DIPOR	19727	19480
Dothistroma_septosporum_DOTSN	12398	7966
Dracunculus_medinensis_DRAME	10897	7939
Drosophila_ananassae_DROAN	14147	11187
Drosophila_busckii_DROBS	11913	10162
Drosophila_ficusphila_DROFC	15030	12113
Drosophila_grimshawi_DROGR	14688	11333
Drosophila_mojavensis_DROMO	13296	10777
Drosophila_persimilis_DROPE	16736	11809
Drosophila_pseudoobscura_DROPS	14388	11229
Drosophila_sechellia_DROSE	16096	11660
Drosophila_simulans_DROSI	15343	10952
Drosophila_virilis_DROVI	13485	10901
Drosophila_willistoni_DROWI	13593	11081
Dryobates_pubescens_DRYPU	13096	12216
Dyadobacter_fermentans_DYAFD	5702	3813
Echinicola_vietnamensis_ECHVK	4508	2943
Echinococcus_granulosus_ECHGR	11278	6698
Echinococcus_multilocularis_ECHMU	10471	7085
Ectocarpus_siliculosus_ECTSI	16333	9889
Edhazardia_aedis_EDHAE	4188	1273
Egretta_garzetta_EGRGA	13488	12691
Eimeria_acervulina_EIMAC	6866	3802
Eimeria_maxima_EIMMA	6056	3220
Eimeria_tenella_EIMTE	8594	3831
Emiliana_huxleyi_EMIHU	35675	18770
Emticicia_oligotrophica_EMTOG	4250	2947
Endocarpon_pusillum_ENDPU	9227	6747
Enterobacter_lignolyticus_ENTLS	4392	3583
Enterobacter_sp_ENT38	4235	3348
Enterobius_vermicularis_ENTVE	12868	8691
Eremothecium_cymbalariae_EREKY	4428	3744
Erinaceus_europaeus_ERIEU	19241	19074
Erwinia_billingiae_ERWBE	4914	3831
Erythranthe_guttata_ERYGU	27702	25879
Eubacterium_limosum_EUBLK	4505	2680
Eucalyptus_grandis_EUCGR	36663	31518
Euroglyphus_maynei_EURMA	15245	9595

Eurypyga_helias_EURHL	7978	7472
Eutrema_salsugineum_EUTSA	26425	24632
Eutypa_lata_EUTLA	11683	8986
Exophiala_dermatitidis_EXODN	9284	7267
Ficedula_albicollis_FICAL	15289	14497
Fistulifera_solaris_FISSO	20300	13241
Flavobacterium_johnsoniae_FLAJ1	5015	3147
Flavobacterium_sp_FLASC	4318	2733
Fluviicola_taffensis_FLUTR	4015	2178
Folsomia_candida_FOLCA	28564	15769
Fomitopsis_pinicola_FOMPI	13804	7630
Frankia_alni_FRAAA	6676	4123
Frankia_casuarinae_FRACC	4440	2864
Frankia_inefficax_FRAIE	7078	5069
Frankia_sp_FRASN	7132	4805
Frankia_symbiont_FRADG	4062	2677
Fukomys_damarensis_FUKDA	20404	17674
Fulmarus_glacialis_FULGA	8114	7676
Fusarium_langsethiae_FUSLA	11938	8910
Fusarium_oxysporum_FUSC1	15354	11177
Fusarium_oxysporum_FUSC4	14156	10313
Fusarium_oxysporum_FUSO4	16635	11500
Fusarium_oxysporum_FUSOF	17783	12224
Fusarium_poeae_FUSPO	14047	10297
Gaeumannomyces_graminis_GAGT3	14187	8212
Galdieria_sulphuraria_GALSU	6594	4752
Gasterosteus_aculeatus_GASAC	20665	19454
Gavia_stellata_GAVST	7729	7361
Geobacillus_sp_GEOS4	6236	4654
Geobacter_bemidjiensis_GEOBB	4041	2940
Geobacter_sp_GEOS8	4405	3111
Geobacter_uraniireducens_GEOUR	4254	3105
Geodermatophilus_obscurus_GEOOG	4794	3314
Gibberella_fujikuroi_GIBF5	14791	10906
Gibberella_moniliformis_GIBM7	15888	10963
Gibberella_zeae_GIBZE	14159	9418
Glarea_lozoyensis_GLAL2	13081	9105
Glarea_lozoyensis_GLAL7	7925	5038
Globodera_pallida_GLOPA	16265	9206
Gloeophyllum_trabeum_GLOTA	11734	7294
Glossina_austeni_GLOAU	19639	11355
Glossina_fuscipes_GLOFF	20020	11489
Glossina_morsitans_GLOMM	12515	9717

