

Supplementary File 1: Ascomycota, Basidiomycota, and Early-diverging

Sequenced Ascomycota species

SPECIES	PHYLUM	SUBPHYLUM	Classification				Strain	GOLD Accession	GENOME Accession	NCBI Project ID	Significance	Genome statistics					GC	Technology
			CLASS	SUBCLASS	ORDER	FAMILY						Size (Mb)	coverage	# of contigs	# of scaffolds	# genes		
Cerataphis brasiliensis yeast-like	Ascomycota	Incertae sedis	Incertae sedis	Incertae sedis	Incertae sedis	Incertae sedis	not specified	Gp0039293	AOPF01	169168	arthropod associated (aphid symbiont)	25.5	39.00	11971	1181	56	illumina HiSeq	
Endocalyx cinctus	Ascomycota	Incertae sedis	Incertae sedis	Incertae sedis	Incertae sedis	Incertae sedis	JCM 7946	Gp0143759	BCKC01	313891	uncertain saprotroph	44.77	252.00	178	17	45.4	HiSeq 2500	
Nilaparvata lugens yeast-like symbi	Ascomycota	Incertae sedis	Incertae sedis	Incertae sedis	Incertae sedis	Incertae sedis	not specified	Gp0076238	JRMI01	177649	uncertain	26,809	193.00	2794	578	55	454; illumina	
Aplosporella prunicola	Ascomycota	Peziomycotina	Dothideomycetes	Incertae sedis	Botryosphaerales	Aplosporellaceae	CBS 121167	Gp0019419	JGI	196034	probable tree pathogen	32.82	194	763	334	12579		
Aplosporella prunicola	Ascomycota	Peziomycotina	Dothideomycetes	Incertae sedis	Botryosphaerales	Aplosporellaceae	CBS 121167	Gp0019419	JGI	196034	probable tree pathogen	32.82	194.00	763	334	12579		
Botryosphaeria dothidea	Ascomycota	Peziomycotina	Dothideomycetes	Incertae sedis	Botryosphaerales	Botryosphaeriaceae	CBS 115476	Gp0038455	AYEP01	81801	plant pathogen (broad host range of trees and shrubs)	43.5		3301	1711	14998		
Botryosphaeria dothidea	Ascomycota	Peziomycotina	Dothideomycetes	Incertae sedis	Botryosphaerales	Botryosphaeriaceae	CBS 115476	Gp0038455	AYEP01	81801	plant pathogen (broad host range of trees and shrubs)	43.5		3301	1711	14998		
Diplodia pinea	Ascomycota	Peziomycotina	Dothideomycetes	Incertae sedis	Botryosphaerales	Botryosphaeriaceae	CMW39103	Gp0093398	JHUM01	242796	plant pathogen (pines)	36,0534	10.00	2367		56.9	illumina MiSeq	
Diplodia pinea	Ascomycota	Peziomycotina	Dothideomycetes	Incertae sedis	Botryosphaerales	Botryosphaeriaceae	CMW39103	Gp0093398	JHUM01	242796	plant pathogen (pines)	36,0534	10.00	2367		56.9	illumina MiSeq	
Diplodia scrobiculata	Ascomycota	Peziomycotina	Dothideomycetes	Incertae sedis	Botryosphaerales	Botryosphaeriaceae	CMW30223	Gp0143864	LAEG01	278001	plant pathogen (conifer spp.)	34.93	15	4037	3772	57	illumina MiSeq	
Diplodia scrobiculata	Ascomycota	Peziomycotina	Dothideomycetes	Incertae sedis	Botryosphaerales	Botryosphaeriaceae	CMW30223	Gp0143864	LAEG01	278001	plant pathogen (conifer spp.)	34.93	15.00	4037	3772	57	illumina MiSeq	
Diplodia seriata	Ascomycota	Peziomycotina	Dothideomycetes	Incertae sedis	Botryosphaerales	Botryosphaeriaceae	DS831	Gp0117696	LAQI01	261773	plant pathogen (grapevine bot canker)	37.12	78.93	1522	694	9343	56.7	illumina HiSeq
Diplodia seriata	Ascomycota	Peziomycotina	Dothideomycetes	Incertae sedis	Botryosphaerales	Botryosphaeriaceae	DS831	Gp0117696	LAQI01	261773	plant pathogen (grapevine bot canker)	37.12	78.93	1522	694	9343	56.7	illumina HiSeq
Guignardia citricarpa	Ascomycota	Peziomycotina	Dothideomycetes	Incertae sedis	Botryosphaerales	Botryosphaeriaceae	CGMCC3.14348	Gp0041977	AOTE01	188924	plant pathogen (citrus)	32,007	300.00	6716		52.6	454; illumina	
Guignardia citricarpa	Ascomycota	Peziomycotina	Dothideomycetes	Incertae sedis	Botryosphaerales	Botryosphaeriaceae	CGMCC3.14348	Gp0041977	AOTE01	188924	plant pathogen (citrus)	32,007	300.00	6716		52.6	454; illumina	
Macrophomina phaseolina	Ascomycota	Peziomycotina	Dothideomycetes	Incertae sedis	Botryosphaerales	Botryosphaeriaceae	MS6	Gp0044758	AHHD01	78845	plant pathogen (broad host range)	48,882	66.00	1506		14712	52.3	454; illumina
Macrophomina phaseolina	Ascomycota	Peziomycotina	Dothideomycetes	Incertae sedis	Botryosphaerales	Botryosphaeriaceae	MS6	Gp0044758	AHHD01	78845	plant pathogen (broad host range)	48,882	66.00	1506		14712	52.3	454; illumina
Neofusicoccum parvum	Ascomycota	Peziomycotina	Dothideomycetes	Incertae sedis	Botryosphaerales	Botryosphaeriaceae	UCRNP2	Gp0039200	AORE01	187491	plant pathogen (grapevines)	42.59	100	1728	1297	10366	56.8	illumina HiSeq
Neofusicoccum parvum	Ascomycota	Peziomycotina	Dothideomycetes	Incertae sedis	Botryosphaerales	Botryosphaeriaceae	UCRNP2	Gp0039200	AORE01	187491	plant pathogen (grapevines)	42.59	100.00	1728	1297	10366	56.8	illumina HiSeq
Phyllosticta capitalensis	Ascomycota	Peziomycotina	Dothideomycetes	Incertae sedis	Botryosphaerales	Phyllostictaceae	Gm33		LOEO01	301361	endophyte; weak plant pathogen	32.45	70	1341		54.6	IonTorrent	
Phyllosticta capitalensis	Ascomycota	Peziomycotina	Dothideomycetes	Incertae sedis	Botryosphaerales	Phyllostictaceae	Gm33		LOEO01	301361	endophyte; weak plant pathogen	32.45	70.00	1341		54.6	IonTorrent	
Phyllosticta citricarpa	Ascomycota	Peziomycotina	Dothideomycetes	Incertae sedis	Botryosphaerales	Phyllostictaceae	Gc12	Gp0144687	LOEN01	301361	plant pathogen (citrus black spot)	31.13	75	5748		53.1	IonTorrent	
Phyllosticta citricarpa	Ascomycota	Peziomycotina	Dothideomycetes	Incertae sedis	Botryosphaerales	Phyllostictaceae	Gc12	Gp0144687	LOEN01	301361	plant pathogen (citrus black spot)	31.13	75.00	5748		53.1	IonTorrent	
Phyllosticta citriana	Ascomycota	Peziomycotina	Dothideomycetes	Incertae sedis	Botryosphaerales	Phyllostictaceae	CBS 120486	Gp0032376	1011300	243943	plant pathogen (citrus tan spot)	32.7	88.60	741	133	11368		illumina
Saccharata proteae	Ascomycota	Peziomycotina	Dothideomycetes	Incertae sedis	Botryosphaerales	Saccharataceae	CBS 121410	Gp0033051	JGI	196072	endophyte; occasional plant pathogen	31.43	98.8	727	245	9234		illumina HiSeq
Saccharata proteae	Ascomycota	Peziomycotina	Dothideomycetes	Incertae sedis	Botryosphaerales	Saccharataceae	CBS 121410	Gp0033051	JGI	196072	endophyte; occasional plant pathogen	31.43	98.80	727	245	9234		illumina HiSeq
Polychaeton citri	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Capnodiaceae	CBS 116435	Gp0033215	JGI	196013	uncertain; mold (non-pathogenic sooty)	27.21	145.2	451	416	10582		illumina HiSeq
Polychaeton citri	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Capnodiaceae	CBS 116435	Gp0033215	JGI	196013	uncertain; mold (non-pathogenic sooty)	27.21	145.2	451	416	10582		illumina HiSeq
Cladosporium fulvum	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Cladosporiaceae	not specified	JGI			61.11		5382	4865	14127			
Cladosporium fulvum	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Cladosporiaceae	not specified	JGI			61.11		5382	4865	14127			
Cladosporium sphaerospermum	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Cladosporiaceae	UM 843	Gp0021025	AI1A02	85131	human allergen; dermatiaceous	26.89	98.00	877	155		56.6	illumina
Cladosporium sphaerospermum	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Cladosporiaceae	UM 843	Gp0021025	AI1A02	85131	human allergen; dermatiaceous	26.89	98.00	877	155		56.6	illumina
Dissoconium aciculare	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Dissoconiaceae	CBS 342.82	Gp0033050	JGI	196071	mycoparasitic (Erysiphaceae)	26.54	97.7	232	54	10299		illumina
Dissoconium aciculare	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Dissoconiaceae	CBS 342.82	Gp0033050	JGI	196071	mycoparasitic (Erysiphaceae)	26.54	97.70	232	54	10299		illumina
Pseudovirgaria hyperparasitica	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Incertae sedis	CBS 121739	Gp0072276	JGI	245627	biocontrol (mycoparasite of rust)	35.44	86.3	408	122	11232		illumina
Pseudovirgaria hyperparasitica	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Incertae sedis	CBS 121739	Gp0072276	JGI	245627	biocontrol (mycoparasite of rust)	35.44	86.30	408	122	11232		illumina
Cercospora canescens	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Mycosphaerellaceae	BHU	Gp0037543	ANSM01	183604	plant pathogen (leaf spot of various bean crops and tomato)	33.96	12.00	8239		52	illumina	
Cercospora canescens	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Mycosphaerellaceae	BHU	Gp0037543	ANSM01	183604	plant pathogen (leaf spot of various bean crops and tomato)	33.96	12.00	8239		52	illumina	
Cercospora zaeae-maydis	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Mycosphaerellaceae	SC01	Gp0002172	JGI	68833	plant pathogen (maize); toxin-producing	46.61	39.29	2555	917	12020		
Cercospora zaeae-maydis	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Mycosphaerellaceae	SC01	Gp0002172	JGI	68833	plant pathogen (maize); toxin-producing	46.61	39.29	2555	917	12020		
Lecanosticta acicola	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Mycosphaerellaceae	CBS 871.95	Gp0047147	AWYC01	212329	plant pathogen (pine)	34.873	295.00	4114	2052		48.7	illumina HiSeq
Lecanosticta acicola	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Mycosphaerellaceae	CBS 871.95	Gp0047147	AWYC01	212329	plant pathogen (pine)	34.873	295.00	4114	2052		48.7	illumina HiSeq
Mycosphaerella arachidis (Cercospora)	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Mycosphaerellaceae	CALF-13A	Gp0150604	LIH801	291633	plant pathogen (leaf spot on peanuts)	33.24	100.00	796	491	52.4		
Mycosphaerella eumusae	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Mycosphaerellaceae	CBS 114824	Gp0143045	LFZN01	289096	plant pathogen (banana)	47.12	165	2944	2626	12632	47.9	illumina HiSeq
Mycosphaerella eumusae	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Mycosphaerellaceae	CBS 114824	Gp0143045	LFZN01	289096	plant pathogen (banana)	47.12	165.00	2944	2626	12632	47.9	illumina HiSeq
Mycosphaerella fijiensis	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Mycosphaerellaceae	CIRAD86	Gp0002650	JGI	19049	plant pathogen (leaf spot of banana)	74.14	7.11	778	56	13107	45.2	Sanger
Mycosphaerella fijiensis	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Mycosphaerellaceae	CIRAD86	Gp0002650	JGI	19049	plant pathogen (leaf spot of banana)	74.14	7.11	778	56	13107	45.2	Sanger
Mycosphaerella laricina	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Mycosphaerellaceae	CBS 326.52	Gp0047149	AWYE01	212505	plant pathogen (larch)	25.598	527.00	1307	642		52.5	illumina HiSeq
Mycosphaerella laricina	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Mycosphaerellaceae	CBS 326.52	Gp0047149	AWYE01	212505	plant pathogen (larch)	25.598	527.00	1307	642		52.5	illumina HiSeq
Mycosphaerella pini	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Mycosphaerellaceae	NZE10	Gp0017021	AIEN01	74753	plant pathogen (pine)	30.21	34.28	264	20	12580	53.1	Sanger; 454; illumina
Mycosphaerella pini	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Mycosphaerellaceae	NZE10	Gp0017021	AIEN01	74753	plant pathogen (pine)	30.21	34.28	264	20	12580	53.1	Sanger; 454; illumina
Mycosphaerella sp. Ston1	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Mycosphaerellaceae	STON1	Gp0045163	AWYF01	212506	poplar-associated	27.509	491.00	3346	1929		51.2	illumina HiSeq
Mycosphaerella sp. Ston1	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Mycosphaerellaceae	STON1	Gp0045163	AWYF01	212506	poplar-associated	27.509	491.00	3346	1929		51.2	illumina HiSeq
Passalora (Cladosporium) fulva	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Mycosphaerellaceae	CBS 131901	Gp0039398	AMRR01	86753	plant pathogen (tomato)	61.1	21.00	5714	4864		48.8	454
Pseudocercospora musae	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Mycosphaerellaceae	CBS 116634	Gp0143044	LFZO01	289098	plant pathogen (banana)	60.44	112	3640	3331	13129	44	illumina HiSeq
Pseudocercospora musae	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Mycosphaerellaceae	CBS 116634	Gp0143044	LFZO01	289098	plant pathogen (banana)	60.44	112	3640	3331	13129	44	illumina HiSeq
Pseudocercospora pini-densiflorae	Ascomycota	Peziomycotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Mycosphaerellaceae	CBS 125139	Gp0047148	AWYD01	212512	animal pathogen (bats)	45,171	304.00	7359	5537		48.5</	