Glossina_pallidipes_GLOPL	19249	10603
Glycine_soja_GLYSO	26095	23337
Gonium_pectorale_GONPE	16223	10154
Gordonia_bronchialis_GORB4	4627	3201
Gordonia_polyisoprenivorans_GORPV	5096	3710
Gossypium_arboreum_GOSAR	30419	17587
Gossypium_hirsutum_GOSHI	60810	57607
Gossypium_raimondii_GOSRA	38036	34471
Granulicella_mallensis_GRAMM	4803	3249
Granulicella_tundricola_GRATM	4513	2915
Gregarina_niphandrodes_GRENI	6340	2665
Grifola_froncosa_GRIFR	14984	7099
Grosmannia_clavigera_GROCL	8310	6635
Haemonchus_contortus_HAECO	21200	14455
Haemonchus_placei_HAEPC	21888	12057
Hahella_chejuensis_HAHCH	6750	4073
Haliaeetus_albicilla_HALAL	8356	7831
Haliangium_ochraceum_HALO1	6683	4030
Halicomenobacter_hydrossis_HALH1	6703	4054
Haloarcula_marismortui_HALMA	4233	2418
Halobacillus_halophilus_HALH3	4099	2753
Halomonas_anticariensis_HALAF	4704	3594
Halomonas_elongata_HALEL	4640	3451
Halopiger_xanaduensis_HALXS	4220	2489
Haloterrigena_turkmenica_HALTV	5112	3031
Hammondia_hammondi_HAMHA	8001	4334
Handelsmanbacteria_sp_HANXR	5363	3584
Harpegnathos_saltator_HARSA	15028	9691
Helianthus_annuus_HELAN	51239	40770
Heligmosomoides_polygyrus_HELBK	23051	10161
Herbaspirillum_seropedicae_HERSS	4731	3730
Herpetosiphon_aurantiacus_HERA2	5253	3459
Heterocephalus_glaber_HETGA	21444	20799
Heterorhabditis_bacteriophora_HETBA	20832	8364
Hoeflea_phototrophica_HOEPD	4184	3137
Hordeum_vulgare_HORVV	35916	30650
Hoyosella_subflava_HOYSD	4702	3254
Hyaloperonospora_arabidopsidis_HYAAE	13835	6691
Hydatigena_teniaeformis_HYDTA	11627	7383
Hymenolepis_diminuta_HYMDI	11246	7574
Hymenolepis_microstoma_HYMMI	11999	7297
Hymenolepis_nana_HYMNN	13721	8289
Hyphomicrobium_sp_HYPSM	4888	2972

Hypocrea_atroviridis_HYPAL	11769	8693
Hypocrea_jecorina_HYPJQ	9111	7255
Hypocrea_virens_HYPVG	12382	9382
Hypsibius_dujardini_HYPDU	14161	8973
Hypsizygus_marmoreus_HYPMA	15518	7533
Ichthyophthirius_multifiliis_ICHMG	8048	5811
Ictidomys_tridecemlineatus ICTTR	18445	18258
Ideonella_sakaiensis_IDESA	5526	3957
Jannaschia_sp_JANSC	4270	3053
Jatropha_curcas_JATCU	27057	20501
Kalmanozyma_brasiliensis_KALBG	5764	4924
Kazachstania_africana_KAZAF	5353	4432
Kazachstania_naganishii_KAZNA	5300	4397
Kibdelosporangium_aridum_KIBAR	11139	7575
Kineococcus_radiotolerans_KINRD	4673	3243
Kitasatospora_aureofaciens_KITAU	7619	5097
Kitasatospora_griseola_KITGR	5874	3994
Kitasatospora_setae_KITSK	7442	4849
Klebsiella_aerogenes_KLEAK	4908	3897
Klebsiella_pneumoniae_KLEP7	5125	4105
Klebsormidium_flaccidum_KLEFL	16170	11098
Kluyvera_intermedia_KLUIN	5557	4126
Kluyveromyces_lactis_KLULA	5070	4199
Komagataella_phaffii_KOMPG	5072	4284
Koribacter_versatilis_KORVE	4770	3186
Kribbella_flavida_KRIFD	6939	4909
Labrenzia_alexandrii_LABAD	5362	3682
Laccaria_bicolor_LACBS	17894	7034
Lachancea_fermentati_LACFM	5228	4425
Lachancea_thermotolerans_LACTC	5092	4319
Larimichthys_crocea_LARCR	12676	11679
Lasius_niger_LASNI	18043	11460
Latimeria_chalumnae_LATCH	19567	19146
Lechevalieria_aerocolonigenes_NOCAE	8236	5512