Eremomyces bilateralis	Ascomycota	Peizozymocotina	Dothideomycetes	Incertae sedis	Incertae sedis	Eremomycetaceae	CBS 781.70	Gp0033623	1011349	217190	uncertain	26,86	91,10	321	95	9881	illumina HiSeq
Cryomyces antarcticus	Ascomycota	Peizozymocotina	Dothideomycetes	Incertae sedis	Incertae sedis	Incertae sedis	CCFEE 534	Gp0076232	AYQD01	222806	rock-inhabiting; stress-tolerant	24,32	108,00	12491			53,9 Ion Torrent
Cryomyces antarcticus	Ascomycota	Peizozymocotina	Dothideomycetes	Incertae sedis	Incertae sedis	Incertae sedis	CCFEE 534	Gp0076232	AYQD01	222806	rock-inhabiting; stress-tolerant	24,32	108,00	12491			53,9 Ion Torrent
Peltaster fructicola	Ascomycota	Peizozymocotina	Dothideomycetes	Incertae sedis	Incertae sedis	Incertae sedis	LNHT1506	Gp0143846	LJA001	293964	plant pathogen (apples)	19,02	253	16	14		51,9
Peltaster fructicola	Ascomycota	Peizozymocotina	Dothideomycetes	Incertae sedis	Incertae sedis	Incertae sedis	LNHT1506	Gp0143846	LJA001	293964	plant pathogen (apples)	19,02	253	16	14		51,9
Lizonia emprigonia	Ascomycota	Peizozymocotina	Dothideomycetes	Incertae sedis	Incertae sedis	Pseudoperisporiaceae	CBS 542.76 v1.0	Gp0036392	1019757	245629	uncertain	51,52	21,6	423	423	12467	PacBio
Lizonia emprigonia	Ascomycota	Peizozymocotina	Dothideomycetes	Incertae sedis	Incertae sedis	Pseudoperisporiaceae	CBS 542.76 v1.0	Gp0036392	1019757	245629	uncertain	51,52	21,6	423	423	12467	PacBio
Microthyrium microscopicum	Ascomycota	Peizozymocotina	Dothideomycetes	Incertae sedis	Microthyriales	Microthyriaceae	CBS 115976	Gp0033175	1011369	234668	saprotroph	37,12	72,9	265	58	12494	illumina HiSeq
Microthyrium microscopicum	Ascomycota	Peizozymocotina	Dothideomycetes	Incertae sedis	Microthyriales	Microthyriaceae	CBS 115976	Gp0033175	1011369	234668	saprotroph	37,12	72,9	265	58	12494	illumina HiSeq
Myriangium duriae	Ascomycota	Peizozymocotina	Dothideomycetes	Dothideomycetidae	Myriangiiales	Myriangiaceae	CBS 260.36	Gp0019337	JGI	196043	parasite (insect)	25,69	97,70	32	16	10685	illumina HiSeq
Myriangium duriae	Ascomycota	Peizozymocotina	Dothideomycetes	Dothideomycetidae	Myriangiiales	Myriangiaceae	CBS 260.36	Gp0019337	JGI	196043	parasite (insect)	25,69	97,70	32	16	10685	illumina HiSeq
Cenococcum geophilum	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Mytilinidiales	Gloniaceae		1,58 Gp0006117	JGI	196023	ectomycorrhizal	177,57	75	2893	268	27529	illumina HiSeq
Cenococcum geophilum	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Mytilinidiales	Gloniaceae		1,58 Gp0006117	JGI	196023	ectomycorrhizal	177,57	75,00	2893	268	27529	illumina HiSeq
Lophium mytilinum	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Mytilinidiales	Mytiliniaceae	CBS 269.34	Gp0036355	JGI	234407	uncertain	43,41	74,4	286	49	15153	illumina HiSeq
Lophium mytilinum	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Mytilinidiales	Mytiliniaceae	CBS 269.34	Gp0036355	JGI	234407	uncertain	43,41	74,40	286	49	15153	illumina HiSeq
Patellaria atrata	Ascomycota	Peizozymocotina	Dothideomycetes	Incertae sedis	Patellariales	Patellariaceae	CBS 101060	Gp0019408	JGI	208393	saprotroph	28,69	192,4	501	127	9794	illumina HiSeq
Patellaria atrata	Ascomycota	Peizozymocotina	Dothideomycetes	Incertae sedis	Patellariales	Patellariaceae	CBS 101060	Gp0019408	JGI	208393	saprotroph	28,69	192,4	501	127	9794	illumina HiSeq
Rhizodiscina lignyota	Ascomycota	Peizozymocotina	Dothideomycetes	Incertae sedis	Patellariales	Patellariaceae	CBS 133067	Gp0036565	1019729	263052	mycobiont (lichen-forming)	33,43	95,90	43	33	12801	illumina HiSeq
Rhizodiscina lignyota	Ascomycota	Peizozymocotina	Dothideomycetes	Incertae sedis	Patellariales	Patellariaceae	CBS 133067	Gp0036565	1019729	263052	mycobiont (lichen-forming)	33,43	95,90	43	33	12801	illumina HiSeq
Rhytidhysterion rufulum	Ascomycota	Peizozymocotina	Dothideomycetes	Patellariales	Patellariales	Patellariaceae	CBS 306.38	Gp0038493	AJFL01	81799	saprotroph (mainly); occasionally plant pathogen	40,18	109,00	4455	3308	12117	47,9 illumina GAI
Rhytidhysterion rufulum	Ascomycota	Peizozymocotina	Dothideomycetes	Patellariales	Patellariales	Patellariaceae	CBS 306.38	Gp0038493	AJFL01	81799	saprotroph (mainly); occasionally plant pathogen	40,18	109	4455	3308	12117	47,9 illumina GAI
Amniculicola lignicola	Ascomycota	Peizozymocotina	Dothideomycetes	Dothideomycetidae	Pleosporales	Amniculicolaceae	CBS 123094	Gp0033118	JGI	217192	saprotroph	49,58	99	1274	510	15590	illumina HiSeq
Amniculicola lignicola	Ascomycota	Peizozymocotina	Dothideomycetes	Dothideomycetidae	Pleosporales	Amniculicolaceae	CBS 123094	Gp0033118	JGI	217192	saprotroph	49,58	99,00	1274	510	15590	illumina HiSeq
Nigrograna mackinnonii	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Biatriosporaceae	E5202H	Gp0039092	JGVQ01	187080	endophyte (root)	51,71	272	425			47,9 illumina HiSeq
Nigrograna mackinnonii	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Biatriosporaceae	E5202H	Gp0039092	JGVQ01	187080	endophyte (root)	51,71	272	425			47,9 illumina HiSeq
Corynespora cassicola	Ascomycota	Peizozymocotina	Dothideomycetes	Dothideomycetidae	Pleosporales	Corynesporaceae	UM 591	Gp0086748	JAQF01	250634	plant pathogen (broad host range)	41,385	118,00	1941		17166	52,5 illumina HiSeq
Corynespora cassicola	Ascomycota	Peizozymocotina	Dothideomycetes	Dothideomycetidae	Pleosporales	Corynesporaceae	UM 591	Gp0086748	JAQF01	250634	plant pathogen (broad host range)	41,385	118	1941		17166	52,5 illumina HiSeq
Cucurbitaria berberidis	Ascomycota	Peizozymocotina	Dothideomycetes	Dothideomycetidae	Pleosporales	Cucurbitariaceae	CBS 394.84	Gp0019330	JGI	196042	saprotroph	32,91	145,7	184	42	12439	illumina HiSeq
Cucurbitaria berberidis	Ascomycota	Peizozymocotina	Dothideomycetes	Dothideomycetidae	Pleosporales	Cucurbitariaceae	CBS 394.84	Gp0019330	JGI	196042	saprotroph	32,91	145,7	184	42	12439	illumina HiSeq
Delitschia confertaspura	Ascomycota	Peizozymocotina	Dothideomycetes	Dothideomycetidae	Pleosporales	Delitschiaceae	ATCC 74209	Gp0039185	JGI	251766	coprophilous	31,16	74,9	822	764	10171	illumina HiSeq
Delitschia confertaspura	Ascomycota	Peizozymocotina	Dothideomycetes	Dothideomycetidae	Pleosporales	Delitschiaceae	ATCC 74209	Gp0039185	JGI	251766	coprophilous	31,16	74,9	822	764	10171	illumina HiSeq
Clathrospora elynae	Ascomycota	Peizozymocotina	Dothideomycetes	Dothideomycetidae	Pleosporales	Diademaceae	CBS 161.51	Gp0036331	JGI	245624	uncertain	37,39	80,8	1994	617	13617	illumina HiSeq
Clathrospora elynae	Ascomycota	Peizozymocotina	Dothideomycetes	Dothideomycetidae	Pleosporales	Diademaceae	CBS 161.51	Gp0036331	JGI	245624	uncertain	37,39	80,8	1994	617	13617	illumina HiSeq
Clathrospora elynae	Ascomycota	Peizozymocotina	Dothideomycetes	Dothideomycetidae	Pleosporales	Diademaceae	CBS 161.51	Gp0036331	JGI	245624	uncertain	37,39	80,8	1994	617	13617	illumina HiSeq
Ascochyta rabiei	Ascomycota	Peizozymocotina	Dothideomycetes	Dothideomycetidae	Pleosporales	Didymellaceae	ArDII	Gp0150874	JYNV01	272665	plant pathogen (blight on chickpea)	34,66	178	932	338	10596	50,7 illumina
Ascochyta rabiei	Ascomycota	Peizozymocotina	Dothideomycetes	Dothideomycetidae	Pleosporales	Didymellaceae	ArDII	Gp0150874	JYNV01	272665	plant pathogen (blight on chickpea)	34,66	178	932	338	10596	50,7 illumina
Didymella exigua	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Didymellaceae	CBS 183.55	Gp0019438	JGI	207857	saprotroph	34,39	82,1	1010	176	12394	illumina
Didymella exigua	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Didymellaceae	CBS 183.55	Gp0019438	JGI	207857	saprotroph	34,39	82,1	1010	176	12394	illumina
Macroventuria anomochaeta	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Didymellaceae	CBS 525.71	Gp0036390	JGI	234398	saprotroph	33,34	116,6	346	75	12954	illumina HiSeq
Macroventuria anomochaeta	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Didymellaceae	CBS 525.71	Gp0036390	JGI	234398	saprotroph	33,34	116,6	346	75	12954	illumina HiSeq
Macroventuria anomochaeta	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Didymellaceae	CBS 525.71	Gp0036390	JGI	234398	saprotroph	33,34	116,6	346	75	12954	illumina HiSeq
Phoma herbarum	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Didymellaceae	JCM 15942	Gp0144010	BCGR01	313796	plant pathogen (hop & hemp)	39,26	462				51,7 HiSeq 2500
Phoma herbarum	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Didymellaceae	JCM 15942	Gp0144010	BCGR01	313796	plant pathogen (hop & hemp)	39,26	462				51,7 HiSeq 2500
Phoma herbarum	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Didymellaceae	JCM 15942	Gp0144010	BCGR01	313796	plant pathogen (hop & hemp)	39,26	462				51,7 HiSeq 2500
Stagonosporopsis tanacetii	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Didymellaceae	Pooled DNA	Gp0146030	JUDZ01	268685	plant pathogen (Asteraceae)	40,1	140	9716			52,3 illumina
Stagonosporopsis tanacetii	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Didymellaceae	Pooled DNA	Gp0146030	JUDZ01	268685	plant pathogen (Asteraceae)	40,1	140	9716			52,3 illumina
Karstenula rhodostoma	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Didymosphaeriaceae	CBS 690.94	Gp0036420	JGI	217209	saprotroph	45,07	121	498	139	15043	illumina HiSeq
Karstenula rhodostoma	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Didymosphaeriaceae	CBS 690.94	Gp0036420	JGI	217209	saprotroph	45,07	121,00	498	139	15043	illumina HiSeq
Verruculina enalia	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Didymosphaeriaceae	CBS 304.66	Gp0036357	JGI	239483	marine fungus; mangrove-associated	61,21	81,2	1600	611	13748	illumina HiSeq
Verruculina enalia	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Didymosphaeriaceae	CBS 304.66	Gp0036357	JGI	239483	marine fungus; mangrove-associated	61,21	81,20	1600	611	13748	illumina HiSeq
Dothidotthia symphoricarpi	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Dothidotthiaceae	CBS 119687	Gp0033174	JGI	217191	saprotroph	34,43	93,4	268	59	11790	illumina HiSeq
Dothidotthia symphoricarpi	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Dothidotthiaceae	CBS 119687	Gp0033174	JGI	217191	saprotroph	34,43	93,40	268	59	11790	illumina HiSeq
Lineolata rhizophorae	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Fenestellaceae	ATCC 16933 v1.0		1051209	marine fungus	31,14	97,8	426	68	10230	illumina	
Aaosphaeria arxii	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Incertae sedis	CBS 175.79	Gp0036559	JGI	234399	uncertain	38,9	86,5	176	55	14203	illumina HiSeq
Aaosphaeria arxii	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Incertae sedis	CBS 175.79	Gp0036559	JGI	234399	uncertain	38,9	86,50	176	55	14203	illumina HiSeq
Periconia macrospinosae	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Incertae sedis	DSE2036	Gp0046570	1025594	243955	endophyte (root)	54,99	139,40	2470	1566	18750	illumina HiSeq
Trinosporium guianense	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Incertae sedis	CBS132537	Gp0095856	1040180	255619	uncertain; environmental contaminant	24,23	140,90	298	23600,00%	8062	illumina HiSeq
Lentithecium fluviatile	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Lentitheciaceae	CBS 122367	Gp0019312	JGI	196040	saprotroph (freshwater)	54,69	85,4	2078	195	16742	illumina HiSeq
Lentithecium fluviatile	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Lentitheciaceae	CBS 122367	Gp0019312	JGI	196040	saprotroph (freshwater)	54,69	85,40	2078	195	16742	illumina HiSeq
Leptosphaeria maculans	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Leptosphaeriaceae	JN3	Gp0010336	ASM23037	63129	plant pathogen (Brassica crops)	45,124		76		12469	45,3
Leptosphaeria maculans	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Leptosphaeriaceae	JN3	Gp0010336	ASM23037	63129	plant pathogen (Brassica crops)	45,124		76		12469	45,3
Ophiobolus disseminans	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Leptosphaeriaceae	CBS 113818	Gp0036265	JGI	239491	uncertain; isolated from poisonous Mercurialis perennis	41,68	97,1	408	72	16027	illumina HiSeq
Ophiobolus disseminans	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Leptosphaeriaceae	CBS 113818	Gp0036265	JGI	239491	uncertain; isolated from poisonous Mercurialis perennis	41,68	97,10	408	72	16027	illumina HiSeq
Plenodomus tracheiphilus	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Leptosphaeriaceae	IPT5	Gp0039845	JGI	223133	plant pathogen (citrus)	34,24	98,6	431	273	13209	illumina HiSeq
Plenodomus tracheiphilus	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Leptosphaeriaceae	IPT5	Gp0039845	JGI	223133	plant pathogen (citrus)	34,24	98,6	431	273	13209	illumina HiSeq
Lophiostoma macrostomum	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Lophiostomataceae	CBS 122681	Gp0033112	JGI	196073	saprotroph	42,58	140,3	1294	1282	16160	illumina HiSeq
Lophiostoma macrostomum	Ascomycota	Peizozymocotina	Dothideomycetes	Pleosporomycetidae	Pleosporales	Lophiostomataceae	CBS 122681	Gp0033112	JGI	196073	saprotroph	42,58	140,30</				

Decorspora gaudefroyi	Ascomycota	Peizozymcotina	Dothideomycetes	Dothideomycetidae	Pleosporales	Pleosporaceae	CBS 332.63		1032355	marine saprotroph	30,56	152,6	879	699	11835	llumina
Decorspora gaudefroyi	Ascomycota	Peizozymcotina	Dothideomycetes	Dothideomycetidae	Pleosporales	Pleosporaceae	CBS 332.63		1032355	marine saprotroph	30,56	152,60	879	699	11835	llumina
Pyrenochaeta lycopersici	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Pleosporaceae	CRA-PAV_ER 1211	Gp0090025	ASRS01	202288 plant pathogen (tomato)	50,489	300,00	12392	7018		47,7 illumina GAltx
Pyrenochaeta lycopersici	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Pleosporaceae	CRA-PAV_ER 1211	Gp0090025	ASRS01	202288 plant pathogen (tomato)	50,489	300,00	12392	7018		47,7 illumina GAltx
Pyrenochaeta sp. DS3sAY3a	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Pleosporaceae	DS3sAY3a	Gp0050683	JGI	255591 Mn(II)-oxidizing; mineral cycling	38,5	86,7	209	69	14995	llumina HiSeq
Pyrenochaeta sp. DS3sAY3a	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Pleosporaceae	DS3sAY3a	Gp0050683	JGI	255591 Mn(II)-oxidizing; mineral cycling	38,5	86,70	209	69	14995	llumina HiSeq
Pyrenochaeta sp. UM 256	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Pleosporaceae	UM 256	Gp0039028	AQUM01	189754 human pathogen	35,484	27,00	286	254		50,4
Pyrenochaeta sp. UM 256	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Pleosporaceae	UM 256	Gp0039028	AQUM01	189754 human pathogen	35,484	27,00	286	254		50,4
Pyrenophora seminiperda	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Pleosporaceae	CCB06	Gp0037221	ATLS01	192591 plant pathogen (necrotrophic; seeds of grasses/cereals)	32,539	17,00	660	54		49,8
Pyrenophora seminiperda	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Pleosporaceae	CCB06	Gp0037221	ATLS01	192591 plant pathogen (necrotrophic; seeds of grasses/cereals)	32,539	17,00	660	54		49,8
Pyrenophora teres	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Pleosporaceae	0-1	Gp0008318	AEEY01	50389 plant pathogen (barley and some other crops)	33,583	20,00	6684	6412	11799	50,9 illumina
Pyrenophora teres	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Pleosporaceae	0-1	Gp0008318	AEEY01	50389 plant pathogen (barley and some other crops)	33,583	20,00	6684	6412	11799	50,9 illumina
Pyrenophora tritici-repentis	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Pleosporaceae	Pt-1C-BFP	Gp0003140	AAXI01	18815 plant pathogen (cereals and grasses; necrotrophic)	37,997	6,93	48		12300	51 Sanger
Pyrenophora tritici-repentis	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Pleosporaceae	Pt-1C-BFP	Gp0003140	AAXI01	18815 plant pathogen (cereals and grasses; necrotrophic)	37,997	6,93	48		12300	51 Sanger
Setosphaeria turcica	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Pleosporaceae	E128A	Gp0008856	AIHT01	82947 plant pathogen (maize)	43,01	58,10	1959	407	11702	51,4 454; Sanger; illumina
Setosphaeria turcica	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Pleosporaceae	E128A	Gp0008856	AIHT01	82947 plant pathogen (maize)	43,01	58,10	1959	407	11702	51,4 454; Sanger; illumina
Stemphylium lycopersici	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Pleosporaceae	CIDEFI 216	Gp0118324	LGLR01	274742 plant pathogen (fruits)	35,17	77,39	5130	414	8997	50,7 illumina HiSeq
Stemphylium lycopersici	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Pleosporaceae	CIDEFI 216	Gp0118324	LGLR01	274742 plant pathogen (fruits)	35,17	77,39	5130	414	8997	50,7 illumina HiSeq
Shiraia sp. slf14	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Pleosporales	SH14	Gp0071001	AXZN01	222884 endophyte	32,067	55,00	288			48 illumina HiSeq
Shiraia sp. slf14	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Pleosporales	SH14	Gp0071001	AXZN01	222884 endophyte	32,067	55,00	288			48 illumina HiSeq
Sporormia fimetaria	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Sporormiaceae	CBS 119925	Gp0033217	JGI	205956 coprophilous	25,89	104	293	140	10783	llumina HiSeq
Sporormia fimetaria	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Sporormiaceae	CBS 119925	Gp0033217	JGI	205956 coprophilous	25,89	104	293	140	10783	llumina HiSeq
Westerdykella ornata	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Sporormiaceae	CBS 379.55	Gp0036361	JGI	245619 pharmaceutical importance (antibiotic-producing)	26,98	162,1	180	94	10410	llumina HiSeq
Westerdykella ornata	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Sporormiaceae	CBS 379.55	Gp0036361	JGI	245619 pharmaceutical importance (antibiotic-producing)	26,98	162,1	180	94	10410	llumina HiSeq
Polyposphaeria fusca	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Tetraplophaeriaceae	CBS 125425	Gp0036310	JGI	245626 bambusicolous	37,01	151	593	468	15194	llumina HiSeq
Polyposphaeria fusca	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Tetraplophaeriaceae	CBS 125425	Gp0036310	JGI	245626 bambusicolous	37,01	151	593	468	15194	llumina HiSeq
Trematosphaeria pertusa	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Trematosphaeriaceae	CBS 122368	Gp0036292	JGI	234397 saprotroph (freshwater)	47,75	96,4	675	101	17306	llumina HiSeq
Trematosphaeria pertusa	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Trematosphaeriaceae	CBS 122368	Gp0036292	JGI	234397 saprotroph (freshwater)	47,75	96,4	675	101	17306	llumina HiSeq
Pleospinales sp. UM 1110 2012	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	unknown	UM 1110	Gp0039009	AJMS01	89471 uncertain	36,919	100,00	11436			51,4 illumina GAltx
Pleospinales sp. UM 1110 2012	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	unknown	UM 1110	Gp0039009	AJMS01	89471 uncertain	36,919	100	11436			51,4 illumina GAltx
Zopfia rhizophila	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Zopfiaceae	CBS 207.26	Gp0024306	JGI	196051 opportunistic root rot	152,78	95,5	1349	864	21730	llumina HiSeq; PacBio
Zopfia rhizophila	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Zopfiaceae	CBS 207.26	Gp0024306	JGI	196051 opportunistic root rot	152,78	95,5	1349	864	21730	llumina HiSeq; PacBio
Lineolata rhizophorae	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Fenestellaceae	ATCC 16933 v1.0		1051209	marine fungus	31,14	97,8	426	68	10230	llumina
Trypethelium eluteriae	Ascomycota	Peizozymcotina	Dothideomycetes	Incertae sedis	Trypetheliales	Trypetheliaceae	not specified		JGI	mycobiont (lichen-forming)	32,16	142,1	747	730	11858	llumina
Trypethelium eluteriae	Ascomycota	Peizozymcotina	Dothideomycetes	Incertae sedis	Trypetheliales	Trypetheliaceae	not specified		JGI	mycobiont (lichen-forming)	32,16	142,10	747	730	11858	llumina
Ochroconis constricta	Ascomycota	Peizozymcotina	Dothideomycetes	Incertae sedis	Venturiales	Sympoventuriaceae	UM 578	Gp0076216	AZYM01	232808 animal pathogen; opportunistic human pathogen	34,434	87,00	544			52,1 illumina HiSeq
Ochroconis constricta	Ascomycota	Peizozymcotina	Dothideomycetes	Incertae sedis	Venturiales	Sympoventuriaceae	UM 578	Gp0076216	AZYM01	232808 animal pathogen; opportunistic human pathogen	34,434	87	544			52,1 illumina HiSeq
Verruconis gallopava	Ascomycota	Peizozymcotina	Dothideomycetes	Incertae sedis	Venturiales	Sympoventuriaceae	CBS 43764		JYBX01	325802 medical importance (black yeast)	31,78	145	565	367	11357	llumina
Tothia fuscella	Ascomycota	Peizozymcotina	Dothideomycetes	Incertae sedis	Venturiales	Venturiaceae	CBS 130266	Gp0036563		245630 uncertain	36,78	146,8	687	363	13685	llumina HiSeq
Tothia fuscella	Ascomycota	Peizozymcotina	Dothideomycetes	Incertae sedis	Venturiales	Venturiaceae	CBS 130266	Gp0036563		245630 uncertain	36,78	146,8	687	363	13685	llumina HiSeq
Venturia pyrina	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Venturiales	Venturiaceae	ICMP 11032	Gp0095335	JEMPO1	232087 plant pathogen (hemibiotrophic; pear)	41,177	40,00	2308			47,6 illumina GAltx
Venturia pyrina	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Venturiales	Venturiaceae	ICMP 11032	Gp0095335	JEMPO1	232087 plant pathogen (hemibiotrophic; pear)	41,177	40	2308			47,6 illumina GAltx
Hortaea acidophila	Ascomycota	Peizozymcotina	Dothideomycetes	Dothideomycetidae	Capnodiales	Tetraplophaeriaceae	CBS 113389 v1.0		1040525	industrial importance (acid-tolerant black yeast)	20,43	100,7	59	39	9831	llumina
Bimuria novae-zelandiae	Ascomycota	Peizozymcotina	Dothideomycetes	Pleosporomycetidae	Pleospinales	Montagnulaceae	CBS 107.79 v1.0		1019717	parasite; lichenicolous	78,18	62,3	1338	321	16681	llumina
Rhizodiscina lignyota	Ascomycota	Peizozymcotina	Dothideomycetes	Incertae sedis	Patellariales	Patellariaceae	CBS 133067	Gp0036565		263052 mycobiont (lichen-forming)	33,43	95,9	43	33	12801	llumina HiSeq
Ascosphaera apis	Ascomycota	Peizozymcotina	Eurotiomycetes	Ascosphaeriales	Ascosphaerales	Ascosphaeraceae	USDA-ARSEF 7405	Gp0002467	AARE01	17285 animal pathogen (honey bees)	21,5	4	6559	1667		Sanger
Ascosphaera apis	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Ascosphaerales	Ascosphaeraceae	USDA-ARSEF 7405	Gp0002467	AARE01	17285 animal pathogen (honey bees)	21,5	4,00	6559	1667		Sanger
Cyphellophora europaea	Ascomycota	Peizozymcotina	Eurotiomycetes	Chaetothiyomycetidae	Chaetothyriales	Cyphellophoraceae	CBS 101466		A0BU01	172438 human pathogen (superficial infection); dermatiaceous	28,7813	132,00	106	19	11153	54 illumina
Cyphellophora europaea	Ascomycota	Peizozymcotina	Eurotiomycetes	Chaetothiyomycetidae	Chaetothyriales	Cyphellophoraceae	CBS 101466		A0BU01	172438 human pathogen (superficial infection); dermatiaceous	28,7813	132	106	19	11153	54 illumina
Capronia coronata	Ascomycota	Peizozymcotina	Eurotiomycetes	Chaetothiyomycetidae	Chaetothyriales	Herpotrichiellaceae	CBS 617.96	Gp0037646	AMWN01	164585; Broad saprotroph; possible beetle associate; black yeast	25,8	90,00	52			9231 52,8
Capronia coronata	Ascomycota	Peizozymcotina	Eurotiomycetes	Chaetothiyomycetidae	Chaetothyriales	Herpotrichiellaceae	CBS 617.96	Gp0037646	AMWN01	164585; Broad saprotroph; possible beetle associate; black yeast	25,8	90	52			9231 52,8
Capronia epimyces	Ascomycota	Peizozymcotina	Eurotiomycetes	Chaetothiyomycetidae	Chaetothyriales	Herpotrichiellaceae	CBS 606.96	Gp0037042; Broad	AMGY01	164587 uncertain; yeast (black)	28,9	83,00	231			10469 53,4
Capronia epimyces	Ascomycota	Peizozymcotina	Eurotiomycetes	Chaetothiyomycetidae	Chaetothyriales	Herpotrichiellaceae	CBS 606.96	Gp0037042; Broad	AMGY01	164587 uncertain; yeast (black)	28,9	83	231			10469 53,4
Capronia semimmersa	Ascomycota	Peizozymcotina	Eurotiomycetes	Chaetothiyomycetidae	Chaetothyriales	Herpotrichiellaceae	CBS27337	Gp0076064	JYCC01	325795 medical importance (black yeast)	31,62	87	73	13	11909	llumina
Cladophialophora bantiana	Ascomycota	Peizozymcotina	Eurotiomycetes	Chaetothiyomycetidae	Chaetothyriales	Herpotrichiellaceae	CBS 173.52	Gp0076062	JYBT01	233316 medical importance (black yeast)	36,72	122	140	60	12762	llumina
Cladophialophora carrionii	Ascomycota	Peizozymcotina	Eurotiomycetes	Chaetothiyomycetidae	Chaetothyriales	Herpotrichiellaceae	CBS 160.54	Gp0037643	A0FF01	185784 human pathogen (chromoblastomycosis); dermatiaceous	28,99	80,00	102	19	10428	54,3 illumina
Cladophialophora carrionii	Ascomycota	Peizozymcotina	Eurotiomycetes	Chaetothiyomycetidae	Chaetothyriales	Herpotrichiellaceae	CBS 160.54	Gp0037643	A0FF01	185784 human pathogen (chromoblastomycosis); dermatiaceous	28,99	80,00	102	19	10428	54,3 illumina
Cladophialophora immunda	Ascomycota	Peizozymcotina	Eurotiomycetes	Chaetothiyomycetidae	Chaetothyriales	Herpotrichiellaceae	CBS 110551	Gp0117567	JOEJ01	264781 industrial importance (black yeast; bioremediation; degrades polyaromatic	41,58	318	464			12879 52,8 IonTorrent
Cladophialophora immunda	Ascomycota	Peizozymcotina	Eurotiomycetes	Chaetothiyomycetidae	Chaetothyriales	Herpotrichiellaceae	CBS 110551	Gp0117567	JSEJ01	264781 industrial importance (black yeast; bioremediation; degrades polyaromatic t	41,58	318,00	464			12879 52,8 IonTorrent
Cladophialophora psammophila	Ascomycota	Peizozymcotina	Eurotiomycetes	Chaetothiyomycetidae	Chaetothyriales	Herpotrichiellaceae	CBS 110553	Gp0037823	AMGX01	164589 industrial importance (bioremediation)	39,42	133,00	317			13421 50,6 illumina
Cladophialophora psammophila	Ascomycota	Peizozymcotina	Eurotiomycetes	Chaetothiyomycetidae	Chaetothyriales	Herpotrichiellaceae	CBS 110553	Gp0037823	AMGX01	164589 industrial importance (bioremediation)	39,42	133,00	317			13421 50,6 illumina
Cladophialophora yegresii	Ascomycota	Peizozymcotina	Eurotiomycetes	Chaetothiyomycetidae	Chaetothyriales	Herpotrichiellaceae	CBS 114405	Gp0037865	AMGW01	164591 endophyte (cactus); dermatiaceous; potential human pathogen	27,89	132,00	63			10118 54 illumina
Cladophialophora yegresii	Ascomycota	Peizozymcotina	Eurotiomycetes	Chaetothiyomycetidae	Chaetothyriales	Herpotrichiellaceae	CBS 114405	Gp0037865	AMGW01	164591 endophyte (cactus); dermatiaceous; potential human pathogen	27,89	132,00	63			10118 54 illumina
Coniosporium apollinis	Ascomycota	Peizozymcotina	Eurotiomycetes	Chaetothiyomycetidae	Chaetothyriales	Herpotrichiellaceae	CBS 352.97	Gp0037641	AJKL01	157061 rock-inhabiting black yeast	28,64	128,00	241	169	9367	52,1 illumina
Coniosporium apollinis	Ascomycota	Peizozymcotina	Eurotiomycetes	Chaetothiyomycetidae	Chaetothyriales	Herpotrichiellaceae	CBS 352.97	Gp0037641	AJKL01	157061 rock-inhabiting black yeast	28,64	128	241	169	9367	52,1 illumina
Exophiala alcalophila	Ascomycota	Peizozymcotina	Eurotiomycetes	Chaetothiyomycetidae	Chaetothyriales	Herpotrichiellaceae	JCM 1751	Gp0144016	BCHY01	313825 black yeast; soil-associated	29,85	209	85	12		54,1 HiSeq 2500
Exophiala alcalophila	Ascomycota	Peizozymcotina	Eurotiomycetes	Chaetothiyomycetidae	Chaetothyriales	Herpotrichiellaceae	JCM 1751	Gp0144016	BCHY01	313825 black yeast; soil-associated	29,85	209	85	12		54,1 HiSeq 2500
Exophiala aquamarina	Ascomycota	Peizozymcotina	Eurotiomycetes	Chaetothiyomycetidae	Chaetothyriales	Herpotrichiellaceae	CBS 119918	Gp0037642	AMGV01	164593 animal pathogen (marine)	41,566	79,00	687	151	13118	49 illumina

<i>Aspergillus carbonarius</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	ITEM 5010	Gp0003596	JGI	34741 industrial importance	36,3	17,78	1346	963	11624	51 454; Sanger
<i>Aspergillus chevalieri</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	JCM 23047	Gp0144024	BCIE01	313830 opportunistic human pathogen	28,01	313	342	75		48 HiSeq 2500
<i>Aspergillus chevalieri</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	JCM 23047	Gp0144024	BCIE01	313830 opportunistic human pathogen	28,01	313,00	342	75		48 HiSeq 2500
<i>Aspergillus clavatus</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	NRRL 1	Gp0002493	AAKD03	15664 soil- and manure-associated; occasional pathogen	27,9	11,4	231	143		49 Sanger
<i>Aspergillus clavatus</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	NRRL 1	Gp0002493	AAKD03	15664 soil- and manure-associated; occasional pathogen	27,9	11,40	231	143		49 Sanger
<i>Aspergillus flavus</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	NRRL 3357	Gp0002470	AAIH02	13284 post-harvest decay	36,9	5		331		48 Sanger
<i>Aspergillus flavus</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	NRRL 3357	Gp0002470	AAIH02	13284 post-harvest decay	36,9	5,00		331		48 Sanger
<i>Aspergillus fumigatus</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	A1163 (CEA10)	Gp0002472	ABDB01	18733 opportunistic human pathogen; saprotroph	29,2	10,00		55		Sanger
<i>Aspergillus fumigatus</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	A1163 (CEA10)	Gp0002472	ABDB01	18733 opportunistic human pathogen; saprotroph	29,2	10,00		55		Sanger
<i>Aspergillus glaucus</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	CBS 516.65	Gp0010048	JGI	169684 saprotroph	27,99	175,90	433	82	11277	454 GS-FLX
<i>Aspergillus glaucus</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	CBS 516.65	Gp0010048	JGI	169684 saprotroph	27,99	175,90	433	82	11277	454 GS-FLX
<i>Aspergillus kawachii</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	IFO 4308	Gp0039000	BACL01	66971 industrial importance	37,1	17,00		1163	11472	49 454 GS-FLX
<i>Aspergillus kawachii</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	IFO 4308	Gp0039000	BACL01	66971 industrial importance	37,1	17,00		1163	11472	49 454 GS-FLX
<i>Aspergillus lentulus</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	IFM 54703	Gp0144501	BCLY01	300219 opportunistic human pathogen	30,96		19	9986	49,5 PacBio RSII	
<i>Aspergillus lentulus</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	IFM 54703	Gp0144501	BCLY01	300219 opportunistic human pathogen	30,96		19	9986	49,5 PacBio RSII	
<i>Aspergillus luchuensis</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	RIB 2604	Gp0143306	BCWF01	314070 industrial importance	34,18		44	12920	49,9 ABI 3730	
<i>Aspergillus luchuensis</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	RIB 2604	Gp0143306	BCWF01	314070 industrial importance	34,18		44	12920	49,9 ABI 3730	
<i>Aspergillus nidulans</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	FGSC A4	Gp0000218; Gp000 JGI		130 human pathogen	30,48	1,00	82	8	10680	51 Sanger
<i>Aspergillus nidulans</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	FGSC A4	Gp0000218; Gp000 JGI		130 human pathogen	30,48	1,00	82	8	10680	51 Sanger
<i>Aspergillus niger</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	CBS 513.88	Gp0000211; Gp001 JGI		19275 industrial importance	34,85	8,90		21	11197	50
<i>Aspergillus niger</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	CBS 513.88	Gp0000211; Gp001 JGI		19275 industrial importance	34,85	8,90		21	11197	50
<i>Aspergillus nomius</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	NRRL13137	Gp0120416	JNOM01	246595 human pathogen (aspergillosis)	36,14	42	1118	11914	48,9 IonTorrent	
<i>Aspergillus nomius</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	NRRL13137	Gp0120416	JNOM01	246595 human pathogen (aspergillosis)	36,14	42,00	1118	11914	48,9 IonTorrent	
<i>Aspergillus ochraceoroseus</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	SRRC1432	Gp0117374	JYKN01	275128 medical importance (mycotoxin-producing)	24,27	39	3590	7829	48,2 IonTorrent	
<i>Aspergillus ochraceoroseus</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	SRRC1432	Gp0117374	JYKN01	275128 medical importance (mycotoxin-producing)	24,27	39,00	3590	7829	48,2 IonTorrent	
<i>Aspergillus oryzae</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	AS 3.951	Gp0038983	AKXN01	89727 industrial importance	36,3	7,00	969			illumina GAI
<i>Aspergillus oryzae</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	AS 3.951	Gp0038983	AKXN01	89727 industrial importance	36,3	7,00	969			illumina GAI
<i>Aspergillus parasiticus</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	SU-1	Gp0094495	JMUG01	246303 medical importance (aflatoxin-producing)	40	50,00	4409			illumina HiSeq
<i>Aspergillus parasiticus</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	SU-1	Gp0094495	JMUG01	246303 medical importance (aflatoxin-producing)	40	50,00	4409			illumina HiSeq
<i>Aspergillus penicillii</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	SRRC1468	Gp0117376	JZBS01	275129 medical importance (mycotoxin-producing)	26,44	89	4177	7761	45,8 IonTorrent	
<i>Aspergillus penicillii</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	SRRC1468	Gp0117376	JZBS01	275129 medical importance (mycotoxin-producing)	26,44	89,00	4177	7761	45,8 IonTorrent	
<i>Aspergillus ruber</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	CBS 135680	Gp0010009	JGI	215335 halotolerant	26,21	91,70	371	110	10076	454; illumina
<i>Aspergillus ruber</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	CBS 135680	Gp0010009	JGI	215335 halotolerant	26,21	91,70	371	110	10076	454; illumina
<i>Aspergillus sojae</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	NBRCC 4239	Gp0038873	BACA01	60265 traditional use	39,7	14,00		542		454
<i>Aspergillus sojae</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	NBRCC 4239	Gp0038873	BACA01	60265 traditional use	39,7	14,00		542		454
<i>Aspergillus sp. Z5</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	Z5	Gp0120939	LDZW01	285783 marine fungus; secondary metabolite biosynthesis	33,81	100	956			50,5 illumina HiSeq
<i>Aspergillus sp. Z5</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	Z5	Gp0120939	LDZW01	285783 marine fungus; secondary metabolite biosynthesis	33,81	100,00	956			50,5 illumina HiSeq
<i>Aspergillus sydowii</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	CBS 593.65	Gp0009566	JGI	207689 animal pathogen (sea fan corals)	34,38	95,10	133	97	13620	454 GS-FLX
<i>Aspergillus sydowii</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	CBS 593.65	Gp0009566	JGI	207689 animal pathogen (sea fan corals)	34,38	95,10	133	97	13620	454 GS-FLX
<i>Aspergillus terreus</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	NH2624	Gp0002492	JGI	15631 soil-associated; cosmopolitan	29,33	11,50	267	26	10406	53 Sanger
<i>Aspergillus terreus</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	NH2624	Gp0002492	JGI	15631 soil-associated; cosmopolitan	29,33	11,50	267	26	10406	53 Sanger
<i>Aspergillus tubingensis</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	CBS 134.48	Gp0010145	JGI	207690 industrial importance	35,15	125,70	87	33	12322	454; illumina
<i>Aspergillus tubingensis</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	CBS 134.48	Gp0010145	JGI	207690 industrial importance	35,15	125,70	87	33	12322	454; illumina
<i>Aspergillus udagawae</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	IFM 46973	Gp0122201	BBXM01	288122 animal pathogen; aspergillosis	32,19		1029	10214	49,6 HiSeq 1500	
<i>Aspergillus udagawae</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	IFM 46973	Gp0122201	BBXM01	288122 animal pathogen; aspergillosis	32,19		1029	10214	49,6 HiSeq 1500	
<i>Aspergillus ustus</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	3.3904	Gp0117377	JOMC01	253260 opportunistic human pathogen	38,35	100	1502	770		51 illumina HiSeq
<i>Aspergillus ustus</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	3.3904	Gp0117377	JOMC01	253260 opportunistic human pathogen	38,35	100,00	1502	770		51 illumina HiSeq
<i>Aspergillus versicolor</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	CBS 583.65	Gp0010019	JGI	207687 industrial importance	33,13	178,10	58	51	13228	454 GS-FLX
<i>Aspergillus versicolor</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	CBS 583.65	Gp0010019	JGI	207687 industrial importance	33,13	178,10	58	51	13228	454 GS-FLX
<i>Aspergillus wentii</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	DTO 134E9	Gp0009565	JGI	170886 industrial importance	31,35	95,00	118	27	12442	illumina
<i>Aspergillus wentii</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	DTO 134E9	Gp0009565	JGI	170886 industrial importance	31,35	95,00	118	27	12442	illumina
<i>Aspergillus westerdijkiae</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	CBS 112803	Gp0124190	LKBE01	296723 medical importance (mycotoxin-producing)	36,07	142	3022	239		50,2 illumina MiSeq
<i>Aspergillus westerdijkiae</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	CBS 112803	Gp0124190	LKBE01	296723 medical importance (mycotoxin-producing)	36,07	142,00	3022	239		50,2 illumina MiSeq
<i>Aspergillus zonatus</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	CBS 506.65	Gp0009569	JGI	207688 industrial importance	28,92	84,80	460	260	9886	illumina
<i>Aspergillus zonatus</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	CBS 506.65	Gp0009569	JGI	207688 industrial importance	28,92	84,80	460	260	9886	illumina
<i>Basipetospora chlamydispora</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	JCM 23157	Gp0144025	BCHP01	313817 uncertain	33,49	162	342	17		55,7 HiSeq 2500
<i>Basipetospora chlamydispora</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	JCM 23157	Gp0144025	BCHP01	313817 uncertain	33,49	162,00	342	17		55,7 HiSeq 2500
<i>Monascus purpureus</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	NRRL 1596	Gp0019248	JGI	204098 industrial importance (toxin producing)	23,44	102,00	319	296	8918	illumina HiSeq
<i>Monascus purpureus</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	NRRL 1596	Gp0019248	JGI	204098 industrial importance (toxin producing)	23,44	102,00	319	296	8918	illumina HiSeq
<i>Monascus ruber</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	NRRL 1597	Gp0019414	JGI	196033 industrial importance	24,8	123,40	362	320	9650	illumina HiSeq
<i>Monascus ruber</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	NRRL 1597	Gp0019414	JGI	196033 industrial importance	24,8	123,40	362	320	9650	illumina HiSeq
<i>Penicillium aurantiogriseum</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	NRRL 62431	Gp0038385	ALY01	170336 endophyte	31,5475	50,00	4775			48,5 illumina GAIix
<i>Penicillium aurantiogriseum</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	NRRL 62431	Gp0038385	ALY01	170336 endophyte	31,5475	50,00	4775			48,5 illumina GAIix
<i>Penicillium biforme</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	FM169	Gp0101004	CBX001	238635 pharmaceutical importance (rugulovasin production)	34,87		692	582		48,1
<i>Penicillium biforme</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	FM169	Gp0101004	CBX001	238635 pharmaceutical importance (rugulovasin production)	34,87		692	582		48,1
<i>Penicillium bilaiae</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	ATCC 20851	Gp0035113	JGI	196077 P-solubilizing	37,54	101	319	132	13606	illumina HiSeq
<i>Penicillium bilaiae</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	ATCC 20851	Gp0035113	JGI	196077 P-solubilizing	37,54	101,00	319	132	13606	illumina HiSeq
<i>Penicillium brasilianum</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	PMG11	Gp0143650	CDHK01	284459 endophyte	35,89		244	87	11943	49,5
<i>Penicillium brasilianum</i>	Ascomycota	Peizozymcotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae										

Penicillium lanosocoeruleum v1.0	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	ATCC 48919	Gp0035117	JGI	208390	pharmaceutical importance (antibiotic- and mycotoxin-producing)	29,05	113	148	13	10698	illumina
Penicillium lanosocoeruleum v1.0	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	ATCC 48919	Gp0035117	JGI	208390	pharmaceutical importance (antibiotic- and mycotoxin-producing)	29,05	113,00	148	13	10698	illumina
Penicillium nalgiouense	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	FM193	Gp0101010	CBXQ01	238637	industrial importance (fermentation; metabolite production)	31,9375		975	896		48,5
Penicillium nalgiouense	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	FM193	Gp0101010	CBXQ01	238637	industrial importance (fermentation; metabolite production)	31,9375		975	896		48,5
Penicillium nordicum	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	BFE487	Gp0090030	JNNR01	239658	contaminant (food; toxicogenic)	30,421	20,00	915			47,7 illumina HiSeq
Penicillium nordicum	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	BFE487	Gp0090030	JNNR01	239658	contaminant (food; toxicogenic)	30,421	20,00	915			47,7 illumina HiSeq
Penicillium oxalicum	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	114-2		AGIH01	60877	lignocellulolytic	30,18	28	345	9	9979	
Penicillium oxalicum	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	114-2		AGIH01	60877	lignocellulolytic	30,18	28,00	345	9	9979	
Penicillium paneum	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	FM227	Gp0101011	CBXN01	238634	contaminant (cereal; toxicogenic)	26,5793		397	224		49
Penicillium paneum	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	FM227	Gp0101011	CBXN01	238634	contaminant (cereal; toxicogenic)	26,5793		397	224		49
Penicillium pauxilli	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	ATCC 26601	Gp0038413	AOTG01	189173	pharmaceutical importance (production of paxelline and antimicrobial cor	34,8	150,00	635	420		47,9 illumina MiSeq
Penicillium pauxilli	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	ATCC 26601	Gp0038413	AOTG01	189173	pharmaceutical importance (production of paxelline and antimicrobial cor	34,8	150,00	635	420		47,9 illumina MiSeq
Penicillium raistrickii	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	ATCC 10490	Gp0039212	JGI	217210	calcium phosphate solubilizer	31,44	95,10	104	76	11368	
Penicillium raistrickii	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	ATCC 10490	Gp0039212	JGI	217210	calcium phosphate solubilizer	31,44	95,10	104	76	11368	
Penicillium roqueforti	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	FM164	Gp0101012	CBMR01	214067	industrial importance (cheese-making)	29,01		157	48	12425	48,7
Penicillium roqueforti	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	FM164	Gp0101012	CBMR01	214067	industrial importance (cheese-making)	29,01		157	48	12425	48,7
Penicillium rubens	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	Wisconsin 54-1255	Gp0003458	JGI	27927	industrial importance (penicillin production)	32,22	9,8	242	49	13671	
Penicillium rubens	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	Wisconsin 54-1255	Gp0003458	JGI	27927	industrial importance (penicillin production)	32,22	9,80	242	49	13671	
Penicillium rubens	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	Wisconsin 54-1255	Gp0003458	JYNM02	225689	post-harvest decay	35,23	7,00				47,1
Penicillium solitum	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	BFE808	Gp0121007	LAKW01	276626	medical importance (ochratoxin-producing)	31,15	60	4207			48,1 illumina MiSeq
Penicillium solitum	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	BFE808	Gp0121007	LAKW01	276626	medical importance (ochratoxin-producing)	31,15	60,00	4207			48,1 illumina MiSeq
Penicillium verrucosum	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	FRR 0525	Gp0144500	CCCX01	271389	xerophile	22,03		1479	572		29,4
Penicillium verrucosum	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Aspergillaceae	FRR 0525	Gp0144500	CCCX01	271389	xerophile	22,03		1479	572		29,4
Xeromyces bisporus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Thermoascaceae	No. 5	Gp0070862	BAUL01	227278	industrial importance (formaldehyde resistant)	29,76	53,5	1053			8877 48,6 illumina
Xeromyces bisporus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Thermoascaceae	No. 5	Gp0070862	BAUL01	227278	industrial importance (formaldehyde resistant)	29,76	53,50	1053			8877 48,6 illumina
Byssoschlamys spectabilis	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Thermoascaceae	ATCC 26904	Gp0017900	JGI	207868	industrial importance (thermophile)	28,49	95,90	196	48	8798	illumina
Byssoschlamys spectabilis	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Thermoascaceae	ATCC 26904	Gp0017900	JGI	207868	industrial importance (thermophile)	28,49	95,90	196	48	8798	illumina
Thermoascus aurantiacus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Thermoascaceae	ATCC 26904	Gp0017900	JGI	207868	industrial importance (thermophile)	28,49	95,90	196	48	8798	illumina
Thermoascus aurantiacus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Thermoascaceae	JCM 12817	Gp0144001	BCIC01	313828	thermophile	31,64	195	258	33		49,2 HiSeq 2500
Thermoascus crustaceus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Thermoascaceae	JCM 12817	Gp0144001	BCIC01	313828	thermophile	31,64	195,00	258	33		49,2 HiSeq 2500
Neosartorya fischeri	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	NRRL 181	Gp0006742	AAKE03	15672	opportunistic human pathogen	32,55	1,00	976	976	10406	49 Sanger
Neosartorya fischeri	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	NRRL 181	Gp0006742	AAKE03	15672	opportunistic human pathogen	32,55	1,00	976	976	10406	49 Sanger
Rasamsonia emersonii	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	CBS393.64	Gp0021159	LASV01	222976	thermophile	28,25	14,50	862	9843		50,6 Sanger; 454
Rasamsonia emersonii	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	CBS393.64	Gp0021159	LASV01	222976	thermophile	28,25	14,50	862	9843		50,6 Sanger; 454
Talaromyces aculeatus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	ATCC 10409	Gp0039191	JGI	217211	iron phosphate solubilizer	37,27	91,80	165	49	13793	illumina
Talaromyces aculeatus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	ATCC 10409	Gp0039191	JGI	217211	iron phosphate solubilizer	37,27	91,80	165	49	13793	illumina
Talaromyces aculeatus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	ATCC 10409	Gp0039191	JGI	217211	iron phosphate solubilizer	37,27	91,80	165	49	13793	illumina
Talaromyces cellulolyticus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	Y-94	Gp0122238	BFPS01	271761	industrial importance (cellulase production)	36,4	19	1723	60	10910	46,6
Talaromyces cellulolyticus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	Y-94	Gp0122238	BFPS01	271761	industrial importance (cellulase production)	36,4	19,00	1723	60	10910	46,6
Talaromyces islandicus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	PIS	Gp0143952	CVMT01	282635	industrial importance (biopolymer degradation, mycotoxins)	34,72		1345	116	9927	46,3
Talaromyces islandicus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	PIS	Gp0143952	CVMT01	282635	industrial importance (biopolymer degradation, mycotoxins)	34,72		1345	116	9927	46,3
Talaromyces islandicus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	PIS	Gp0143952	CVMT01	282635	industrial importance (biopolymer degradation, mycotoxins)	34,72		1345	116	9927	46,3
Talaromyces leycettanus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	CBS 398.68	Gp0107549	JSVW01	261108	industrial importance (thermophilic enzymes)	25,95	180	991			49,7 illumina HiSeq
Talaromyces leycettanus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	CBS 398.68	Gp0107549	JSVW01	261108	industrial importance (thermophilic enzymes)	25,95	180,00	991			49,7 illumina HiSeq
Talaromyces marneffii	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	ATCC 18224	Gp0002656	ABAR01	19555	opportunistic pathogen (dimorphic; penicilliosis)	28,64	8,8	524	452	10638	47 Sanger
Talaromyces marneffii	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	ATCC 18224	Gp0002656	ABAR01	19555	opportunistic pathogen (dimorphic; penicilliosis)	28,64	8,80	524	452	10638	47 Sanger
Talaromyces marneffii	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	ATCC 18224	Gp0002656	ABAR01	19555	opportunistic pathogen (dimorphic; penicilliosis)	28,64	8,80	524	452	10638	47 Sanger
Talaromyces pinophilus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	1-95	Gp0144166	LSFK01	310372	industrial importance (enzyme production)	36,41	150	265	131		46,8 illumina HiSeq
Talaromyces pinophilus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	1-95	Gp0144166	LSFK01	310372	industrial importance (enzyme production)	36,41	150,00	265	131		46,8 illumina HiSeq
Talaromyces pinophilus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	1-95	Gp0144166	LSFK01	310372	industrial importance (enzyme production)	36,41	150,00	265	131		46,8 illumina HiSeq
Talaromyces purpureogenus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	MYA-38	Gp0122196	LIAB01	276974	medical importance (mycotoxin-producing)	38,85	213	1150	1010		48,7 illumina HiSeq; PacBio
Talaromyces purpureogenus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	MYA-38	Gp0122196	LIAB01	276974	medical importance (mycotoxin-producing)	38,85	213,00	1150	1010		48,7 illumina HiSeq; PacBio
Talaromyces purpureogenus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	MYA-38	Gp0122196	LIAB01	276974	medical importance (mycotoxin-producing)	38,85	213,00	1150	1010		48,7 illumina HiSeq; PacBio
Talaromyces stipitatus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	ATCC 10500	Gp0002704	ABAS01	19557	saprotroph	35,69	8,1	896	820	13252	46 Sanger
Talaromyces stipitatus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	ATCC 10500	Gp0002704	ABAS01	19557	saprotroph	35,69	8,10	896	820	13252	46 Sanger
Talaromyces stipitatus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	ATCC 10500	Gp0002704	ABAS01	19557	saprotroph	35,69	8,10	896	820	13252	46 Sanger
Talaromyces verruculosus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	TS63-9	Gp0124670	LHCL01	291496	industrial importance (cellulase production)	37,63	100	719	540	11326	46,2 illumina HiSeq
Talaromyces verruculosus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	TS63-9	Gp0124670	LHCL01	291496	industrial importance (cellulase production)	37,63	100,00	719	540	11326	46,2 illumina HiSeq
Talaromyces verruculosus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	TS63-9	Gp0124670	LHCL01	291496	industrial importance (cellulase production)	37,63	100,00	719	540	11326	46,2 illumina HiSeq
Thermomyces lanuginosus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	SSBP	Gp0038902	ANHP01	88097	industrial importance (thermophile; xylanase producer)	19,156	48,00	311			52,2 454; illumina GAI
Thermomyces lanuginosus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	SSBP	Gp0038902	ANHP01	88097	industrial importance (thermophile; xylanase producer)	19,156	48,00	311			52,2 454; illumina GAI
Thermomyces lanuginosus	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Eurotiales	Trichocomaceae	SSBP	Gp0038902	ANHP01	88097	industrial importance (thermophile; xylanase producer)	19,156	48,00	311			52,2 454; illumina GAI
Ajellomyces dermatitidis	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Onygenales	Ajellomycetaceae	SLH14081	Gp0002636	ACBU01	29173	human pathogen (blastomycosis)	75,4	8,45		103		36 Sanger
Ajellomyces dermatitidis	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Onygenales	Ajellomycetaceae	SLH14081	Gp0002636	ACBU01	29173	human pathogen (blastomycosis)	75,4	8,45		103		36 Sanger
Ajellomyces dermatitidis	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Onygenales	Ajellomycetaceae	SLH14081	Gp0002636	ACBU01	29173	human pathogen (blastomycosis)	75,4	8,45		103		36 Sanger
Emmonsia crescens	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Onygenales	Ajellomycetaceae	UAMH 3008	Gp0037041	LCZIO1	178252	occasional human pathogen (dimorphic)	30,7	163,00	2489	1734	9558	45,2
Emmonsia crescens	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Onygenales	Ajellomycetaceae	UAMH 3008	Gp0037041	LCZIO1	178252	occasional human pathogen (dimorphic)	30,7	163,00	2489	1734	9558	45,2
Emmonsia parva	Ascomycota	Pezizomycotina	Eurotiomycetes	Eurotiomycetidae	Onygenales	Ajellomycetaceae</											