Leishmania_braziliensis_LEIBR	8083	4953
Leishmania_infantum_LEIIN	8044	5003
Lentinula_edodes_LENED	12045	7242
Leptomonas_seymouri_LEPSE	8479	4891
Leptosomus_discolor_LEPDC	9573	8954
Leptosphaeria_maculans_LEPMJ	12607	7369
Leptothrix_cholodnii_LEPCP	4342	3325
Lingula_unguis_LINUN	30539	25796
Loa_loa_LOALO	12172	8143

Lodderomyces_elongisporus_LODEL	5778	4617
Lottia_gigantea_LOTGI	23572	16003
Loxodonta_africana_LOXAF	20019	19835
Lucilia_cuprina_LUCCU	14335	9482
Lupinus_angustifolius_LUPAN	13930	12958
Lutzomyia_longipalpis_LUTLO	10277	8474
Lyngbya_sp_LYNBP	6109	3720
Lysobacter_enzymogenes_LYSEN	5513	3219
Macaca_fascicularis_MACFA	17395	16757
Macrophomina_phaseolina_MACPH	13800	9487
Magnaporthe_oryzae_MAGO7	12674	7983
Magnaportheiopsis_poae_MAGP6	11205	6828
Magnetospirillum_magneticum_MAGSA	4513	2946
Malassezia_globosa_MALGO	4272	3700
Marinomonas_mediterranea_MARM1	4117	3121
Marinomonas_sp_MARMS	4415	3572
Marssonina_brunnea_MARBU	10036	6906
Medicago_truncatula_MEDTR	49963	35057
Megaselia_scalaris_MEGSC	11460	6978
Melampsora_larici_MELLP	16236	6705
Meleagris_gallopavo_MELGA	14165	13987
Meloidogyne_hapla_MELHA	14361	7606
Merops_nubicus_MERNU	7656	7290
Mesocricetus_auratus_MESAU	20194	19956
Mesorhizobium_ciceri_MESCW	6259	4531
Metarhizium_acridum_METAQ	9829	7782
Metarhizium_robertsii_METRA	11683	8857
Methylbium_petroleiphilum_METPP	4358	3013
Methylobacter_tundripaludum_METTV	4193	2808
Methylobacterium_extorquens_METEA	6232	3533
Methylobacterium_nodulans_METNO	8127	4606
Methylobacterium_radiotolerans_METRJ	6387	4143
Methylobacterium_sp_METS4	6646	4369
Methylocystis_sp_METSZ	4039	2477
Methylomicrobium_alcaliphilum_META2	4040	2739
Methylomonas_methanica_METMM	4434	2921
Meyerozyma_guilliermondii_PICGU	5918	4915
Microbotryum_lychnidis_USTV1	7353	5368
Microcystis_aeruginosa_MICAN	5980	3133
Microlunatus_phosphovorus_MICPN	5304	3576
Micromonas_commoda_MICCC	10088	7304
Micromonas_pusilla_MICPC	10245	7056
Micromonospora_aurantiaca_MICAI	6203	4118

Micromonospora_echinospora_MICEC	6414	4336
Mixia_osmundae_MIXOS	6724	4979
Moniliophthora_ernsteri_MONPE	13648	6843
Moniliophthora_roreri_MONRO	17971	9912
Mucor_circinelloides_MUCC1	12142	8800
Musa_acuminata_MUSAM	36473	30353
Musca_domestica_MUSDO	14345	11900
Mustela_putorius_MUSPF	19908	18415
Myceliophthora_thermophila_MYCTT	9078	6703
Mycobacterium_asiaticum_MYCAS	4762	3472
Mycobacterium_celatum_MYCCE	4309	3156
Mycobacterium_chubuense_MYCCN	5778	4041
Mycobacterium_gordonae_MYCGO	6406	4477
Mycobacterium_hassiacum_MYCHD	4958	3443
Mycobacterium_kansasii_MYCKA	5034	3464
Mycobacterium_malmoense_MYCMA	4970	3598
Mycobacterium_marinum_MYCMM	5417	3934
Mycobacterium_paraafortuitum_MYCPF	5682	4284
Mycobacterium_paratuberculosis_MYCPA	4315	3234
Mycobacterium_rhodesiae_MYCRN	6104	4322
Mycobacterium_shimoidei_MYCSH	4325	3137
Mycobacterium_sinense_MYCSD	4331	3028
Mycobacterium_smegmatis_MYCS2	6600	4843
Mycobacterium_sp_MYCSK	5892	4159
Mycobacterium_thermoresistibile_MYCT3	4612	3321