Phaeoconiella chlamydospora	Ascomycota	Peizizomycotina	Eurotiomycetes	Chaetothyriomycetidae	Phaeoconiales	Uncertae sedis	UCRPC4	Gp0118145	LCWF01	261774	plant pathogen (grapevine trunk disease)	27,51	107,28	917	702	6907	47	illumina HiSeq
Phaeoconiella chlamydospora	Ascomycota	Peizizomycotina	Eurotiomycetes	Chaetothyriomycetidae	Phaeoconiales	Uncertae sedis	UCRPC4	Gp0118145	LCWF01	261774	plant pathogen (grapevine trunk disease)	27,51	107,28	917	702	6907	47	illumina HiSeq
Endocarpon pusillum	Ascomycota	Peizizomycotina	Eurotiomycetes	Chaetothyriomycetidae	Verrucariales	Verrucariaceae	Z07020	Gp0048200	APWS01	181958	mycobiont (lichen-forming)	37,5	78,00	1731	908	9285	46	454; illumina GAlIx
Endocarpon pusillum	Ascomycota	Peizizomycotina	Eurotiomycetes	Chaetothyriomycetidae	Verrucariales	Verrucariaceae	Z07020	Gp0048200	APWS01	181958	mycobiont (lichen-forming)	37,5	78,00	1731	908	9285	46	454; illumina GAlIx
Symbiotaphrina buchneri	Ascomycota	Peizizomycotina	Uncertae sedis	Incertae sedis	Incertae sedis	Incertae sedis	JCM 9740	Gp0144048	BCIG01	313832	insect-associated (beetle endosymbiont)	23,71	251,00	211	169		51,6	HiSeq 2500
Symbiotaphrina buchneri	Ascomycota	Peizizomycotina	Uncertae sedis	Incertae sedis	Incertae sedis	Incertae sedis	JCM 9740	Gp0144048	BCIG01	313832	insect-associated (beetle endosymbiont)	23,71	251,00	211	169		51,6	HiSeq 2500
Symbiotaphrina kochii	Ascomycota	Peizizomycotina	Uncertae sedis	Incertae sedis	Incertae sedis	Incertae sedis	CBS 250.77	Gp0010144		207854	insect-associated (beetle endosymbiont)	24,83	69,00	59	54	10482	454;	illumina
Symbiotaphrina kochii	Ascomycota	Peizizomycotina	Uncertae sedis	Incertae sedis	Incertae sedis	Incertae sedis	CBS 250.77	Gp0010144		207854	insect-associated (beetle endosymbiont)	24,83	69,00	59	54	10482	454;	illumina
Cladonia grayi	Ascomycota	Peizizomycotina	Lecanoromycetes	Lecanoromycetidae	Lecanorales	Cladoniaceae	Cgr/DA2myc/ss		JGI		mycobiont (lichen-forming)	39,6		5214	1506	11415	454;	illumina
Cladonia grayi	Ascomycota	Peizizomycotina	Lecanoromycetes	Lecanoromycetidae	Lecanorales	Cladoniaceae	Cgr/DA2myc/ss		JGI		mycobiont (lichen-forming)	39,6		5214	1506	11415	454;	illumina
Cladonia macilenta	Ascomycota	Peizizomycotina	Lecanoromycetes	Lecanoromycetidae	Lecanorales	Cladoniaceae	KoLRIO03786	Gp0042523	AUPP01	210603	mycobiont (lichen-forming)	37,12	540,00	1310	240		44,8	illumina
Cladonia macilenta	Ascomycota	Peizizomycotina	Lecanoromycetes	Lecanoromycetidae	Lecanorales	Cladoniaceae	KoLRIO03786	Gp0042523	AUPP01	210603	mycobiont (lichen-forming)	37,12	540,00	1310	240		44,8	illumina
Cladonia metacorallifera	Ascomycota	Peizizomycotina	Lecanoromycetes	Lecanoromycetidae	Lecanorales	Cladoniaceae	KoLRIO02260	Gp0049795	AXCT02	219240	mycobiont (lichen-forming)	36,68	1023,00	625	30		45	illumina
Cladonia metacorallifera	Ascomycota	Peizizomycotina	Lecanoromycetes	Lecanoromycetidae	Lecanorales	Cladoniaceae	KoLRIO02260	Gp0049795	AXCT02	219240	mycobiont (lichen-forming)	36,68	1023,00	625	30		45	illumina
Usnea florida	Ascomycota	Peizizomycotina	Lecanoromycetes	Lecanoromycetidae	Lecanorales	Parmeliaceae	ATCC18376 v1.0		10S1215		mycobiont (lichen-forming)	44,32	87,6	1774	274	12649		illumina
Usnea florida	Ascomycota	Peizizomycotina	Lecanoromycetes	Lecanoromycetidae	Lecanorales	Parmeliaceae	ATCC18376 v1.0		10S1215		mycobiont (lichen-forming)	44,32	87,6	1774	274	12649		illumina
Gyalolechia flavorubescens	Ascomycota	Peizizomycotina	Lecanoromycetes	Lecanoromycetidae	Lecanorales	Teloschistales	KoLRIO02931	Gp0047051	AUPK01	210248	mycobiont (lichen-forming)	34,468	541,00	189	36		42	illumina HiSeq
Gyalolechia flavorubescens	Ascomycota	Peizizomycotina	Lecanoromycetes	Lecanoromycetidae	Lecanorales	Teloschistales	KoLRIO02931	Gp0047051	AUPK01	210248	mycobiont (lichen-forming)	34,468	541,00	189	36		42	illumina HiSeq
Xanthoria parietina	Ascomycota	Peizizomycotina	Lecanoromycetes	Lecanoromycetidae	Teloschistales	Teloschistaceae	46-1	Gp0017906	JGI	62697	mycobiont (lichen-forming)	31,9	43,84	302	39	10818		454
Xanthoria parietina	Ascomycota	Peizizomycotina	Lecanoromycetes	Lecanoromycetidae	Teloschistales	Teloschistaceae	46-1	Gp0017906	JGI	62697	mycobiont (lichen-forming)	31,9	43,84	302	39	10818		454
Lasallia pustulata	Ascomycota	Peizizomycotina	Lecanoromycetes	Incertae sedis	Umbilicariales	Umbilicariaceae	Sardinia_28052013	Gp0138618	JYI01	275184	mycobiont (lichen-forming)	39,23	90,00	5331	3891		51,2	PacBio; illumina HiSeq
Lasallia pustulata	Ascomycota	Peizizomycotina	Lecanoromycetes	Incertae sedis	Umbilicariales	Umbilicariaceae	Sardinia_28052013	Gp0138618	JYI01	275184	mycobiont (lichen-forming)	39,23	90,00	5331	3891		51,2	PacBio; illumina HiSeq
Umbilicaria muehlenbergii	Ascomycota	Peizizomycotina	Lecanoromycetes	Incertae sedis	Umbilicariales	Umbilicariaceae	Gp0090033	JFDN01		239196	mycobiont (lichen-forming); genetically tractable	34,812	663,00	297	7		47,1	illumina HiSeq
Umbilicaria muehlenbergii	Ascomycota	Peizizomycotina	Lecanoromycetes	Incertae sedis	Umbilicariales	Umbilicariaceae	Gp0090033	JFDN01		239196	mycobiont (lichen-forming); genetically tractable	34,812	663,00	297	7		47,1	illumina HiSeq
Blumeria graminis	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Erysiphales	Erysiphaceae	A6	Gp0038457	AOLT01	186717	plant pathogen (mildew on grasses and cereals)	47,46	70,00	21305		7088	46,4	454; illumina HiSeq
Blumeria graminis	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Erysiphales	Erysiphaceae	A6	Gp0038457	AOLT01	186717	plant pathogen (mildew on grasses and cereals)	47,46	70,00	21305		7088	46,4	454; illumina HiSeq
Erysiphe necator	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Erysiphales	Erysiphaceae	branching	Gp0117742	JNUS01	248900	plant pathogen (powdery mildew of grape)	50,66	29,00	11631	6224	6484	39	illumina HiSeq
Erysiphe necator	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Erysiphales	Erysiphaceae	branching	Gp0117742	JNUS01	248900	plant pathogen (powdery mildew of grape)	50,66	29,00	11631	6224	6484	39	illumina HiSeq
Erysiphe pisi	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Erysiphales	Erysiphaceae	not specified	Gp0008359	CACN01	50315	plant pathogen (powdery mildew of pea)	41	8,30	26142			39,2	454
Erysiphe pisi	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Erysiphales	Erysiphaceae	not specified	Gp0008359	CACN01	50315	plant pathogen (powdery mildew of pea)	41	8,30	26142			39,2	454
Marssonina brunnea	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Dermateaceae	MB_m1	Gp0038386	AFXC01	66127	plant pathogen (poplar leaf spot)	51,949	34,00	2415	89	10027	42,9	454; Sanger
Marssonina brunnea	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Dermateaceae	MB_m1	Gp0038386	AFXC01	66127	plant pathogen (poplar leaf spot)	51,949	34,00	2415	89	10027	42,9	454; Sanger
Ascoconyze sarcoides	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Dermateaceae	NRRL 50072	Gp0039091	AIAA01	71021	pharmaceutical importance (antibiotic-producing); saprotroph	34,2	250	219	13			454
Ascoconyze sarcoides	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Dermateaceae	NRRL 50072	Gp0039091	AIAA01	71021	pharmaceutical importance (antibiotic-producing); saprotroph	34,2	250	219	13			454
Glarea lozoyensis	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Helotiaceae	74030	Gp0020666	AGUE01	74639	pharmaceutical importance (produces antifungal compounds)	38,718	34,40	880	581	13083	46	illumina HiSeq
Glarea lozoyensis	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Helotiaceae	74030	Gp0020666	AGUE01	74639	pharmaceutical importance (produces antifungal compounds)	38,718	34,40	880	581	13083	46	illumina HiSeq
Hymenoscyphus fraxineus	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Helotiaceae	CBS 133217	Gp0124450	LLCC01	297734	plant pathogen (ash dieback)	51,52	90,00	4749			43,7	illumina HiSeq
Hymenoscyphus fraxineus	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Helotiaceae	CBS 133217	Gp0124450	LLCC01	297734	plant pathogen (ash dieback)	51,52	90,00	4749			43,7	illumina HiSeq
Hymenoscyphus fructigenus	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Helotiaceae	CBS 650.92	Gp0124451	LKUV01	298282	saprotroph	61,12	400,00	504			43,1	illumina HiSeq
Hymenoscyphus fructigenus	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Helotiaceae	CBS 650.92	Gp0124451	LKUV01	298282	saprotroph	61,12	400,00	504			43,1	illumina HiSeq
Hymenoscyphus infarciens	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Helotiaceae	CBS 122016	Gp0124452	LLCB01	297733	saprotroph	68,15	250,00	1714			37,6	illumina HiSeq
Hymenoscyphus infarciens	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Helotiaceae	CBS 122016	Gp0124452	LLCB01	297733	saprotroph	68,15	250,00	1714			37,6	illumina HiSeq
Hymenoscyphus laetus	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Helotiaceae	CBS 340.76	Gp0124448	LLCA01	297728	saprotroph	36,47	140,00	1714			51,9	illumina HiSeq
Hymenoscyphus laetus	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Helotiaceae	CBS 340.76	Gp0124448	LLCA01	297728	saprotroph	36,47	140,00	1714			51,9	illumina HiSeq
Hymenoscyphus repandus	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Helotiaceae	CBS 341.76	Gp0124456	LLCE01	297738	saprotroph	42,81	50,00	925			46,6	illumina HiSeq
Hymenoscyphus repandus	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Helotiaceae	CBS 341.76	Gp0124456	LLCE01	297738	saprotroph	42,81	50,00	925			46,6	illumina HiSeq
Hymenoscyphus salicellus	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Helotiaceae	CBS 111550	Gp0124453	LLCD01	297737	saprotroph	57,95	30,00				44,4	illumina HiSeq
Hymenoscyphus salicellus	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Helotiaceae	CBS 111550	Gp0124453	LLCD01	297737	saprotroph	57,95	30,00				44,4	illumina HiSeq
Hymenoscyphus scutula	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Helotiaceae	CBS 480.97	Gp0124454	LKTO01	297978	saprotroph	62,23	100,00	2591			41,1	illumina HiSeq
Hymenoscyphus scutula	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Helotiaceae	CBS 480.97	Gp0124454	LKTO01	297978	saprotroph	62,23	100,00	2591			41,1	illumina HiSeq
Meliniomyces bicolor	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Helotiaceae	E	Gp0009599	JGI	196026	mycorrhizal	82,38	190,6	301	206	18619		illumina HiSeq
Meliniomyces bicolor	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Helotiaceae	E	Gp0009599	JGI	196026	mycorrhizal	82,38	190,6	301	206	18619		illumina HiSeq
Meliniomyces variabilis	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Helotiaceae	F	Gp0019251	JGI	200595	mycorrhizal	55,86	108,4	272	93	20389		illumina HiSeq
Meliniomyces variabilis	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Helotiaceae	F	Gp0019251	JGI	200595	mycorrhizal	55,86	108,4	272	93	20389		illumina HiSeq
Rhizoscyphus ericae	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Helotiaceae	UAMH 7357	Gp0019396	1006265	263050	mycorrhizal (ericoid)	57,41	120,90	1025	267	16784		illumina HiSeq
Rhizoscyphus ericae	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Helotiaceae	UAMH 7357	Gp0019396	1006265	263050	mycorrhizal (ericoid)	57,41	120,90	1025	267	16784		illumina HiSeq
Calycina herbarum	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Hyaloscyphaceae	CBS 466.73	Gp0124449	LLEY01	298390	uncertain saprotroph	69,31	300,00	529			41,7	illumina HiSeq
Calycina herbarum	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Hyaloscyphaceae	CBS 466.73	Gp0124449	LLEY01	298390	uncertain saprotroph	69,31	300,00	529			41,7	illumina HiSeq
Acephala macrosclerotiorum	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Uncertae sedis	EW76-UTF0540 v1.0		1034881		ectomycorrhizal	73,68	141,30	1901	1695	21024		illumina
Acephala macrosclerotiorum	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Uncertae sedis	EW76-UTF0540 v1.0		1034881		ectomycorrhizal	73,68	141,30	1901	1695	21024		illumina
Cadophora sp. DSE1049	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Incertae sedis	DSE1049	Gp0046557	JGI	243951	endophyte (grasslands)	70,46	79,2	1294	1193	22766		illumina HiSeq
Cadophora sp. DSE1049	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Incertae sedis	DSE1049	Gp0046557	JGI	243951	endophyte (grasslands)	70,46	79,2	1294	1193	22766		illumina HiSeq
Cairneyella heathii	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Incertae sedis	VPRI 42388	Gp0067908	AYLM01	225634	mycorrhizal	50,69	20,00	3371	50,69			
Chalara longipes	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Incertae sedis	BDJ	Gp0019347	JGI	213334	saprotroph	52,43	104,7	175	54	19765		illumina
Chalara longipes	Ascomycota	Peizizomycotina	Leotiomycetes	Leotiomycetidae	Helotiales	Incertae sedis	BDJ	Gp0019347	JGI	213334	saprotroph	52,43	104,7	175	54	19765		illumina
Leptodontium sp.	As																	