Mycobacterium_vanbaalenii_MYCVP	5901	4202
Myotis_brandtii_MYOBR	19242	18073
Myotis_davidii_MYODS	15445	14416
Myotis_lucifugus_MYOLU	19661	19452
Myxococcus_stipitatus_MYXSD	8042	4831
Myxococcus_xanthus_MYXXD	7313	4329
Naegleria_gruberi_NAAGR	15633	9005
Nakamurella_multipartita_NAKMY	5122	3536
Nasonia_vitripennis_NASVI	17018	11559
Natrialba_asiatica_NATA1	4174	2539
Natrialba_magadii_NATMM	4202	2414
Natrinema_pellirubrum_NATP1	4137	2358
Natrinema_sp_NATSJ	4295	2107
Naumovozya_castellii_NAUCC	5564	4565
Naumovozya_dairenensis_NAUDC	5522	4549
Necator_americanus_NECAM	19124	11745
Nectria_haematococca_NECH7	15708	12025
Nelumbo_nucifera_NELNU	23992	23350

Neosartorya_fischeri_NEOFI	10413	8423
Neospora_caninum_NEOCL	7107	4133
Neotoma_lepida_NEOLE	24273	22354
Nestor_notabilis_NESNO	9136	8736
Neurospora_tetrasperma_NEUT9	11176	6749
Niastella_koreensis_NIAKG	7170	4497
Nicotiana_attenuata_NICAT	20697	17311
Nicotiana_sylvestris_NICSY	33639	30414
Nicotiana_tabacum_TOBAC	61674	57395
Nipponia_nippon_NIPNI	14131	13180
Nippostrongylus_brasiliensis_NIPBR	22657	13715
Nitrobacter_hamburgensis_NITHX	4242	2606
Nitrospira_moscoviensis_NITMO	4732	2731
Nocardia_cyriacigeorgica_NOCCG	5472	3725
Nocardia_farcinica_NOCFA	5940	3886
Nocardioides_simplex_NOCSI	5425	3755
Nocardioides_sp_NOCSJ	4887	3482
Nocardiosis_alba_NOCAA	5499	3484
Nocardiosis_dassonvillei_NOCCD	5496	3873
Nomascus_leucogenys_NOMLE	18563	17768
Nosema_bombycis_NOSB1	4397	1765
Nostoc_punctiforme_NOSP7	6572	4225
Nostoc_sp_NOSS1	6069	3783
Nostoc_sp_NOSS7	5397	3508
Ochrobactrum_anthropi_OCHA4	4756	3544
Octopus_bimaculoides_OCTBM	32664	16764
Oesophagostomum_dentatum_OESDE	25132	16607
Ogataea_parapolyomorpha_OGAPD	5337	4561
Oikopleura_dioica_OIKDI	17049	9816
Onchocerca_ochengi_ONCOC	13341	8993
Onchocerca_volvulus_ONCVO	12117	7700
Ooceraea_biroi_OOCBI	16496	10333
Ophiocordyceps_sinensis_OPHSC	6967	5095
Ophiophagus_hannah_OPHHA	18386	15160
Ophiostoma_piceae_OPHP1	8877	6958
Opisthocomus_hoazin_OPIHO	12772	11510
Opitutus_terrae_OPITP	4587	3124
Orchesella_cincta_ORCCI	20217	14206
Oreochromis_niloticus_ORENI	21435	21123
Oryctolagus_cuniculus_RABIT	19904	19657
Oryza_brachyantha_ORYBR	31988	23954
Oryza_glaberrima_ORYGL	31806	25088
Oryza_nivara_ORYNI	36305	26317

Oryza_punctata_ORYPU	31310	24910
Oryza_rufipogon_ORYRU	37109	26559
Oscillibacter_valericigenes_OSCVS	4592	2629
Ostreococcus_lucimarinus_OSTLU	7389	5644
Ostreococcus_tauri_OSTTA	7742	5812
Otolemur_garnettii_OTOGA	19450	19303
Ovis_aries_SHEEP	21220	20688
Paenarthrobacter_aurescens_PAEAT	4564	3308
Paenibacillus_macerans_PAEMA	6550	4577
Paenibacillus_polymyxa_PAEPS	5376	3632
Paenibacillus_sp_PAESJ	6209	4761
Pantoea_ananatis_PANAM	4240	3406
Pantoea_sp_PANSA	5759	4528
Pantoea_vagans_PANVC	4589	3485
Papilio_machaon_PAPMA	15460	11344
Papilio_xuthus_PAPXU	15264	11134
Papio_anubis_PAPAN	19198	18808
Paraburkholderia_caryophylli_PARCY	5784	4310
Paraburkholderia_phymatum_PARP8	7460	5446
Paraburkholderia_xenovorans_PARXL	8590	6308
Paracoccidioides_brasiliensis_PARBD	8398	5777
Paracoccidioides_lutzii_PARBA	8810	5863
Paracoccus_denitrificans_PARDP	5018	3671
Parastrongyloides_trichosuri_PARTI	14866	9687
Pectobacterium_atrosepticum_PECAS	4458	3405
Pediculus_humanus_PEDHC	10753	8728
Pedobacter_heparinus_PEDHD	4248	2958
Pedosphaera_parvula_PEDPL	6491	3630
Pelagibaca_bermudensis_PELBH	5419	3731
Pelodiscus_sinensis_PELSI	18115	17709
Penicillium_digitatum_PEND2	9100	6947
Penicillium_expansum_PENEN	11059	8875
Penicillium_italicum_PENIT	9992	7526
Penicillium_nalgiovense_PENNA	11727	8460
Penicillium_oxalicum_PENO1	9976	7213
Penicillium_patulum_PENPA	9627	7900
Penicillium_roqueforti_PENRF	12314	8239
Penicillium_rubens_PENRW	12787	8798
Perkinsus_marinus_PERM5	22957	11717
Phaeodactylum_tricornutum_PHATC	10450	6978
Phaethon_lepturus_PHALP	9151	8602
Phalacrocorax_carbo_PHACA	8989	8611
Phanerochaete_carnosa_PHACS	13866	7545

Phaseolus_angularis_PHAAN	33729	25221
Phaseolus_vulgaris_PHAVU	28019	25888
Phlebotomus_papatasi_PHLPP	11187	9352
Photobacterium_angustum_PHOAS	4551	3318
Photobacterium_profundum_PHOPR	5327	3850
Photorhabdus_luminescens_PHOLL	4555	2967
Phycomyces_blakesleeenanus_PHYB8	16153	8336
Phytophthora_infestans_PHYIT	17608	11035
Phytophthora_nicotianae_PHYNI	15886	10673
Phytophthora_parasitica_PHYPN	23003	11709
Phytophthora_sojae_PHYSP	25720	12789
Picea_glauca_PICGL	6154	201
Pichia_kudriavzevii_PICKU	6872	4643
Pichia_sorbitophila_PICSO	8850	7232
Pirellula_staley_i_PIRSD	4710	2805
Planctopirus_limnophila_PLAL2	4257	2444
Plasmodiophora_brassicae_PLABS	9719	6684
Plasmodium_berghei_PLABA	11655	3467
Plasmodium_berghei_PLABE	5059	2894
Plasmodium_chabaudi_PLACH	14613	3916
Plasmodium_fragile_PLAFR	5637	3036
Plasmodium_gonderi_PLAGO	5914	3031
Plasmodium_knowlesi_PLAKH	5099	2990
Plasmodium_malariae_PLAMA	6338	2863
Plasmodium_vivax_PLAVS	5388	3060
Plasmodium_yoelii_PLAYO	7740	2846
Pluralibacter_gergoviae_PLUGE	4976	4004
Podospora_anserina_PODAN	10656	7951
Poecilia_formosa_POEFO	23407	22776
Polaromonas_naphthalenivorans_POLNA	4878	3376
Polaromonas_sp_POLSJ	5436	4000
Polymorphum_gilvum_POLGS	4353	3175
Polysphondylium_pallidum_POLPP	12350	8309
Pongo_abelii_PONAB	22000	20570
Postia_placenta_POSPM	8982	3943
Prunus_persica_PRUPE	26845	23713
Pseudarthrobacter_chlorophenolicus_PSECP	4586	3107
Pseudarthrobacter_phenanthrenivorans_PSEPM	4080	2987
Pseudoalteromonas_atlantica_PSEA6	4270	3243
Pseudoalteromonas_piscicida_PSEO7	4133	2984
Pseudocercospora_fijiensis_PSEFD	13042	8107
Pseudocohnilembus_persalinus_PSEPJ	13174	7153
Pseudogymnoascus_destructans_PSED2	9072	6344

<i>Pseudomonas_agarici_PSEAA</i>	4625	3483
<i>Pseudomonas_alcaligenes_PSEA4</i>	4527	3265
<i>Pseudomonas_entomophila_PSEE4</i>	5125	3881
<i>Pseudomonas_fluorescens_PSEF5</i>	6107	4686
<i>Pseudomonas_fluorescens_PSEFS</i>	6387	4637
<i>Pseudomonas_fulva_PSEF1</i>	4458	3519
<i>Pseudomonas_knackmussii_PSEKB</i>	5615	4251
<i>Pseudomonas_mendocina_PSEMY</i>	4562	3572
<i>Pseudomonas_putida_PSEPK</i>	5526	4116