Drechlerella stenobrocha	Ascomycota	Peizomycotina	Orbiliomycetes	Orbiliomycetidae	Orbiliales	Orbiliaceae	YNWS02-9-1	Gp0005661		biocontrol (nematophagous)	29,02	80,00			142	7781	Illumina	
Drechlerella stenobrocha	Ascomycota	Peizomycotina	Orbiliomycetes	Orbiliomycetidae	Orbiliales	Orbiliaceae	YNWS02-9-1	Gp0005661		biocontrol (nematophagous)	29,02	80,00			142	7781	Illumina	
Ascobolus immersus	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Ascobolaceae	RN42	Gp0017640	JGI	250965 coprophilous	59,53	86,3	1225		706	17877	Illumina HiSeq	
Ascobolus immersus	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Ascobolaceae	RN42	Gp0017640	JGI	250965 coprophilous	59,53	86,30	1225		706	17877	Illumina HiSeq	
Ascodesmis nigricans	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Ascodesmidaceae	CBS 389.68	Gp0090695		247594 coprophilous	27,39	96,90			407	9622	Illumina	
Caloscypha fulgens	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Caloscyphaeae	ATCC 42695 v1.0			1052670 plant pathogen (seed rot of conifers)	44,84				405	9203	Illumina	
Caloscypha fulgens	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Caloscyphaeae	ATCC 42695 v1.0			1052670 plant pathogen (seed rot of conifers)	44,84				405	9203	Illumina	
Gyromitra esculenta	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Discinaceae	CBS101906 v1.0			1051239 saprotroph	45,05	83,6	774		271	11202	Illumina	
Gyromitra esculenta	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Discinaceae	CBS101906 v1.0			1051239 saprotroph	45,05	83,60	774		271	11202	Illumina	
Morchella conica	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Morchellaceae	CCBAS932	Gp0044465	JGI	217205 mycorrhizal; saprotroph	48,21	67,80	1793		540	11600	Illumina HiSeq	
Morchella conica	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Morchellaceae	CCBAS932	Gp0044465	JGI	217205 mycorrhizal; saprotroph	48,21	67,80	1793		540	11600	Illumina HiSeq	
Morchella importuna	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Morchellaceae	SCYD11-A1 v1.0			1047733 saprotroph; edible	48,8	83,9	1509		338	11971	Illumina	
Morchella importuna	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Morchellaceae	SCYD11-A1 v1.0			1047733 saprotroph; edible	48,8	83,90	1509		338	11971	Illumina	
Kalaharituber Pfeilli	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Pezizaceae	F3 v1.0			1060175 mycorrhizal; edible desert truffle	78,99				595	15190	PacBio	
Kalaharituber Pfeilli	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Pezizaceae	F3 v1.0			1060175 mycorrhizal; edible desert truffle	78,99				595	15190	PacBio	
Terfezia boudieri	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Pezizaceae	S1	Gp0009600	JGI	200599 mycorrhizal	63,23	104,4	2078		516	10200	454; Illumina; PacBio	
Terfezia boudieri	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Pezizaceae	S1	Gp0009600	JGI	200599 mycorrhizal	63,23	104,40	2078		516	10200	454; Illumina; PacBio	
Pyronema confluens	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Pyronemataceae	CBS 100304	Gp0035318	CATG00000000	65573 saprotroph (soil)	50,03		1865		1588	13367	48 454; Illumina HiSeq	
Pyronema confluens	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Pyronemataceae	CBS 100304	Gp0035318	CATG00000000	65573 saprotroph (soil)	50,03		1865		1588	13367	48 454; Illumina HiSeq	
Ramularia collo-cygni	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Pyronemataceae	Gs0120586	CZLF01		306455 plant pathogen (barley)	30,3	90,00	832		576	11617	51,4	
Ramularia collo-cygni	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Pyronemataceae	Gs0120586	CZLF01		306455 plant pathogen (barley)	30,3	90,00	832		576	11617	51,4	
Wilcoxina mikolae	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Pyronemataceae	CBS 423.85	Gp0035338	JGI	196022 ectomycorrhizal	117,29		95		5591	1604	13093	Illumina HiSeq; PacBio
Wilcoxina mikolae	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Pyronemataceae	CBS 423.85	Gp0035338	JGI	196022 ectomycorrhizal	117,29		95		5591	1604	13093	Illumina HiSeq; PacBio
Sarcoscypha coccinea	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Sarcoscyphaeae	ATCC 58028 v1.0			1042915 saprotroph	39,09	95,9	1481		461	13738	Illumina	
Sarcoscypha coccinea	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Sarcoscyphaeae	ATCC 58028 v1.0			1042915 saprotroph	39,09	95,90	1481		461	13738	Illumina	
Plectania melastoma	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Sarcosomataceae	CBS 918.72 v1.0			1040543 saprotroph	92,51	72,3	504		175	16180	Illumina	
Plectania melastoma	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Sarcosomataceae	CBS 918.72 v1.0			1040543 saprotroph	92,51	72,30	504		175	16180	Illumina	
Choioomyces venosus	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Tuberaceae	120613-1	Gp0035337	JGI	204096 ectomycorrhizal	126,04		89,5	3183	1176	17986	Illumina; PacBio	
Choioomyces venosus	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Tuberaceae	120613-1	Gp0035337	JGI	204096 ectomycorrhizal	126,04		89,50	3183	1176	17986	Illumina; PacBio	
Tuber borchii	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Tuberaceae	Tbo3840	Gp0002708		1034997 ectomycorrhizal	97,18	97,00	969		969	12346	PacBio	
Tuber melanosporum	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Tuberaceae	Mel28	Gp0002709	CABJ01	38847 ectomycorrhizal (edible delicacy)	124,945	10,00	4440		398	7496	45 Sanger	
Tuber melanosporum	Ascomycota	Peizomycotina	Peizomyces	Peizomycetidae	Peiziales	Tuberaceae	Mel28	Gp0002709	CABJ01	38847 ectomycorrhizal (edible delicacy)	124,945	10,00	4440		398	7496	45 Sanger	
Microdochium bolleyi	Ascomycota	Peizomycotina	Sordariomycetes	Yliariomycetidae	Amphisphaeriales	Incertae sedis	J235TASD1	Gp0113784	LSSP01	308023 endophyte	38,84	136,20	262		173	13165	57,1 HiSeq 2500	
Pestalotiopsis fici	Ascomycota	Peizomycotina	Sordariomycetes	Yliariomycetidae	Amphisphaeriales	Pestalotiopsidaceae	W106-1	Gp0038703	ARNU01	174299 endophyte	51,91	80,00	518		39	15413	52 454; Illumina HiSeq	
Pestalotiopsis sp. JCM 9685	Ascomycota	Peizomycotina	Sordariomycetes	Yliariomycetidae	Amphisphaeriales	Pestalotiopsidaceae	JCM 9685	Gp0149822	BCGF01	313890 endophyte (Taxus brevifolia)	48,23	235,00	130		13		51,6 Illumina	
Thozetella sp. PML_491	Ascomycota	Peizomycotina	Sordariomycetes	Sordariomycetidae	Chaetosphaeriales	Chaetosphaeriaceae	PML_491	Gp0039995	JGI	251777 endophyte	72,86	112,6	627		194	23281	Illumina HiSeq	
Thozetella sp. PML_491	Ascomycota	Peizomycotina	Sordariomycetes	Sordariomycetidae	Chaetosphaeriales	Chaetosphaeriaceae	PML_491	Gp0039995	JGI	251777 endophyte	72,86	112,60	627		194	23281	Illumina HiSeq	
Coniochaeta ligniaria	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthomycetidae	Coniochaetales	Coniochaetaeae	NRRL 30616	Gp0036825	JGI	223108 industrial importance	42,38	94,40	230		135	13657	Illumina HiSeq	
Coniochaeta ligniaria	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthomycetidae	Coniochaetales	Coniochaetaeae	NRRL 30616	Gp0036825	JGI	223108 industrial importance	42,38	94,40	230		135	13657	Illumina HiSeq	
Coniochaeta sp. PML_546	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthomycetidae	Coniochaetales	Coniochaetaeae	PML_546	Gp0039950	JGI	234867 endophyte (root); saprotroph	33,51	102	68		37	11346	Illumina HiSeq	
Coniochaeta sp. PML_546	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthomycetidae	Coniochaetales	Coniochaetaeae	PML_546	Gp0039950	JGI	234867 endophyte (root); saprotroph	33,51	102,00	68		37	11346	Illumina HiSeq	
Chrysosporthe austroafricana	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthales	Cryphonectriaceae	Cryphonectriaceae	CMW 2113	Gp0146002	JYIP01	263707 plant pathogen (eucalyptus, Tibouchina, Syzygium)	44,66	40	6415				54,3 Illumina MiSeq; IonTorrent	
Chrysosporthe austroafricana	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthales	Cryphonectriaceae	Cryphonectriaceae	CMW 2113	Gp0146002	JYIP01	263707 plant pathogen (eucalyptus, Tibouchina, Syzygium)	44,66	40,00	6415				54,3 Illumina MiSeq; IonTorrent	
Chrysosporthe cubensis	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthales	Cryphonectriaceae	Cryphonectriaceae	CMW 10028	Gp0117564	LJCY01	264999 plant pathogen (eucalyptus, Tibouchina, Syzygium)	42,62	40	1257		954		55,1 Illumina MiSeq	
Chrysosporthe cubensis	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthales	Cryphonectriaceae	Cryphonectriaceae	CMW 10028	Gp0117564	LJCY01	264999 plant pathogen (eucalyptus, Tibouchina, Syzygium)	42,62	40,00	1257		954		55,1 Illumina MiSeq	
Chrysosporthe deuterocubensis	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthales	Cryphonectriaceae	Cryphonectriaceae	CMW 8650	Gp0117565	LJDD01	265023 plant pathogen (eucalyptus, Tibouchina, Syzygium)	43,97	45	3126		2574		55,3 Illumina MiSeq	
Chrysosporthe deuterocubensis	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthales	Cryphonectriaceae	Cryphonectriaceae	CMW 8650	Gp0117565	LJDD01	265023 plant pathogen (eucalyptus, Tibouchina, Syzygium)	43,97	45,00	3126		2574		55,3 Illumina MiSeq	
Cryphonectria parasitica	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthales	Cryphonectriaceae	Cryphonectriaceae	EP155	Gp0002604	JGI	207842 plant pathogen (chestnut blight)	43,9	8,54	33		26	11184		
Cryphonectria parasitica	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthales	Cryphonectriaceae	Cryphonectriaceae	EP155	Gp0002604	JGI	207842 plant pathogen (chestnut blight)	43,9	8,54	33		26	11184		
Diaporthe ampelina	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthales	Diaporthaceae	Diaporthaceae	UCDDA912	Gp0117694	LCUC01	261766 endophyte	47,33	50	3116		2383		59,5 Illumina HiSeq	
Diaporthe ampelina	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthales	Diaporthaceae	Diaporthaceae	UCDDA912	Gp0117694	LCUC01	261766 endophyte	47,33	50,00	3116		2383		59,5 Illumina HiSeq	
Diaporthe aspalathi	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthales	Diaporthaceae	Diaporthaceae	DPM001935	Gp0144055	LJS01	295230 plant pathogen (soybean stem canker)	55,03	100	5371		1871		51,6 Illumina HiSeq	
Diaporthe aspalathi	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthales	Diaporthaceae	Diaporthaceae	DPM001935	Gp0144055	LJS01	295230 plant pathogen (soybean stem canker)	55,03	100,00	5371		1871		51,6 Illumina HiSeq	
Diaporthe longicolla	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthales	Diaporthaceae	Diaporthaceae	MS10-6	Gp0038530	AYRD01	174445 plant pathogen (soybean)	62,26	97,00	8023		5943		Illumina HiSeq	
Diaporthe longicolla	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthales	Diaporthaceae	Diaporthaceae	MS10-6	Gp0038530	AYRD01	174445 plant pathogen (soybean)	62,26	97,00	8023		5943		Illumina HiSeq	
Ophiognomonium clavignenti-jugla	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthales	Gnomoniaceae	Gnomoniaceae	MS10-6	Gp0008964	AEGN01	52061 plant pathogen (butternut)	15,906	2,13	28868				48,8	454
Ophiognomonium clavignenti-jugla	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthales	Gnomoniaceae	Gnomoniaceae	MS10-6	Gp0008964	AEGN01	52061 plant pathogen (butternut)	15,906	2,13	28868				48,8	454
Lolliopodia minuta	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthales	Incertae sedis	Incertae sedis	CBS 116597 v1.0			1032359 saprotroph tropical	37,42	138	427		380	11996	Illumina	
Lolliopodia minuta	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthales	Incertae sedis	Incertae sedis	CBS 116597 v1.0			1032359 saprotroph tropical	37,42	138,00	427		380	11996	Illumina	
Melanconium sp. 1 NRRL 54901	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthales	Melanconidaceae	Melanconidaceae	NRRL 54901	Gp0019267	JGI	207856 plant pathogen (probable maize pathogen)	58,52	92,80	465		100	16656	Illumina	
Melanconium sp. 1 NRRL 54901	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthales	Melanconidaceae	Melanconidaceae	NRRL 54901	Gp0019267	JGI	207856 plant pathogen (probable maize pathogen)	58,52	92,80	465		100	16656	Illumina	
Valsa mali	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthales	Valsaceae	Valsaceae	SXYL134	Gp0118828	JUIZ01	268128 plant pathogen (apple & pear)	35,73	180	2917		475	11165	49,3 Illumina GAlIx	
Valsa mali	Ascomycota	Peizomycotina	Sordariomycetes	Diaporthales	Valsaceae	Valsaceae	SXYL134	Gp0118828	JUIZ01	268128 plant pathogen (apple & pear)	35,73	180,00	2917		475	11165	49,3 Illumina GAlIx	
Acremonium chrysogenum	Ascomycota	Peizomycotina	Sordariomycetes	Hypocreomycetidae	Glomerellales	Plectosphaerellaceae	ATCC 11550	Gp0095146	JPKY00000000.1	248608 industrial importance; pharmaceutical importance	28,5	137			543	8901	Illumina HiSeq	
Acremonium furcatum	Ascomycota	Peizomycotina	Sordariomycetes	Hypocreomycetidae	Glomerellales	Plectosphaerellaceae	JCM 9210	Gp0144039	BCIA01	313827 biocontrol (mycoparasite)	40,32	281	94		9		57,7 HiSeq 2500	
Colletotrichum godetiae	Ascomycota	Peizomycotina	Sordariomycetes	Hypocreomycetidae	Glomerellales	Glomerellaceae	CBS 193.32 v1.0			1060998 insect-associated	51,65	235	194		194	16071	PacBio	
Colletotrichum lupini	Ascomycota	Peizomycotina	Sordariomycetes	Hypocreomycetidae	Glomerellales	Glomerellaceae	CBS 109225 v1.0			1061002 plant pathogen (Lupinus flowering plants)	58,76	97	116		116	15365	PacBio	
Colletotrichum caudatum	Ascomycota	Peizomycotina	Sordariomycetes	Hypocreomycetidae	Glomerellales	Glomerellaceae	CBS131602 v1.0			1006149 plant pathogen (warm-season grasses)	44,2	143	1381		1257	15294	Illumina	
Colletotrichum caudatum	Ascomycota	Peizomycotina	Sordariomycetes	Hypocreomycetidae	Glomerellales	Glomerellaceae	C											

Verticillium longisporum	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Glomerellales	Plectosphaerellaceae	VL1	Gp0143280	CVQH01	285310	plant pathogen (canola)	99,19		38029	28081	20793	53,9	
Verticillium tricolorum	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Glomerellales	Plectosphaerellaceae	MUCL9297	Gp0076233	JPET01	229139	opportunistic plant pathogen (lettuce); saprotroph	36,06	65,00	251			57,3	illumina HiSeq; PacBio
Verticillium tricolorum	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Glomerellales	Plectosphaerellaceae	MUCL9297	Gp0076233	JPET01	229139	opportunistic plant pathogen (lettuce); saprotroph	36,06	65,00	251			57,3	illumina HiSeq; PacBio
Clonostachys rosea	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Bionectriaceae	CBS 125111	Gp0072263	JGI	247918	endophyte; saprotroph; parasite; biocontrol	52,44	59	774	74	18639		illumina HiSeq
Clonostachys rosea	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Bionectriaceae	CBS 125111	Gp0072263	JGI	247918	endophyte; saprotroph; parasite; biocontrol	52,44	59,00	774	74	18639		illumina HiSeq
Gliomastix tumulicola	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Bionectriaceae	JCM 17184	Gp0144014	BCHX01	313824	uncertain	42,39	295	194	72		54,8	HiSeq 2500
Gliomastix tumulicola	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Bionectriaceae	JCM 17184	Gp0144014	BCHX01	313824	uncertain	42,39	295,00	194	72		54,8	HiSeq 2500
Stanjonium grisellum	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Bionectriaceae	CBS 655.79	Gp0050687	1029499	239486	soil-associated	33	103,00	831	151	11832		illumina
Aciculosporium take	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	MAFF-241224	Gp0038974	University of Kentucky	67241	plant pathogen (bamboo parasite)	58,836	18,5	3298			40,1	454 GS FLX Titanium
Aciculosporium take	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	MAFF-241224	Gp0038974	University of Kentucky	67241	plant pathogen (bamboo parasite)	58,836	18,50	3298			40,1	454 GS FLX Titanium
Aschersonia alejrodis	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	RCEF 2490	Gp0039338	AZGY01	72735	entomopathogen	30,87	76,00	604	97	8461	30,87	illumina HiSeq
Atkinsonella hypoxylon	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	B4728	Gp0067879	JFHB01	221544	parasite (systemic grass)	35,6	31,60	688				454
Atkinsonella hypoxylon	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	B4728	Gp0067879	JFHB01	221544	parasite (systemic grass)	35,6	31,60	688				454
Atkinsonella texensis	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	B6155	Gp0120993	LBNC01	274998	epiphyte	29,37	63,7	3966	2630		49,8	illumina MiSeq
Atkinsonella texensis	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	B6155	Gp0120993	LBNC01	274998	epiphyte	29,37	63,70	3966	2630		49,8	illumina MiSeq
Balansia obtecta	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	B249	Gp0047672	JFZS01	221345	parasite (systemic grass)	30,1	21,60	1552			48,5	
Balansia obtecta	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	B249	Gp0047672	JFZS01	221345	parasite (systemic grass)	30,1	21,60	1552			48,5	
Claviceps fusiformis	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	PRL 1980	Gp0038970	AFRA01	67243	plant pathogen (pearl millet)	52,585	34,90	6930			36,9	454
Claviceps fusiformis	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	PRL 1980	Gp0038970	AFRA01	67243	plant pathogen (pearl millet)	52,585	34,90	6930			36,9	454
Claviceps paspali	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	7990	Gp0008743	AFRC01	51623	medical importance (ergot fungus; mycotoxin-producing)	28,97	54,40	2304			47,5	454
Claviceps paspali	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	7990	Gp0008743	AFRC01	51623	medical importance (ergot fungus; mycotoxin-producing)	28,97	54,40	2304			47,5	454
Claviceps purpurea	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae		20,1 Gp0038662	CAGA01	76493	plant pathogen (cereals)	32,09		191		8979	51,6	
Claviceps purpurea	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae		20,1 Gp0038662	CAGA01	76493	plant pathogen (cereals)	32,09		191		8979	51,6	
Epichloe (Neotyphodium) gansuense	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	E7080		AFRE01	174039	endophyte (grass)	39,62	41,50	1621			44,4	454
Epichloe amarillans	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	E57	Gp0038968	AFRF01	67301	endophyte; plant pathogen	38,06	27,70	2180	2180		44,3	454
Epichloe amarillans	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	E57	Gp0038968	AFRF01	67301	endophyte; plant pathogen	38,06	27,70	2180	2180		44,3	454
Epichloe baconii	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	ATCC 200745	Gp0068053	JFGY01	221976	endophyte; plant pathogen	38,08	18,40	3603			41,6	454
Epichloe baconii	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	ATCC 200745	Gp0068053	JFGY01	221976	endophyte; plant pathogen	38,08	18,40	3603			41,6	454
Epichloe brachyelytri	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	E4804	Gp0038969	AFRB01	67245	endophyte; plant pathogen	44,23	24,60	5136			40,2	454
Epichloe brachyelytri	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	E4804	Gp0038969	AFRB01	67245	endophyte; plant pathogen	44,23	24,60	5136			40,2	454
Epichloe bromicola	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	ATCC 200750	Gp0047721	JFHA01	221343	endophyte; plant pathogen	28,57	6,70	16548			45,3	454
Epichloe bromicola	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	ATCC 200750	Gp0047721	JFHA01	221343	endophyte; plant pathogen	28,57	6,70	16548			45,3	454
Epichloe elymi	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	E56	Gp0039395	AMDJ01	173776	endophyte	32,335	31,80	6988			46,6	454; Ion Torrent
Epichloe elymi	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	E56	Gp0039395	AMDJ01	173776	endophyte	32,335	31,80	6988			46,6	454; Ion Torrent
Epichloe festucae	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	F11	Gp0008744	AFRX01	51625	endophyte	35,105	27,80	1722	799		44,1	454; Sanger
Epichloe festucae	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	F11	Gp0008744	AFRX01	51625	endophyte	35,105	27,80	1722	799		44,1	454; Sanger
Epichloe glyceriae	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	E277	Gp0038972	AFRG01	67247	endophyte; plant pathogen	46,72	27,70	3076			45	454
Epichloe glyceriae	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	E277	Gp0038972	AFRG01	67247	endophyte; plant pathogen	46,72	27,70	3076			45	454
Epichloe mollis	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	AL9924	Gp0047723	JFGW01	215230	endophyte; plant pathogen	36,169	28,00	1068			44	454
Epichloe mollis	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	AL9924	Gp0047723	JFGW01	215230	endophyte; plant pathogen	36,169	28,00	1068			44	454
Epichloe sylvatica	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	GR10156	Gp0120997	LCTT01	275112	endophyte; plant pathogen (woodland grass sp.)	36,1	160	36463			44,8	illumina MiSeq
Epichloe sylvatica	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	GR10156	Gp0120997	LCTT01	275112	endophyte; plant pathogen (woodland grass sp.)	36,1	160,00	36463			44,8	illumina MiSeq
Epichloe typhina	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	E5819	Gp0038966	AFSE01	68441	plant pathogen (Poaceae)	34,185	18,50	2556			41,5	454
Epichloe typhina	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	E5819	Gp0038966	AFSE01	68441	plant pathogen (Poaceae)	34,185	18,50	2556			41,5	454
Epichloe uncinata	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	e167	Gp0120998	LELE01	275109	endophyte (grasses)	53,34	131,4	23517	23102		49,6	illumina MiSeq
Epichloe uncinata	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	e167	Gp0120998	LELE01	275109	endophyte (grasses)	53,34	131,40	23517	23102		49,6	illumina MiSeq
Hypocrella siamensis	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	MTCC 10142	Gp0091946	JMQE01	242986	entomopathogenic	28,856	90,00	2034			53,1	illumina HiSeq
Hypocrella siamensis	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	MTCC 10142	Gp0091946	JMQE01	242986	entomopathogenic	28,856	90,00	2034			53,1	illumina HiSeq
Metacordyceps chlamydosporia	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae		123 Gp0038416	AOSW01	68669	biocontrol (nematophagous)	42,462	136,00	8574	956		49,7	illumina HiSeq
Metacordyceps chlamydosporia	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae		123 Gp0038416	AOSW01	68669	biocontrol (nematophagous)	42,462	136,00	8574	956		49,7	illumina HiSeq
Metarhizium acridum	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	CQMa102	Gp0006357	ADNI01	38715	entomopathogenic; biocontrol	39,422	113,00	1608	241	9974	49,9	illumina
Metarhizium acridum	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	CQMa102	Gp0006357	ADNI01	38715	entomopathogenic; biocontrol	39,422	113,00	1608	241	9974	49,9	illumina
Metarhizium album	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	ARSEF 1941	Gp0039284	AZHE01	72731	entomopathogen	30,45	117,07	731	257	8472	30,45	illumina HiSeq
Metarhizium album	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	ARSEF 1941	Gp0039284	AZHE01	72731	entomopathogen	30,45	117,07	731	257	8472	30,45	illumina HiSeq
Metarhizium anisopliae	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	ARSEF 23	Gp0006292	ADNJ01	38717	entomopathogenic; biocontrol	39,145	100,00	1265	176	10726	51,5	illumina
Metarhizium anisopliae	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	ARSEF 23	Gp0006292	ADNJ01	38717	entomopathogenic; biocontrol	39,145	100,00	1265	176	10726	51,5	illumina
Metarhizium brunneum	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	ARSEF 3297	Gp0039279	AZNG01	184756	biocontrol (entomopathogen)	37,07	80,13	180	92	10689	51,5	illumina HiSeq
Metarhizium guizhouense	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	ARSEF 977	Gp0039280	AZNH01	184755	biocontrol (entomopathogen)	43,47	95,42	1111	563	11787	49,6	illumina HiSeq
Metarhizium majus	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	ARSEF 297	Gp0039281	AZNE01	184757	biocontrol (entomopathogen)	42,02	71,17	1847	1134	11535	51	illumina HiSeq
Metarhizium rileyi	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	RCEF 4871	Gp0039340	AZHC01	72739	entomopathogen	32,01	107,34	1000	389	8764	49,3	illumina HiSeq
Metarhizium robertsii	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	ARSEF 2575	Gp0076192	ELW01	230500	parasite (arthropod)	40,317	25,00	464			50,8	454
Metarhizium robertsii	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	ARSEF 2575	Gp0076192	ELW01	230500	parasite (arthropod)	40,317	25,00	464			50,8	454
Neotyphodium aotearoae	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	ATCC MYA-1229	Gp0070855	JFGX01	221524	endophyte (grass)	34,423	26,30	2094			43,6	454
Neotyphodium aotearoae	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	ATCC MYA-1229	Gp0070855	JFGX01	221524	endophyte (grass)	34,423	26,30	2094			43,6	454
Neotyphodium gansuense	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Clavicipitaceae	E7080	Gp0038971	AFRE01	67299								