<i>Pseudomonas_putida_PSEPU</i>	5174	3895
<i>Pseudomonas_stutzeri_PSEST</i>	4144	3348
<i>Pseudomonas_stutzeri_PSEU5</i>	4091	3211
<i>Pseudomonas_syringae_PSESM</i>	5430	3910
<i>Pseudomonas_syringae_PSESX</i>	4833	3767
<i>Pseudonocardia_dioxanivorans_PSEUX</i>	6619	4766
<i>Pseudonocardia_thermophila_PSETH</i>	5849	4334
<i>Pseudoceanicola_batsensis_PSEBH</i>	4192	3036
<i>Pseudovibrio_sp_PSEUV</i>	5455	3847
<i>Pseudozyma_antarctica_PSEA2</i>	4671	3584
<i>Pseudozyma_antarctica_PSEA3</i>	6542	5231
<i>Pseudozyma_hubeiensis_PSEHS</i>	7471	5162
<i>Pteropus_alecto_PTEAL</i>	19519	17914
<i>Puccinia_triticina_PUCT1</i>	14859	7797
<i>Punica_granatum_PUNGR</i>	28976	21374
<i>Pycnoporus_cinnabarinus_PYCCI</i>	10179	6770
<i>Pygoscelis_adeliae_PYGAD</i>	12847	12018
<i>Pyrenophora_teres_PYRTT</i>	11704	8215
<i>Pyrenophora_tritici_PYRTR</i>	12061	8088
<i>Pyronema_omphalodes_PYROM</i>	13305	6666
<i>Rahnella_aquaticus_RAHAC</i>	4840	3809
<i>Ralstonia_pickettii_RALPJ</i>	4889	3540
<i>Ralstonia_solanacearum_RALSO</i>	5001	3510
<i>Ramazzottius_varieornatus_RAMVA</i>	22939	11655
<i>Raoultella_ornithinolytica_RAOOR</i>	4873	4128
<i>Reticulomyxa_filosa_RETFI</i>	39902	14527
<i>Rhizobium_etli_RHIEC</i>	5917	4407
<i>Rhizobium_lotii_RHILI</i>	5897	4118
<i>Rhizobium_lotii_RHILO</i>	7254	5011
<i>Rhizobium_meliloti_RHIME</i>	6168	4657
<i>Rhizophagus_irregularis_RHIID</i>	29837	10861
<i>Rhizopus_delemar_RHIO9</i>	16970	10105
<i>Rhodnius_prolixus_RHOPR</i>	15182	10412
<i>Rhodobacter_sphaeroides_RHOS4</i>	4284	3045

Rhodococcus_erythropolis_RHOE4	6423	4604
Rhodococcus_jostii_RHOJR	9074	6134
Rhodoferax_ferrireducens_RHOFT	4400	3347
Rhodopseudomonas_palustris_RHOPA	4810	3609
Rhodopseudomonas_palustris_RHOPB	4863	3436
Rhodopseudomonas_palustris_RHOPL	5579	3987
Rhodospiridium_toruloides_RHOT1	8137	5806
Rhodotorula_graminis_RHOGW	7224	5403
Rhodovulum_sulfidophilum_RHOSU	4358	2994
Ricinus_communis_RICCO	31218	23171
Roseiflexus_sp_ROSS1	4493	3232
Rosellinia_necatrix_ROSNE	12439	8858
Roseobacter_denitrificans_ROSDO	4117	2966
Rubinisphaera_brasiliensis_RUBBR	4709	2861
Rubrivivax_gelatinosus_RUBGI	4685	3502
Ruegeria_pomeroyi_RUEPO	4268	3300
Runella_slithyformis_RUNSL	5749	3661
Saccharopolyspora_erythraea_SACEN	7153	5125
Saccharothrix_espanaensis_SACES	8422	5325
Salinispora_tropica_SALTO	4521	3146
Salmo_salar_SALSA	47718	45303
Salmonella_arizonae_SALAR	4499	3227
Salpingoeca_rosetta_SALR5	11613	8498
Saprolegnia_parasitica_SAPPC	20051	12488
Saprospira_grandis_SAPGL	4217	1869
Sarcophilus_harrisii_SARHA	18780	17968
Sarcoptes_scabiei_SARSC	10467	7197
Scheffersomyces_stipitis_PICST	5796	4885
Schistocephalus_solidus_SCHSO	20214	10335
Schistosoma_haematobium_SCHHA	11118	8046
Schistosoma_mansoni_SCHMA	10724	7561
Schizophyllum_commune_SCHCM	13123	7268
Schizosaccharomyces_cryophilus_SCHCR	5134	4377
Schizosaccharomyces_japonicus_SCHJY	4851	4195
Sebaldella_terminidis_SEBTE	4123	2480
Sediminispirochaeta_smaragdinae_SEDSS	4210	3188
Selaginella_moellendorffii_SELML	32881	27005