Trichoderma pseudokoningii	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Hypocreaceae	SMF2	Gp0039277	ANBJ01	175761	biocontrol (nematode parasite)	31,743	69,00	316	194	54 454; Illumina HiSeq
Trichoderma pseudokoningii	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Hypocreaceae	SMF2	Gp0039277	ANBJ01	175761	biocontrol (nematode parasite)	31,743	69,00	316	194	54 454; Illumina HiSeq
Trichoderma reesei	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Hypocreaceae	QM6a	Gp0017902	AAILO2	15571	industrial importance (cellulases; hemicellulases)	33,3	9,00	128	77	9129 52,8 Sanger
Trichoderma reesei	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Hypocreaceae	QM6a	Gp0017902	AAILO2	15571	industrial importance (cellulases; hemicellulases)	33,3	9,00	128	77	9129 52,8 Sanger
Trichoderma virens	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Hypocreaceae	Gv29-8	Gp0002706	ABDF02	19983	biocontrol	39	8,05	93	93	12427 49,2 Sanger
Trichoderma virens	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Hypocreaceae	Gv29-8	Gp0002706	ABDF02	19983	biocontrol	39	8,05	93	93	12427 49,2 Sanger
Acremonium (Sacrocladium) strictur	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Incertae sedis	DS1bioAY4a	Gp0047505	1029426	239484	endophyte (grasses); mycoparasite	35,79	120,00	81	13	13158 Illumina
Sacrocladium oryzae	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Incertae sedis	Saro-13	LOPT01		305454	plant pathogen (rice sheath rot)	32,78	82,00	5856		53,5 Illumina
Stachybotrys chartarum	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Incertae sedis	IBT 40293	Gp0039336	ASEQ01	185808	medical importance (stachybotryotoxicosis; mycotoxin-producing-satratox	36,48	192,00	4267	2342	11453 53,3 Illumina HiSeq
Stachybotrys chartarum	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Incertae sedis	IBT 40293	Gp0039336	ASEQ01	185808	medical importance (stachybotryotoxicosis; mycotoxin-producing-satratox	36,48	192,00	4267	2342	11453 53,3 Illumina HiSeq
Stachybotrys chlorohalonata	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Incertae sedis	IBT 40285	Gp0039361	APWP01	185807	medical importance (atranone-producing)	34,39	196,00	5591	2802	10706 53,4 Illumina HiSeq
Stachybotrys chlorohalonata	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Incertae sedis	IBT 40285	Gp0039361	APWP01	185807	medical importance (atranone-producing)	34,39	196,00	5591	2802	10706 53,4 Illumina HiSeq
Ustilagoidea virens	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Incertae sedis	IPU010	Gp0115332	BBTG02	279060	plant pathogen (rice)	33,57		139		8426 49,9 Illumina HiSeq; PacBio
Ustilagoidea virens	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Incertae sedis	IPU010	Gp0115332	BBTG02	279060	plant pathogen (rice)	33,57		139		8426 49,9 Illumina HiSeq; PacBio
Dactyloctenidia macrodidyma	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	JAC 15-24	Gp0117674	JYGD01	274176	plant pathogen (grapevine, avocado, and olive)	58	74	1466	911	50 Illumina HiSeq
Dactyloctenidia macrodidyma	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	JAC 15-24	Gp0117674	JYGD01	274176	plant pathogen (grapevine, avocado, and olive)	58	74,00	1466	911	50 Illumina HiSeq
Fusarium acuminatum	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	CS5907	Gp0043378	CBMG000000000.1	206959	plant pathogen (cereals)	43,98		3907	758	Illumina HiSeq
Fusarium acuminatum	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	CS5907	Gp0043378	CBMG000000000.1	206959	plant pathogen (cereals)	43,98		3907	758	Illumina HiSeq
Fusarium avenaceum	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	FaLH03	Gp0143156	JQGD01	253730	plant pathogen (generalist, including grain crops)	43,17	459	115	105	48 Illumina HiSeq
Fusarium avenaceum	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	FaLH03	Gp0143156	JQGD01	253730	plant pathogen (generalist, including grain crops)	43,17	459,00	115	105	48 Illumina HiSeq
Fusarium circinatum	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	FSP 34	Gp0005151	AYJV01	41113	plant pathogen (pitch canker of pines)	44,138	11,00	4145		47,3 454
Fusarium circinatum	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	FSP 34	Gp0005151	AYJV01	41113	plant pathogen (pitch canker of pines)	44,138	11,00	4145		47,3 454
Fusarium equiseti	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	CS3069	Gp0044229	CBMI000000000.1	209001	plant pathogen (members of the Leguminosae and some cereals)	38,06		5111		Illumina HiSeq
Fusarium equiseti	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	CS3069	Gp0044229	CBMI000000000.1	209001	plant pathogen (members of the Leguminosae and some cereals)	38,06		5111		Illumina HiSeq
Fusarium fujikuroi	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	B14	Gp0039409	ANFV01	171493	plant pathogen (rice)	43,81	75,80	455	333	48,3 Illumina HiSeq
Fusarium fujikuroi	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	B14	Gp0039409	ANFV01	171493	plant pathogen (rice)	43,81	75,80	455	333	48,3 Illumina HiSeq
Fusarium graminearum	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	CS3005	Gp0086804	JATU01	235346	plant pathogen (wheat and barley)	36,66	50,00	1205	199	11578 48,3 Illumina HiSeq
Fusarium graminearum	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	CS3005	Gp0086804	JATU01	235346	plant pathogen (wheat and barley)	36,66	50,00	1205	199	11578 48,3 Illumina HiSeq
Fusarium langsethiae	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	F1201059	Gp0121990	JXCE01	271560	medical importance (mycotoxin-producing)	37,54	500	2538	1586	12232 48,3 Illumina HiSeq; 454
Fusarium langsethiae	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	F1201059	Gp0121990	JXCE01	271560	medical importance (mycotoxin-producing)	37,54	500,00	2538	1586	12232 48,3 Illumina HiSeq; 454
Fusarium nygamai	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	MRC8546	Gp0124341	LBNR01	281294	plant pathogen (rice)	51,62	333	743	409	47,5 Illumina HiSeq
Fusarium nygamai	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	MRC8546	Gp0124341	LBNR01	281294	plant pathogen (rice)	51,62	333,00	743	409	47,5 Illumina HiSeq
Fusarium oxysporum f. sp. congluti	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	NRR1 54008	Gp0037083	AGNF01	73543	plant pathogen (broad host range)	53,57	124,00	3350	2552	20232 48,4 Illumina
Fusarium oxysporum f. sp. congluti	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	NRR1 54008	Gp0037083	AGNF01	73543	plant pathogen (broad host range)	53,57	124,00	3350	2552	20232 48,4 Illumina
Fusarium pseudograminearum	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	CS3427	Gp0043380	CBMD000000000.1	206566	plant pathogen (wheat)	36,93		685	685	12447 47,8 Illumina HiSeq
Fusarium pseudograminearum	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	CS3427	Gp0043380	CBMD000000000.1	206566	plant pathogen (wheat)	36,93		685	685	12447 47,8 Illumina HiSeq
Fusarium sambucinum	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	F-4	Gp0144734	LSRD01	274729	plant pathogen (potato dry rot); mycotoxin-producing	37,78	18	961		47,8 454
Fusarium sambucinum	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	F-4	Gp0144734	LSRD01	274729	plant pathogen (potato dry rot); mycotoxin-producing	37,78	18,00	961		47,8 454
Fusarium sp. JS1030	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	JS1030	Gp0119197	JWIV01	269535	uncertain	53,75	1244	310	107	51,7 Illumina HiSeq; MiSeq
Fusarium sp. JS1030	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	JS1030	Gp0119197	JWIV01	269535	uncertain	53,75	1244,00	310	107	51,7 Illumina HiSeq; MiSeq
Fusarium sp. JS626	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	JS626	Gp0119196	JWIV01	269534	uncertain	42,87	1966	216	63	48,2 Illumina HiSeq; MiSeq
Fusarium sp. JS626	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	JS626	Gp0119196	JWIV01	269534	uncertain	42,87	1966,00	216	63	48,2 Illumina HiSeq; MiSeq
Fusarium temperatum	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	CMWF389	Gp0093049	LIGR01	242703	plant pathogen (maize); opportunistic human pathogen	45,46	414,00	244	43	47 Illumina HiSeq
Fusarium verticillioides	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	FGSC 7600	Gp0002615	AAIM02	15553	plant pathogen (maize)	41,8851	8,00	210	39	15935 48,7 Sanger
Fusarium verticillioides	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	FGSC 7600	Gp0002615	AAIM02	15553	plant pathogen (maize)	41,8851	8,00	210	39	15935 48,7 Sanger
Fusarium virguliforme	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	Mont-1	Gp0038801	AEYB01	63281	plant pathogen (soybean)	50,448	20,00	3098	49,4	454
Fusarium virguliforme	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	Mont-1	Gp0038801	AEYB01	63281	plant pathogen (soybean)	50,448	20,00	3098	49,4	454
Ilyonectria europaea	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	PMI-82	Gp0019433	JGI	196035	root-associated	63,66	153,50	950	325	22250 Illumina HiSeq
Ilyonectria europaea	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	PMI-82	Gp0019433	JGI	196035	root-associated	63,66	153,50	950	325	22250 Illumina HiSeq
Nectria haematococca	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	MPVI 77-13-4	Gp0017718	JGI	16586	plant pathogen (broad host range)	51		72	15707	50,8
Nectria haematococca	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	MPVI 77-13-4	Gp0017718	JGI	16586	plant pathogen (broad host range)	51		72	15707	50,8
Neonectria ditissima	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	RS324p	Gp0144542	LDPL01	285413	plant pathogen (apple canker)	44,95	200	189	172	51,8 Illumina HiSeq
Neonectria ditissima	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Nectriaceae	RS324p	Gp0144542	LDPL01	285413	plant pathogen (apple canker)	44,95	200,00	189	172	51,8 Illumina HiSeq
Niesslia exilis	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Niessliaceae	CBS 358.70	Gp0036359	1019485	239481	saprotroph	35,38	85,00	74	34	13499 Illumina HiSeq
Niesslia exilis	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Niessliaceae	CBS 358.70	Gp0036359	1019485	239481	saprotroph	35,38	85,00	74	34	13499 Illumina HiSeq
Valettoniopsis laxa	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Niessliaceae	CBS 191.97	Gp0036333	1019489	239487	uncertain; monotypic genus	22,13	95,00	213	83	8026 Illumina HiSeq
Valettoniopsis laxa	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Niessliaceae	CBS 191.97	Gp0036333	1019489	239487	uncertain; monotypic genus	22,13	95,00	213	83	8026 Illumina HiSeq
Drechmeria coniospora	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Ophiocordycipitaceae	ATCC 96282	Gp0120732	JYHR01	269584	biocontrol (nematode endoparasite)	31,89	100	1012	75	8216 53,9 Illumina HiSeq; SOLiD
Drechmeria coniospora	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Ophiocordycipitaceae	ATCC 96282	Gp0120732	JYHR01	269584	biocontrol (nematode endoparasite)	31,89	100,00	1012	75	8216 53,9 Illumina HiSeq; SOLiD
Hirsutella minnesotensis	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Ophiocordycipitaceae	3608	Gp0038705	JPUM01	67943	biocontrol (nematode pathogen)	51,11	128,00	2109	736	12700 52,1 Illumina HiSeq
Hirsutella minnesotensis	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Ophiocordycipitaceae	3608	Gp0038705	JPUM01	67943	biocontrol (nematode pathogen)	51,11	128,00	2109	736	12700 52,1 Illumina HiSeq
Hirsutella thompsonii	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Ophiocordycipitaceae	MTC3556	Gp0038699	APKB01	192877	arthropod pathogen (acarine)	34,557	180,00	621		52,6 Illumina HiSeq
Hirsutella thompsonii	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Ophiocordycipitaceae	MTC3556	Gp0038699	APKB01	192877	arthropod pathogen (acarine)	34,557	180,00	621		52,6 Illumina HiSeq
Ophiocordyceps polyrhachis-furcat	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Ophiocordycipitaceae	BCC 54312	Gp0042014	LKCN01	200756	uncertain	43,16	37,00	4013	418	42,8 454; Illumina
Ophiocordyceps polyrhachis-furcat	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Ophiocordycipitaceae	BCC 54312	Gp0042014	LKCN01	200756	uncertain	43,16	37,00	4013	418	42,8 454; Illumina
Ophiocordyceps sinensis	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Ophiocordycipitaceae	CO18	Gp0008980	ANOV01	59569	traditional use	78,515	241,00	25873	10603	6972 46,2 454; Illumina HiSeq
Ophiocordyceps sinensis	Ascomycota	Peizizomycotina	Sordariomycetes	Hypocreomycetidae	Hypocreales	Ophiocordycipitaceae	CO18	Gp0008980	ANOV01	59569	traditional use	78,515	241,00	25873	10603	6972 46,2 454; Illumina HiSeq
Ophiocordyceps unilateralis																