Serendipita_indica_SERID	11779	6726
Serpula_lacrymans_SERL3	14338	6716
Serratia_fonticola_SERFO	5085	4043
Serratia_proteamaculans_SERP5	4929	3966
Serratia_sp_SERS3	4406	3503
Setaria_italica_SETIT	35699	28349

Setosphaeria_turcica_SETT2	11686	8290
Shewanella_pealeana_SHEPA	4180	3150
Shewanella_violacea_SHEVD	4335	2936
Shewanella_woodyi_SHEWM	4864	3513
Singulisphaera_acidiphila_SINAD	7125	4201
Sinorhizobium_fredii_SINFN	6273	4598
Sinorhizobium_saheli_SINSA	5289	3944
Solanum_tuberosum_SOLTU	39132	27677
Solenopsis_invicta_SOLIN	13579	8713
Solibacter_usitatus_SOLUE	7760	5121
Solitalea_canadensis_SOLCM	4303	2796
Sorangium_cellulosum_SORC5	9319	5416
Sordaria_macrospora_SORMK	9889	7228
Sorghum_bicolor_SORBI	33939	27193
Spathaspora_passalidarum_SPAPN	5972	4814
Sphaerulina_musiva_SPHMS	10153	7213
Sphingobacterium_sp_SPHS2	5131	3589
Sphingobium_japonicum_SPHJU	4346	2752
Sphingomonas_wittichii_SPHWW	5312	3892
Sphingopyxis_macrogoltabida_SPHMC	4439	3025
Sphingopyxis_sp_SPHS1	4364	2947
Spinacia_oleracea_SPIOL	21532	18179
Spirosoma_linguale_SPILD	6866	4308
Sporisorium_reilianum_SPORE	6672	5347
Sporosarcina_psychrophila_SPOPS	4218	3024
Sporothrix_schenckii_SPOS1	8672	7065
Stachybotrys_chlorohalonata_STAC4	10675	8134
Stackebrandtia_nassauensis_STANL	6378	4305
Stanieria_cyanosphaera_STAC7	4750	3180
Starkeya_novella_STAND	4423	3365
Stigmatella_aurantiaca_STIAD	8306	4975
Stomoxys_calcitrans_STOCA	13975	11700
Streptoalloteichus_hindustanus_STRHI	6532	4330
Streptomyces_albulus_STRA9	8068	5474
Streptomyces_albus_STRA4	7321	4710
Streptomyces_atratus_STRAR	7606	5015
Streptomyces_avermitilis_STRAW	7671	5277
Streptomyces_bingchenggensis_STRBB	10018	6855
Streptomyces_cattleya_STREN	7536	4735
Streptomyces_clavuligerus_STRC2	7289	4549
Streptomyces_collinus_STRC3	6681	4683
Streptomyces_fradiae_STRFR	6178	4209
Streptomyces_glaucescens_STRGA	6549	4593

Streptomyces_griseus_STRGG	7007	4937
Streptomyces_hygroscopicus_STRHJ	9045	6067
Streptomyces_lincolnsis_STRLN	8566	6390
Streptomyces_pratensis_STRFA	6557	4635
Streptomyces_scabiei_STRSW	8699	5849
Streptomyces_sp_STREK	6353	4575
Streptomyces_sp_STRSH	5652	3772
Streptomyces_toyocaensis_STRTO	6314	4429
Streptomyces_venezuelae_STRVP	7450	5044
Streptomyces_viridochromogenes_STRVT	7705	5344
Streptosporangium_roseum_STRRD	8954	6274
Strigamia_maritima_STRMM	14958	11235
Strongyloides_papillosus_STREA	18206	11093
Strongyloides_ratti_STRRB	9955	7193
Strongyloides_stercoralis_STRER	12822	8843
Stylonychia_lemnae_STYLE	20719	10152
Symbiodinium_microadriaticum_SYMMI	43268	16649
Synechococcus_sp_SYNS7	5474	3307
Syntrophobacter_fumaroxidans_SYNFM	4011	2807
Taenia_asiatica_TAEAS	10314	6997
Taeniopygia_guttata_TAEGU	17428	16746
Takifugu_rubripes_TAKRU	18562	18444
Talaromyces_islandicus_TALIS	9926	8236
Talaromyces_marneffeii_TALMQ	10027	8221
Talaromyces_stipitatus_TALSN	12467	9672
Taphrina_deformans_TAPDE	4649	3865
Tarsius_syrichtha_TARSY	20572	20137
Tauraco_erythrolophus_TAUER	10098	9518
Teredinibacter_turnerae_TERTT	4248	2828
Terriglobus_saanensis_TERSS	4176	2913
Tetrahymena_thermophila_TETTS	26970	14843
Tetranychus_urticae_TETUR	17525	10176
Tetraodon_nigroviridis_TETNG	19571	19200
Tetrapisispora_blattae_TETBL	5384	4472
Tetrapisispora_phaffii_TETPH	5237	4344
Thalassiosira_oceanica_THAOC	34546	11146
Thanatephorus_cucumeris_THACA	10481	5361
Thanatephorus_cucumeris_THACB	12196	8195
Theileria_parva_THEPA	4070	2136
Thelazia_callipaeda_THECL	10893	7655
Thelohanellus_kitaei_THEKT	14749	5329
Theobroma_cacao_THECC	29149	23212
Thermomonospora_curvata_THECD	4887	3329

Thielavia_terrestris_THITE	9759	7065
Thiocystis_violascens_THIV6	4191	2814
Thiothrix_nivea_THINJ	4217	2799
Tinamus_guttatus_TINGU	13376	12252
Tistrella_mobilis_TISMK	5777	4434
Togninia_minima_TOGMI	8832	7392
Torulaspora_delbrueckii_TORDC	4965	4201
Toxocara_canis_TOXCA	18498	11465
Toxoplasma_gondii_TOXGV	8403	4352
Trametes_pubescens_TRAPU	14146	7524
Trichinella_britovi_TRIBR	15465	6416
Trichinella_pseudospiralis_TRIPS	10628	5784
Trichinella_spiralis_TRISP	15523	7564
Trichobilharzia_regenti_TRIRE	22145	10964
Trichoderma_harzianum_TRIHA	11496	9057
Trichodesmium_erythraeum_TRIEI	4341	2783
Trichophyton_equinum_TRIEC	8675	6143
Trichophyton_rubrum_TRIRC	8615	6156
Trichosporon_asahii_TRIAC	8514	5333
Trichuris_muris_TRIMR	10587	6728
Trichuris_trichiura_TRITR	9624	7563
Triticum_aestivum_WHEAT	102255	93965
Triticum_urartu_TRIUA	33312	27288
Trypanosoma_congolense_TRYCI	5905	1786
Trypanosoma_cruzi_TRYCC	19241	9622
Tsukamurella_paurometabola_TSUPD	4169	2991
Tuber_melanosporum_TUBMM	7493	5479
Tupaia_chinensis_TUPCH	20823	18603
Turneriella_parva_TURPD	4091	2385
Tyto_alba_TYTAL	9262	8582
Uncinocarpus_reesii_UNCRE	7759	5783
Uncinula_necator_UNCNE	6481	4552
Ustilago_hordei_USTH4	7109	5359
Vanderwaltozyma_polyspora_VANPO	5313	4345
Variovorax_paradoxus_VARPD	6787	5255
Verminephrobacter_eiseniae_VEREI	4910	3763
Verrucospora_maris_VERMA	5997	3960
Verticillium_alfalfae_VERA1	10232	7645
Verticillium_dahliae_VERDV	10529	7918
Vibrio_campbellii_VIBCB	5604	3644
Vibrio_furnissii_VIBFN	4439	3487
Vibrio_parahaemolyticus_VIBPA	4820	3412
Vibrio_sp_VIBSJ	4782	3690

Vibrio_sp_VIBSN	4027	3000
Vibrio_tasmaniensis_VIBTL	4419	3236
Vibrio_vulnificus_VIBVY	4989	3415
Vigna_radiata_VIGRR	26452	25384
Vitrella_brassicaformis_VITBC	23029	10462
Wallemia_ichthyophaga_WALI9	4835	3968
Wallemia_mellicola_WALMC	5259	4285
Wickerhamomyces_ciferrii_WICCF	6697	5147
Wuchereria_bancrofti_WUCBA	19297	10989
Xanthobacter_autotrophicus_XANP2	4970	3455
Xanthomonas_oryzae_XANOR	4381	3102
Xenopus_laevis_XENLA	41561	31494
Xenorhabdus_bovienii_XENBS	4101	2495
Xenorhabdus_nematophila_XENNA	4438	2646
Xiphophorus_maculatus_XIPMA	20376	20010
Zancudomyces_culisetae_ZANCU	7386	4165
Zobellia_galactanivorans_ZOBGA	4707	2980
Zootermopsis_nevadensis_ZOONE	14525	10147
Zostera_marina_ZOSMR	20357	18128
Zunongwangia_profunda_ZUNPS	4632	2856
Zygosaccharomyces_rouxii_ZYGRC	4986	4200
Zymoseptoria_tritici_ZYMTI	10971	7559