Ceratocystis manginecans	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Ceratocystidaceae	CMW17570	Gp0097242	JJRZ01	243355	plant pathogen (mango)	31,7	22,00	2295	7494	48	illumina
Ceratocystis manginecans	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Ceratocystidaceae	CMW17570	Gp0097242	JJRZ01	243355	plant pathogen (mango)	31,7	22,00	2295	7494	48	illumina
Ceratocystis platani	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Ceratocystidaceae	CFO	Gp0117548	LBBL01	278456	plant pathogen (trees)	29,18	655	1213	5963	48,2	illumina HiSeq
Ceratocystis platani	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Ceratocystidaceae	CFO	Gp0117548	LBBL01	278456	plant pathogen (trees)	29,18	655,00	1213	5963	48,2	illumina HiSeq
Chalaropsis thielavioides	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Ceratocystidaceae	JCM 1933	Gp0143985	BCGU01	313799	plant pathogen (Fabaceae sp.)	29,33	387	252	12	52,1	HiSeq 2500
Chalaropsis thielavioides	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Ceratocystidaceae	JCM 1933	Gp0143985	BCGU01	313799	plant pathogen (Fabaceae sp.)	29,33	387,00	252	12	52,1	HiSeq 2500
Endoconidiophora laricicola	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Ceratocystidaceae	CBS100207	Gp0149935	LXGT01	319433	insect-associated	32,69	93,00	898	879	45,4	illumina
Huntliella moniliformis	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Ceratocystidaceae	CBS118127	Gp0094242	JMSH01	246136	saprotroph	25,4	38,00	600	6832	47,9	illumina GALix
Huntliella moniliformis	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Ceratocystidaceae	CBS118127	Gp0094242	JMSH01	246136	saprotroph	25,4	38,00	600	6832	47,9	illumina GALix
Huntliella omanensis	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Ceratocystidaceae	CMW 11056	Gp0121623	JSUI01	263445	plant pathogen (weak mango pathogen)	31,13	9	6763	6542	47,7	illumina
Huntliella omanensis	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Ceratocystidaceae	CMW 11056	Gp0121623	JSUI01	263445	plant pathogen (weak mango pathogen)	31,13	9,00	6763	6542	47,7	illumina
Huntliella savannae	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Ceratocystidaceae	CBS 121151	Gp0143126	LCZG01	283473	saprotroph	28,54	22	1617	361	48,3	illumina HiSeq
Huntliella savannae	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Ceratocystidaceae	CBS 121151	Gp0143126	LCZG01	283473	saprotroph	28,54	22,00	1617	361	48,3	illumina HiSeq
Huntliella savannae	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Ceratocystidaceae	CMW1546	Gp0145653	LKBB01	296851	post harvest pathogen (banana)	28,42	95	1849	541	49,2	illumina GALix
Thielaviopsis musarum	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Ceratocystidaceae	CMW1546	Gp0145653	LKBB01	296851	post harvest pathogen (banana)	28,42	95,00	1849	541	49,2	illumina GALix
Thielaviopsis musarum	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Ceratocystidaceae	CMW1546	Gp0145653	LKBB01	296851	post harvest pathogen (banana)	28,42	95,00	1849	541	49,2	illumina GALix
Thielaviopsis paradoxa	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Ceratocystidaceae	JCM 6020	Gp0144032	BCHJ01	313811	plant pathogen (palm)	29,63	345	282	30	49	HiSeq 2500
Thielaviopsis paradoxa	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Ceratocystidaceae	JCM 6020	Gp0144032	BCHJ01	313811	plant pathogen (palm)	29,63	345,00	282	30	49	HiSeq 2500
Thielaviopsis punctulata	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Ceratocystidaceae	CR-DP1	Gp0118396	LAEV01	273322	plant pathogen (date palm)	28,12	75	3751	2315	5296	48,3
Thielaviopsis punctulata	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Ceratocystidaceae	CR-DP1	Gp0118396	LAEV01	273322	plant pathogen (date palm)	28,12	75,00	3751	2315	5296	48,3
Knoxdaviesia capensis	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Gondwanamycetaceae	Gs0110866	Gp0110866	LNGK01	246171	saprotroph (plant-associated)	35,54	188,00	29	7940	52,8	HiSeq 2500
Knoxdaviesia capensis	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Gondwanamycetaceae	Gs0110866	Gp0110866	LNGK01	246171	saprotroph (plant-associated)	35,54	188,00	29	7940	52,8	HiSeq 2500
Knoxdaviesia proteae	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Gondwanamycetaceae	SB2.3	Gp0110284	LNGL01	275563	saprotroph (plant-associated)	35,489	271	1379	133 8173	52,7	HiSeq 2500
Knoxdaviesia proteae	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Gondwanamycetaceae	SB2.3	Gp0110284	LNGL01	275563	saprotroph (plant-associated)	35,489	271,00	1379	133 8173	52,7	HiSeq 2500
Knoxdaviesia proteae	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Gondwanamycetaceae	SB2.3	Gp0110284	LNGL01	275563	saprotroph (plant-associated)	35,489	271,00	1379	133 8173	52,7	HiSeq 2500
Corollospora maritima	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Halosphaeriaceae	CBS 119819 v2.0	Gp0033164	JGI	196081	human pathogen	36,1	104	143	13	13087	illumina
Corollospora maritima	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Halosphaeriaceae	CBS 119819 v2.0	Gp0033164	JGI	196081	human pathogen	36,1	104,00	143	13	13087	illumina
Microascus trigonosporus	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Microascaleae	CBS 218.31	Gp0033164	JGI	196081	human pathogen	36,1	104,00	143	13	13087	illumina
Microascus trigonosporus	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Microascaleae	CBS 218.31	Gp0033164	JGI	196081	human pathogen	36,1	104,00	143	13	13087	illumina
Microascus trigonosporus	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Microascaleae	CBS 218.31	Gp0033164	JGI	196081	human pathogen	36,1	104,00	143	13	13087	illumina
Scedosporium apiospermum	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Microascaleae	IHEM 14462	Gp0092899	JOWA01	244532	human pathogen (infects lungs, especially in cystic fibrosis patients)	41,437	280,00	333	10919	50,4	illumina HiSeq; PacBio
Scedosporium apiospermum	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Microascaleae	IHEM 14462	Gp0092899	JOWA01	244532	human pathogen (infects lungs, especially in cystic fibrosis patients)	41,437	280,00	333	10919	50,4	illumina HiSeq; PacBio
Scedosporium aurantiacum	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Microascaleae	WM 09.24	Gp0118269	JUDQ01	261653	human pathogen	39,89	162	2285	1584	49,2	illumina HiSeq
Scedosporium aurantiacum	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Microascaleae	WM 09.24	Gp0118269	JUDQ01	261653	human pathogen	39,89	162,00	2285	1584	49,2	illumina HiSeq
Scedosporium aurantiacum	Ascomycota	Pezizomycotina	Sordariomycetes	Hypocreomycetidae	Microascales	Microascaleae	WM 09.24	Gp0118269	JUDQ01	261653	human pathogen	39,89	162,00	2285	1584	49,2	illumina HiSeq
Graphilbum fragrans	Ascomycota	Pezizomycotina	Sordariomycetes	Diaporthomycetidae	Ophiostomatales	Ophiostomataceae	CBS 138720	Gp0124538	LLKO01	298958	insect-associated (conifer-infesting beetles)	34,27	64	393	80	55,7	illumina HiSeq
Graphilbum fragrans	Ascomycota	Pezizomycotina	Sordariomycetes	Diaporthomycetidae	Ophiostomatales	Ophiostomataceae	CBS 138720	Gp0124538	LLKO01	298958	insect-associated (conifer-infesting beetles)	34,27	64,00	393	80	55,7	illumina HiSeq
Grosmannia clavigera	Ascomycota	Pezizomycotina	Sordariomycetes	Diaporthomycetidae	Ophiostomatales	Ophiostomataceae	kw1407	Gp0002583	ACXQ02	39837	plant pathogen; blue stain	29,79	50,00	333	289	8312	51,4 Sanger; 454; illumina
Grosmannia clavigera	Ascomycota	Pezizomycotina	Sordariomycetes	Diaporthomycetidae	Ophiostomatales	Ophiostomataceae	kw1407	Gp0002583	ACXQ02	39837	plant pathogen; blue stain	29,79	50,00	333	289	8312	51,4 Sanger; 454; illumina
Leptographium lundbergii	Ascomycota	Pezizomycotina	Sordariomycetes	Diaporthomycetidae	Ophiostomatales	Ophiostomataceae	CBS 138716	Gp0145151	LDEF01	284246	insect-associated (beetles)	26,54	70	735	411	56,9	illumina HiSeq
Leptographium lundbergii	Ascomycota	Pezizomycotina	Sordariomycetes	Diaporthomycetidae	Ophiostomatales	Ophiostomataceae	CBS 138716	Gp0145151	LDEF01	284246	insect-associated (beetles)	26,54	70,00	735	411	56,9	illumina HiSeq
Leptographium procerum	Ascomycota	Pezizomycotina	Sordariomycetes	Diaporthomycetidae	Ophiostomatales	Ophiostomataceae	CMW34542	Gp0107386	JRUC01	262457	plant pathogen (pine)	28,57	32	2747	2687	54,8	illumina MiSeq
Leptographium procerum	Ascomycota	Pezizomycotina	Sordariomycetes	Diaporthomycetidae	Ophiostomatales	Ophiostomataceae	CMW34542	Gp0107386	JRUC01	262457	plant pathogen (pine)	28,57	32,00	2747	2687	54,8	illumina MiSeq
Ophiostoma novo-ulmi	Ascomycota	Pezizomycotina	Sordariomycetes	Diaporthomycetidae	Ophiostomatales	Ophiostomataceae	H327	Gp0038489	AMZD01	173023	plant pathogen (Dutch Elm Disease)	31,855	61,00	161	10	50,1	454
Ophiostoma novo-ulmi	Ascomycota	Pezizomycotina	Sordariomycetes	Diaporthomycetidae	Ophiostomatales	Ophiostomataceae	H327	Gp0038489	AMZD01	173023	plant pathogen (Dutch Elm Disease)	31,855	61,00	161	10	50,1	454
Ophiostoma piceae	Ascomycota	Pezizomycotina	Sordariomycetes	Diaporthomycetidae	Ophiostomatales	Ophiostomataceae	UAMH 11346	Gp0048401	AQHS01	182071	saprotroph; wood-staining	32,84	735	343	45	8884	53,4 454; illumina HiSeq
Ophiostoma piceae	Ascomycota	Pezizomycotina	Sordariomycetes	Diaporthomycetidae	Ophiostomatales	Ophiostomataceae	UAMH 11346	Gp0048401	AQHS01	182071	saprotroph; wood-staining	32,84	735,00	343	45	8884	53,4 454; illumina HiSeq
Sporothrix brasiliensis	Ascomycota	Pezizomycotina	Sordariomycetes	Diaporthomycetidae	Ophiostomatales	Ophiostomataceae	5110	Gp0047830	AWTV01	218075	human and animal pathogen (sporotrichosis)	33,21	20,00	13	9231	54,3	illumina
Sporothrix brasiliensis	Ascomycota	Pezizomycotina	Sordariomycetes	Diaporthomycetidae	Ophiostomatales	Ophiostomataceae	5110	Gp0047830	AWTV01	218075	human and animal pathogen (sporotrichosis)	33,21	20,00	13	9231	54,3	illumina
Sporothrix globosa	Ascomycota	Pezizomycotina	Sordariomycetes	Diaporthomycetidae	Ophiostomatales	Ophiostomataceae	CBS 120340	Gp0149694	LVYW01	315855	human and animal pathogen (sporotrichosis)	33,47	146,00	222	24	54,3	illumina
Sporothrix insectorum	Ascomycota	Pezizomycotina	Sordariomycetes	Diaporthomycetidae	Ophiostomatales	Ophiostomataceae	RCEF 264	Gp0039314	AZH001	72727	entomopathogen	34,72	7037,00	819	78	9496	illumina HiSeq
Sporothrix pallida	Ascomycota	Pezizomycotina	Sordariomycetes	Diaporthomycetidae	Ophiostomatales	Ophiostomataceae	SPA8	Gp0095173	JNEX01	248334	saprotroph (environmental)	39,881	20,00	3392	53	Ion Torrent	
Sporothrix pallida	Ascomycota	Pezizomycotina	Sordariomycetes	Diaporthomycetidae	Ophiostomatales	Ophiostomataceae	SPA8	Gp0095173	JNEX01	248334	saprotroph (environmental)	39,881	20,00	3392	53	Ion Torrent	
Sporothrix schenckii	Ascomycota	Pezizomycotina	Sordariomycetes	Diaporthomycetidae	Ophiostomatales	Ophiostomataceae	ATCC 58251	Gp0034023	AWEQ01	217088	human and animal pathogen (sporotrichosis)	32,228	56,00	125	29	8805	55,1 illumina
Sporothrix schenckii	Ascomycota	Pezizomycotina	Sordariomycetes	Diaporthomycetidae	Ophiostomatales	Ophiostomataceae	ATCC 58251	Gp0034023	AWEQ01	217088	human and animal pathogen (sporotrichosis)	32,228	56,00	125	29	8805	55,1 illumina
Sporothrix schenckii	Ascomycota	Pezizomycotina	Sordariomycetes	Diaporthomycetidae	Ophiostomatales	Ophiostomataceae	ATCC 58251	Gp0034023	AWEQ01	217088	human and animal pathogen (sporotrichosis)	32,228	56,00	125	29	8805	55,1 illumina
Chaetomium globosum	Ascomycota	Pezizomycotina	Sordariomycetes	Sordariomycetidae	Sordariales	Chaetomiaceae	CBS 148.51	Gp0002586	AAFU01	12795	human pathogen and allergen (mycosis; mycotoxin-producing)	34,88	7,00	1245	37	11232	55,6 Sanger
Chaetomium globosum	Ascomycota	Pezizomycotina	Sordariomycetes	Sordariomycetidae	Sordariales	Chaetomiaceae	CBS 148.51	Gp0002586	AAFU01	12795	human pathogen and allergen (mycosis; mycotoxin-producing)	34,88	7,00	1245	37	11232	55,6 Sanger
Chaetomium globosum	Ascomycota	Pezizomycotina	Sordariomycetes	Sordariomycetidae	Sordariales	Chaetomiaceae	CBS 148.51	Gp0002586	AAFU01	12795	human pathogen and allergen (mycosis; mycotoxin-producing)	34,88	7,00	1245	37	11232	55,6 Sanger
Chaetomium thermophilum	Ascomycota	Pezizomycotina	Sordariomycetes	Sordariomycetidae	Sordariales	Chaetomiaceae	DSM 1495	Gp0007119	ADUW01	47065	thermophile	28,32	24,00	112	21	7475	52,6 454
Chaetomium thermophilum	Ascomycota	Pezizomycotina	Sordariomycetes	Sordariomycetidae	Sordariales	Chaetomiaceae	DSM 1495	Gp0007119	ADUW01	47065	thermophile	28,32	24,00	112	21	7475	52,6 454
Chaetomium thermophilum	Ascomycota	Pezizomycotina	Sordariomycetes	Sordariomycetidae	Sordariales	Chaetomiaceae	DSM 1495	Gp0007119	ADUW01	47065	thermophile	28,32	24,00	112	21	7475	52,6 454
Myceliophthora heterothallica	Ascomycota	Pezizomycotina	Sordariomycetes	Sordariomycetidae	Sordariales	Chaetomiaceae	CBS 203.75 v1.0	Gp0017713	1006350	219689	thermophile	35,36	132,8	547	37	10061	illumina HiSeq
Myceliophthora heterothallica	Ascomycota	Pezizomycotina	Sordariomycetes	Sordariomycetidae	Sordariales	Chaetomiaceae	CBS 203.75 v1.0	Gp0017713	1006350	219689	thermophile	35,36	132,80	547	37	10061	illumina HiSeq
Myceliophthora thermophila	Ascomycota	Pezizomycotina	Sordariomycetes	Sordariomycetidae	Sordariales	Chaetomiaceae	ATCC 42464	Gp0004720	GCA_000226095.1	32775	thermophile	38,74	7	7	7	9110	51
Myceliophthora thermophila	Ascomycota	Pezizomycotina	Sordariomycetes	S													

Millerozyma farinosa	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Debaryomycetaceae	CBS 7064	Gp0038456	GCA_000315895.1	73835 halotolerant; osmotolerant	21,459	9,80	17	11662	41,33	Sanger
Piceomyces haplophilus	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Debaryomycetaceae	JCM 1635	Gp0144012	BCIF01	313831 insect-associated (bark beetles)	10,52	273,00	29	9	41	HiSeq 2500
Scheffersomyces lignosus	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Debaryomycetaceae	JCM 9837	Gp0144050	BCGS01	313797 fermentation (xylose)	16,59	171,00	73	19	41,2	HiSeq 2500
Scheffersomyces stipitidis	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Debaryomycetaceae	CBS 6054	Gp0017786	AAVQ01	16843 fermentation	15,4			9	5841	41
Spathaspora arborariae	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Debaryomycetaceae	UFMG-19.1A	Gp0043415	AYLH01	207280 industrial importance	12,87	23,00	381	41	31,9	454
Spathaspora passalidarum	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Debaryomycetaceae	NRRL Y-27907	Gp0017849	AEIK01	53891 industrial importance (biofuel production-xylose fermentation)	13,2		26	8	5983	42 454; Sanger
Wickerhamia fluorescens	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Debaryomycetaceae	JCM 1821	Gp0144017	BCEG01	313784 saprotroph	13,18	239,00	109	20	37,3	HiSeq 2500
Geotrichum candidum	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Dipodascaceae	3C	Gp0106203	JMRO01	243259 plant pathogen (citrus)	41,38	31,25	560		41,38	454
Saprochaete clavata	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Dipodascaceae	CNRM 12.647	Gp0145559	CBXB01	221847 human pathogen	17,72		3170	339	33,8	
Sporopachydermia quercuum	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Dipodascaceae	JCM 9486	Gp0144045	BCGN01	313792 endophyte	16,41	182,00	37	15	36,2	illumina HiSeq
Yarrowia deformans	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Dipodascaceae	JCM 1694	Gp0144013	BCIW01	313845 industrial importance (Alkane-using)	20,88	131,00	174	44	50	HiSeq 2500
Yarrowia keelungensis	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Dipodascaceae	JCM 14894	Gp0144005	BCJD01	313892 Industrial importance; oil-degrading	21,82	203,00	180	41	48	HiSeq 2500
Yarrowia lipolytica	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Dipodascaceae	CLIB122	Gp0000567	GCA_000002525.1	13837 industrial importance (Alkane-using)	20,5	10,00	6	6	6447	49 Sanger
Yarrowia sp. JCM 30694	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Dipodascaceae	JCM 30694	Gp0143753	BCKF01	313895 uncertain	21,76	217,00	244	19	46	HiSeq 2500
Yarrowia sp. JCM 30695	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Dipodascaceae	JCM 30695	Gp0150865	BCLX01	313897 uncertain	21,9	251,00	189	41	47,8	illumina
Yarrowia sp. JCM 30696	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Dipodascaceae	JCM 30696	Gp0143755	BCKG01	313896 uncertain	21,75	230,00	206	39	47,9	HiSeq 2500
Ashbya aceri	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Dipodascaceae	JCM 30696	Gp0143755	BCKG01	313896 uncertain	21,75	230,00	206	39	47,9	HiSeq 2500
Eremothecium (Ashbya) gossypii	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Eremotheciaceae	FD-2008	Gp0006845	GCA_000412225.2	8951 insect-associated	9,9		7	7	3887	51 Sanger
Eremothecium coryli	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Eremotheciaceae	ATCC 10895	Gp0000589	GCA_000091025.4	13834 plant pathogen (insect-associated; cotton)	9,1	4,20	7	7	4768	19 Sanger
Eremothecium cymbalariae	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Eremotheciaceae	CBS 5749	Gp0097267	AZAH01	229863 plant pathogen (soybean)	9,09	18,00	63	19	41,6	illumina HiSeq
Ambrosiozyma kashinagacola	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Eremotheciaceae	DBVPG#7215	Gp0008918	GCA_000235365.1	60715 plant pathogen (stigmatomycosis; fruit rot; crops)	9,66	40,00	9	8	4853	40,3
Ambrosiozyma monospora	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	JCM 15019	Gp0144006	BCEA01	313780 insect-associated	12,32	227,00	59	23	36,1	HiSeq 2500
Candida albicans	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	JCM 7599	Gp0144035	BCIP01	313840 industrial importance; ethanol production	24,98	116,00	304	118	37,2	HiSeq 2500
Candida apicola	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	SCS314	Gp0000024	AACQ01	10701 opportunistic human pathogen	27,56		413		14217	33,4
Candida arabinofementans	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	NRRL Y-50540	Gp0120946	LBNK01	278776 industrial importance (sophorolipid producing)	9,77	211,00	135	40	45,2	illumina GALix
Candida auris	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	NRRL YB-2248	Gp0009551	JGI	207879 industrial importance	13,23	74,00	244	62	5861	454; illumina
Candida boidinii	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	6684	Gp0144502	LGST01	267757 human pathogen (multidrug healthcare infections)	12,5	179,00	759	99	8301	45,1 illumina HiSeq; MiSeq
Candida bracedensis	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	GF002	Gp0143128	LMZ001	299882 industrial importance (methylotrophic)	19,11	144,00	43	428	30,4	illumina HiSeq
Candida carpophila	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	CBS 10154	Gp0041972	CAPU000000000.1	202296 opportunistic human pathogen	12,2		51			
Candida caseinolytica	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	JCM 9396	Gp0144041	BCKG01	313789 probable human pathogen	10,24	273,00	26	10	47,4	HiSeq 2500
Candida castellii	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	NRRL Y-17796	Gp0005936	JGI	76687 plant pathogen (possible; associated with rot in cacti)	9,18	47,89	49	6	4657	454; illumina
Candida dubliniensis	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	CBS 4332	Gp0041973	CAPW000000000.1	202297 uncertain	10,2		101			
Candida ethanolica	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	CD36	Gp0002579	ASM2694v1	34697 opportunistic human pathogen	14,62	11,00		8	6095	33 Sanger
Candida glabrata	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	M2	Gp0039259	ANNA01	171020 industrial importance	23,58	85,00	2647		26,4	illumina HiSeq
Candida homilientoma	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	CBS 138	Gp0000563	ASM254v2	13831 human pathogen	12,3	8,00		13	5462	39 Sanger
Candida intermedia	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	JCM 1507	Gp0144054	BCGB01	313781 insect-associated (Bostrychid beetles)	12,18	223,00	32	8	49,4	HiSeq 2500
Candida maltosa	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	JCM 1607	Gp0144011	BCGD01	313783 opportunistic human pathogen (candidiasis)	13,03	218,00	54	12	43,2	HiSeq 2500
Candida nivariensis	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	Xu316	Gp0039144	AOGT01	184737 industrial importance	12,8	130,00	2947		5986	34,2 illumina HiSeq
Candida orthopsilosis	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	CBS 9983	Gp0041974	CAPV000000000.1	202298 human pathogen; drug-resistant	11,56		123			
Candida parapsilosis	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	AY2	Gp0039261	AMDC01	171019 human pathogen	12,65	67,00	4152	8	3296	37,6 illumina GALix
Candida sorboxylosa	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	CD317	Gp0002580	CABE01	32889 human pathogen (sepsis)	13,08	9,20	24		38,7	Sanger
Candida succiphila	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	JCM 1536	Gp0144008	BCCG01	313782 industrial importance (fermentative yeast)	10,71	247,00	277	37	38,2	HiSeq 2500
Candida tanzawaensis	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	JCM 9445	Gp0144043	BCGL01	313790 industrial importance (methanol-assimilating)	12,15	234,00	64	22	40,9	HiSeq 2500
Candida tenuis	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	NRRL Y-17324	Gp0009552	JGI	207878 insect-associated	13,14	74,00	52	16	5895	454; illumina
Candida tropicalis	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	ATCC 10573	Gp0016931	JGI	33673 industrial importance	10,7	26,90	668	25	5533	42 454; Sanger
Candida versatilis	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	MYA-3404	Gp0006759	AAFN01	13675 human pathogen (candidiasis); industrial importance (biodiesel production)	14,6	10,00	128	24	6441	33 Sanger
Lodderomyces elongisporus	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	JCM 5958	Gp0144031	BCIV01	313866 industrial importance (salt-tolerant)	9,31	441,00	52	19	44,9	HiSeq 2500
Nadsonia fulvescens	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	NRRL YB-4239	Gp0002646	AAPO01	12899 possible human pathogen	15,547	8,70	145	28	5908	37
Pachysolen tannophilus	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	DSM 6958	Gp0009966	JGI	207853 uncertain; yeast (bipolar budding)	13,75	72,50	64	20	5657	39 454; illumina
Starmerella bombicola	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	NRRL Y-2460	Gp0038525	CAHV01	85615 Fermentation; osmotolerant	12,6	90,65	583	198	5675	29,8 454; illumina; Sanger
Zygoascus hellenicus	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	JCM 9596	Gp0144046	BGG001	313793 industrial importance (Sphorolipids, Glycolipid Biosurfactant production)	9,56	299,00	63	16	47,6	HiSeq 2500
Lipomyces starkeyi	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Uncertae sedis	Y-7136 v1.0	Gp0009552	JGI	human pathogen (fungemia)	12,17	98,40	48	11	5430	illumina
Clavispora lusitanae	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Lipomycetaceae	NRRL Y11557	Gp0000708	JGI	71653 metabolically interesting	21,27	47,87	439	117	8192	54 454; illumina; Sanger
Metschnikowia bicuspidata	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Metschnikowiaceae	ATCC 42720	Gp0002581	AAFT01	12753 human pathogen	12,1	9,00	88	9	6153	44,5 Sanger
Metschnikowia fructicola	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Metschnikowiaceae	Baker2002	Gp0072273	JGI	246206 parasite (brine shrimp); hypersaline	16,06	16,08	421	48	1497	454; illumina MiSeq
Cyberlindnera fabianii	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Metschnikowiaceae	277	Gp0037508	JGI	179032 biocontrol (spoilage control)	24,482	700,00	8430		45,5	illumina HiSeq
Cyberlindnera jadinii	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Phaffomycetaceae	JCM 3601	Gp0144028	BCGI01	313787 industrial importance (waste water treatment; alcoholic fermentation)	12,3	223,00	53	12	44,2	HiSeq 2500
Brettanomyces (Dekkera) bruxelleri	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Phaffomycetaceae	NRRC 0988	Gp0038874	BAEL01	167219 industrial importance	14,27	20,00	1163		46 454; Sanger	
Brettanomyces anomalus	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Pichiaceae	CBS 2499	Gp0005465	AHMD01	76499 industrial importance	13,37	127,50	1374	84	5600	40,3 454; illumina
Hyphopichia burtonii	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Pichiaceae	YV396	Gp0120591	LCTY01	281311 industrial importance (fermentative yeast)	12,88	100,00	280	30	39,9	illumina HiSeq
Nakazawaella peltata	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Pichiaceae	NRRL Y-1933	Gp0009550	JGI	207851 spoilage yeast	12,4	50,40	105	27	6002	454; illumina
Ogataea methanolica	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Pichiaceae	JCM 9829	Gp0144049	BCGO01	313795 fermentation	11,65	239,00	34	11	40,5	HiSeq 2500
Ogataea polymorpha	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Pichiaceae	JCM 10240	Gp0143979	BCKW01	313882 industrial importance (methylotrophic)	15,1	248,00	168	32	36,2	HiSeq 2500
Pichia kudriavzevii	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Pichiaceae	BV4329	Gp0109098	BKNV01	263660 industrial importance (methylotrophic)	8,89	20,00	66		47,7	454 GS FLX; GALix
Pichia membranifaciens	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Pichiaceae	NRRL Y-2026	Gp0107454	BBOI01	260583 spoilage yeast	10,18	45,00	669		7107	38,5
Eremothecium sinecaudum	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Pichiaceae	NRRL Y-2026	Gp0007246	JGI	52937 spoilage yeast; contaminant	11,58	38,95	279	11	5560	
Kazachstania africana	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Saccharomycetaceae	ATCC 58844	Gp0150734	JGI	310026 industrial importance (oxylipin synthesis)	8,92		7	7	4536	40,13
Kazachstania naganishii	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Saccharomycetaceae	CBS 2517	Gp0038942	JGI	70967 uncertain	11,13		34			

Hanseniaspora uvarum	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Saccharomycodaceae	34-9	Gp0097581	JPPO02	254213	saprotroph	8,1	234,00	103	41	4061	31,6	illumina HiSeq
Hanseniaspora valbyensis	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Saccharomycodaceae	NRRL Y-1626	Gp0007245	JGI	64991	traditional use	11,46	53,00	1163	647	4800	454	illumina
Hanseniaspora vineae	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Saccharomycodaceae	T02/19AF	Gp0090029	JFAV02	238564	industrial importance	11,383	121,00	305			37,4	illumina GAltx
Arthroascus fermentans	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Saccharomycopsidaceae	17710 v1.0		1040501		fermenting yeast	14,37	89,20	115	46	5449		illumina
Saccharomycopsis malanga	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Saccharomycopsidaceae	JCM 7620	Gp0144036	BCGJ01	313788	uncertain	16,72	190,00	229	44		37,8	HiSeq 2500
Sugiyamaella (Candida) lignohabita	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Trichomonasaceae	CBS 10342			308900	industrial importance (biorefinery)	15,98			5	5135	44,9	
Sugiyamaella americana	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Trichomonasaceae	NRRL YB-2067 v1.0		1040555		insect-associated (beetles)	16,48	100,00	223	52	6288		illumina
Sympodiomyces attinorum	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Trichomonasaceae	NRRL Y-27639 v1.0		1040561		insect-associated (ants)	14,02	89,30	66	14	6184		illumina
Trichomonascus petasosporus	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Trichomonasaceae	NRRL YB-2093	Gp0150175		332934	saprotrophic yeast	14,46	91,90	175	79			illumina
Wickerhamiella domercqiae	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Trichomonasaceae	JCM 9478	Gp0144044	BCGM01	313791	pharmaceutical importance (anticancer sphingolipid producing)	8,47	344,00	50	4		48,4	HiSeq 2500
Wickerhamomyces anomalus	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Wickerhamomycetaceae	NRRL Y-366	Gp0008963	AEIO2	52059	industrial importance (wine yeast); spoilage; biocontrol (mycotoxic compo	14,15	97,57	207	46	6423	35,1	454; illumina
Wickerhamomyces ciferrii	Ascomycota	Saccharomycotina	Saccharomycetes	Saccharomycetidae	Saccharomycetales	Wickerhamomycetaceae	NRRL Y-1031	Gp0038328	CAIF01	169887	pharmaceutical importance (sphingolipid biosynthesis pathway)	15,901		364		6702	30,4	
Pneumocystis jirovecii (carinii)	Ascomycota	Taphrinomycotina	Pneumocystidomycetes	Pneumocystidomycetidae	Pneumocystidales	Pneumocystidaceae	SE8	Gp0038459	CAKM01	68827	parasite (obligate); colonizes lungs (pneumonia)	8,15	675,50	355	355	3520	28,4	454; illumina
Pneumocystis murina	Ascomycota	Taphrinomycotina	Pneumocystidomycetes	Pneumocystidomycetidae	Pneumocystidales	Pneumocystidaceae	B123	Gp0037048	AFWA01	70803	parasite (obligate); colonizes lungs (pneumonia)	7,451	214,90	17		3609	26,9	454; illumina
Schizosaccharomyces cryophilus	Ascomycota	Taphrinomycotina	Schizosaccharomycetes	Schizosaccharomycetidae	Schizosaccharomycetales	Schizosaccharomycetaceae	OY26	Gp0008116	ACQJ02	38373	uncertain; yeast (fission)	11,56	51,00	202	34	5180	37,7	454
Schizosaccharomyces japonicus	Ascomycota	Taphrinomycotina	Schizosaccharomycetes	Schizosaccharomycetidae	Schizosaccharomycetales	Schizosaccharomycetaceae	yFS275	Gp0002702	AATM02	13640	model organism; yeast (fission)	11,73	9,00	87	32	4878	44	Sanger
Schizosaccharomyces octosporus	Ascomycota	Taphrinomycotina	Schizosaccharomycetes	Schizosaccharomycetidae	Schizosaccharomycetales	Schizosaccharomycetaceae	yFS286	Gp0002701	ABHY03	13639	uncertain; yeast (fission)	11,63	39,00	18	5	4986	37,5	Sanger
Schizosaccharomyces pombe	Ascomycota	Taphrinomycotina	Schizosaccharomycetes	Schizosaccharomycetidae	Schizosaccharomycetales	Schizosaccharomycetaceae	972h-	Gp0000701	GCA_000002945.2	13836	model organism	12,591		8	4	6953	36	
Saitoella complicata	Ascomycota	Taphrinomycotina	Taphrinomycetes	Taphrinomycetidae	Taphrinales	Protomycetaceae	NRRL Y-17804	Gp0038417	BACD02	63243	saprotroph	14,14	52,49	74	35	7034	52,5	454; illumina
Taphrina deformans	Ascomycota	Taphrinomycotina	Taphrinomycetes	Taphrinomycetidae	Taphrinales	Taphrinaceae	PYCC 5710	Gp0038420	CAHR02	74523	plant pathogen (peach)	13,394		517	403	4668	49,5	
Taphrina flavorubra	Ascomycota	Taphrinomycotina	Taphrinomycetes	Taphrinomycetidae	Taphrinales	Taphrinaceae	JCM 22207	Gp0103452	BAVW01	257906	plant pathogen (Prunus fruit)	15,73	200,00	1266	865		49,6	illumina HiSeq
Taphrina populina	Ascomycota	Taphrinomycotina	Taphrinomycetes	Taphrinomycetidae	Taphrinales	Taphrinaceae	JCM 22190	Gp0124247	BAVX01	271741	plant pathogen (cottonwood)	12	200,00	408	335		47,4	illumina HiSeq
Taphrina wiesneri	Ascomycota	Taphrinomycotina	Taphrinomycetes	Taphrinomycetidae	Taphrinales	Taphrinaceae	JCM 22204	Gp0103453	BAVU01	257904	plant pathogen (cherry trees)	13,1	200,00	359	225		48,1	illumina HiSeq

Sequenced Basidiomycota species

SPECIES	PHYLUM	SUBPHYLUM	CLASS	Classification			Strain	GOLD Accession	GENOME Accession	NCBI Project ID	Significance	Genome statistics							
				SUBCLASS	ORDER	FAMILY						Size (Mb)	coverage	# of contigs	# of scaffolds	# genes	GC	Technology	
Agaricus bisporus	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Agaricaceae	JB137-58	Gp0003193	JGI	61007	edible; saprotroph	30,2		46	254	29	10438	454; Illumina	
Leucoagaricus gongylophorus	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Agaricaceae	Ac12	Gp0042023	ANIS01	179280	insect symbiont	101,58		15	92785	92785		35,1	
Leucoagaricus sp. Symb_Cos	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Agaricaceae	Sym_Cos	Gp0143237	LSDH01	295288	insect-associated (ants)	119,03		27	33952	20457	12136	44,4	Illumina HiSeq
Macrolepiota fuliginosa	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Agaricaceae	MF-152	Gp0024456	JGI	218801	saprotroph	46,4	165,4	4852	3478	15801		Illumina HiSeq	
Amanita brunneascens	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Amanitaceae	BX004	Gp0096753	JNHV01	236753	mycorrhizal	57,56		25	24247	17039		Illumina HiSeq	
Amanita inopinata	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Amanitaceae	Kibby_2008	Gp0096754	JNHV01	236757	saprotroph	22,12		900	6054	5912		47,9	Illumina HiSeq
Amanita jacksonii	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Amanitaceae	TRTC16861	Gp0067868	AYNK01	226613	ectomycorrhizal	30,9		100	5557	4516			
Amanita muscaria var. guessio	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Amanitaceae	BX008	Gp0096755	JNHV01	236758	ectomycorrhizal	67,64		250	23945	17515	18091	47,5	Illumina HiSeq
Amanita polypyrans	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Amanitaceae	BW_CC	Gp0096756	JNHV01	236755	ectomycorrhizal	23,56		150	6521	5295		47,3	
Amanita thiersii	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Amanitaceae	Skay4041	Gp0005144	JGI	82749	saprotroph	33,69		135,9	2164	1446	10354		
Bolbitius vitellinus	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Bolbitiaceae	SZMC-NL-1	Gp00125832	1097215	334996	saprotroph	51,24		65	428	428	14483		PacBio
Clavaria fumosa	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Clavariaceae	KM175152	Gp0145123	CVRD01	287237	saprotroph	70,47			114209	111201		55,7	Illumina HiSeq
Cortinariu glaucopus	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Cortinariaceae	AT 2004 27	Gp0019356	JGI	213332	ectomycorrhizal	63,45	107,00	2103	769	20377			Illumina HiSeq
Hebeloma cylindrosporum	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Cortinariaceae	h7	Gp0005977	JGI	207849	mycorrhizal	38,23		113	526	176	15382		Illumina; PacBio; 454; Sanger
Crepidotus sp. BD-2015	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Crepidotaceae	MCA163	Gp0145126	CVRE01	287237	uncertain	70,26			793879	182032		54,3	IonTorrent
Crepidotus variabilis	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Crepidotaceae	CBS 506.95	v1.0	1056714		saprotroph	38,58	111,20	1097	435	14573			Illumina
Fistulina hepatica	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Fistulinaceae	ATCC 6442	Gp0017025	JYF01	196028	saprotroph; wood-decay	33,85		137,9	914	588	11391	50,2	Illumina; PacBio
Laccaria amethystina	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Hydnangiaceae	LaAM-08-1	Gp0010080	JGI	196025	ectomycorrhizal	52,2		156,5	4756	1299	21066	454; Illumina HiSeq	
Laccaria bicolor	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Hydnangiaceae	S238N-H82	Gp0002644	JGI	19043	ectomycorrhizal	60,71		9,90	584	55	23132	47	Sanger
Hypsizygus marmoreus	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Lyophyllaceae	51987-8	Gp0143018	LUEZ01	312409	saprotroph; edible	41,63	287,30	999	340	15561	48,7	Illumina HiSeq; MiSeq	
Termitomyces sp. J132	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Lyophyllaceae	J132	Gp0076039	JDCH01	193471	insect-cultivated fungus	67,3		81	4863	2335	11398	46,3	Illumina HiSeq
Marasmius fiardii	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Marasmiaceae	PR-910	Gp0035332	1016747	200608	uncertain	59,45		96,1	2986	1124	17098		Illumina HiSeq
Moniliophthora perniciosa	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Marasmiaceae	FA553	Gp0002607	ABRE01	28951	plant pathogen (cacao)	26,663			25056	16443	48	Sanger	
Moniliophthora roreri	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Marasmiaceae	MCA 2997	Gp0049167	AWSO01	213737	plant pathogen (pod rot of cacao)	52,204	15,00		3280	17910		46,9	454; Illumina
Mycena chlorophos	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Mycenaceae	BAYG01	Gp0149686		317219	bioluminescent saprotroph	43,6		420	25660	17445		55,6	Illumina
Mycena galopus	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Mycenaceae	ATCC-6205	Gp0035333	1016743	196020	saprotroph	211,36	80,09557307	1364	1364	49694		PacBio	
Panellus stipticus	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Mycenaceae	LUM	Gp0046822	1018599	245622	saprotroph	53,17		112,20	3730	1562	15860		Illumina
Crucibulum laeve	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Nidulariaceae	CBS 166.37	v1.0	1059303		saprotroph	44,73	106,60	1536	574	14218			Illumina
Cyathus striatus	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Nidulariaceae	AH 40144	Go0111615	1056738	333390	saprotroph; bird's nest fungus	91,18			1562	1562	23513		Illumina; PacBio
Lentinula edodes	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Omphalotaceae	L-54	Gp0006482		17581	edible	40,2		11,00	767	13382		454; SOLiD	
Omphalotus olearius	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Omphalotaceae	VT 653.13	Gp0039058	AHIW01	79063	bioluminescent mushroom	28,15		85,3	1535	868	8171	47,4	Illumina
Rhodocollybia butyracea	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Omphalotaceae	AH 40177	v1.0			saprotroph	96,28			1482	1482	22870		PacBio
Armillaria gallica	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Physalaciaceae	AR21-2	Gp0072259	JGI	242129	saprotroph; pathogen (root rot; opportunistic tree i	85,34		41,8	1529	319	25704		Illumina HiSeq
Armillaria ostoyae	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Physalaciaceae	28-4	v1.0	1032462		plant pathogen; conifer root rot (parasitic or sapro	58,01		67,6	693	229	20811		PacBio
Cylindrobasidium torrendii	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Physalaciaceae	FP15055	ss-Gp0034230	JNEL01	196018	saprotroph	31,57		134,3	1222	1149	13940		Illumina HiSeq
Flammulina velutipes	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Physalaciaceae	W23	Gp0041101	AQHU01	191864	model organism	35,64		37,20	513	11	49,8		454
Guyanagaster necrorhiza	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Physalaciaceae	MCA 3950	Gp0036668		234669	saprotroph	53,69		81,5	656	168			Illumina HiSeq
Oudemansiella mucida	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Physalaciaceae	CBS 558.79	Gp0111942	1056768		saprotroph; white-rot	61,73	131,00	1386	1386	18562			PacBio
Pleurotus eryngii	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Pleurotaceae	ATCC 90797	v1.0	1056780		bioremediation; edible	44,61		96,7	1684	609	15960		
Pleurotus ostreatus	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Pleurotaceae	PC15	Gp0017839	AYUK01	81933	saprotrophic (white rot)	34,342		8,7	13	12	12460	50,9	Sanger
Pluteus cervinus	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Pluteaceae	NL-1719	v1.0	1063679		saprotroph	52,19	138,20	3329	1887	19818			Illumina
Volvariella volvacea	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Pluteaceae	Pyd21	Gp0038369	ANCH01	171553	edible mushroom	36,626		90,00	2304			48,8	Illumina GAI
Coprinellus micaceus	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Psathyrellaceae	FP101781	v Gp0072267	1031312	247835	saprotroph	77,39		74,8	704	704	23559		PacBio
Coprinellus pelliculosus	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Psathyrellaceae	TEP2b		1074556		coprophilous	41,56		167,7	2262	1355	16047		Illumina
Coprinopsis cinerea	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Psathyrellaceae	okayama7#	Gp0002605	AACS02	1447	model organism	36,19		10	68	68	13657	52	Sanger
Coprinopsis marcescibilis	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Psathyrellaceae	CBS121175	Gp0092282	1040687		coprophilous	38,91		94,40	1269	817	14632		Illumina
Pterula gracilis	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Pterulaceae	CBS309.79	v1.0	1019505		developmentally interesting	34,77		88,4	852	221	12873		Illumina
Schizophyllum commune	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Schizophyllaceae	H4-8	Gp0003179	ADMJ01	32757	saprotroph; opportunistic human pathogen	38,67		8,29	72	25	16319	57,5	Sanger
Galerina marginata	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Strophariaceae	CBS 339.88	Gp0017026	AYUM01	207683	saprotroph (white rot); toxic	59,42		34,30	1272	414	21461	48	454; Illumina
Gymnopilus chrysopellus	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Strophariaceae	PR-1187	Gp0033092	JGI	196058	saprotroph	47,22		142,5	2046	1949	18193		Illumina HiSeq
Gymnopilus junonius	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Strophariaceae	AH 44721	Gp0111649	1056762		saprotroph; white-rot; hallucinogenic	59,46		101,97	1174	16444			Illumina; PacBio
Hypholoma sublateritium	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Strophariaceae	FD-334	SS-4Gp0010136		70685	industrial importance	48,03		152	1329	704	17911	51	454; Illumina
Baeospora myosura	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Tricholomataceae	KM189292	Gp0145125	CEMG01	287237	saprotroph	61,02			190914	1824890		50,5	
Gymnopus androsaceus	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Tricholomataceae	JB14	Gp0046757	JGI	234428	saprotrophic (white rot); important in carbon cycle	89,15		2519	2516	29375			Illumina
Gymnopus luxurians	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Tricholomataceae	FD-317	M1 Gp0010138	JGI	68535	saprotroph	66,28		29,73	1848	383	22057	45	454; Illumina
Lepista nuda	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Tricholomataceae	CBS 247.69	v1.0	1056744		saprotroph; edible	43,49		93,4	2234	822	14880		Illumina
Macrocyttidia cucumis	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Tricholomataceae	KM177596	Gp0145124	CEMH01	287237	saprotroph	46,75			210056	204508		48,8	
Tricholoma matsutake	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Agaricales	Tricholomataceae	945												

Species	Genus	Family	Order	Class	Accession	Host	Host Type	Accession	Host	Host Type	Accession	Host	Host Type	Accession	Host	Host Type
Dendrothele bispora	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Corticiales	Corticaceae	CBS 962.96 Gp0034229	JGI	196017	saprotroph	130,65	103	6351	3942	33645	illumina HiSeq
Limonomycetes culmigenus	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Corticiales	Corticaceae	CBS 661.85			plant pathogen (turfgrass)	36,1	211	8889		57,8	
Punctularia strigosozonata	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Corticiales	Corticaceae	HHB-11173 Gp0007184	AEGM01	52407	saprotrophic (white rot)	34,17	45,55	1327	195	11538	55,2 Sanger; 454; Illumina
Sphaerobolus stellatus	Basidiomycota	Agaricomycotina	Agaricomycetes	Phallomycetidae	Gaeastrales	Gaeastraceae	SS14 Gp0017850		207858	saprotroph	176,37	57,5	13156	1460	35274	illumina
Sclerogaster hysterangioides	Basidiomycota	Agaricomycotina	Agaricomycetes	Phallomycetidae	Gaeastrales	Sclerogastreae	SCL2.BST	1019437	256708	uncertain	124,26		901	901	16656	illumina; PacBio
Gloeophyllum trabeum	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Gloeophyllales	Gloeophyllaceae	ATCC 11535; Gp0005491	AFVP01	64553	saprotroph (brown rot)	37,18	54,00	1454	442	11885	53,2 Sanger; 454; Illumina
Helocybe sulcata	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Gloeophyllales	Gloeophyllaceae	OMC1185 v1.0	1047715		saprotroph (brown rot)	31,95	82,2	491		12570	
Neolentinus lepideus	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Gloeophyllales	Gloeophyllaceae	HHB14362; Gp0025087	JGI	196054	saprotroph (brown rot)	35,64	92,4	1215	331	13164	illumina HiSeq
Gautieria morcheliformis	Basidiomycota	Agaricomycotina	Agaricomycetes	Phallomycetidae	Gomphales	Gomphaceae	GMNE.BST v1.0	1019425		uncertain, hypogean	122,81		1220	1220	20331	PacBio
Ramaria acris	Basidiomycota	Agaricomycotina	Agaricomycetes	Phallomycetidae	Gomphales	Gomphaceae	UT-36052-T; Gp0035336	JGI	196021	ectomycorrhizal	105,46	78,90	5927	1553	19287	illumina
Fomitiporia mediterranea	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Hymenochaetales	Hymenochaetaeae	MF3/22 Gp0006428	AEJ01	56107	saprotrophic (white rot)	63,35	39,35	5766	1412	11333	40,8 Sanger; 454; Illumina
Onnia scaura	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Hymenochaetales	Hymenochaetaeae	P-53A Gp0035335		245618	saprotroph; wood-decomposing	37,1	88,8	2066	834	12895	illumina HiSeq
Phellinus noxius	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Hymenochaetales	Hymenochaetaeae	OVT-YTM/9 Gp0070880	AYOR01	226629	plant pathogen (broad host range, typically trees)	31,259	35,00	1434			41,6 Ion Torrent
Porodaedalea chrysoloma	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Hymenochaetales	Hymenochaetaeae	FP-135951 Gp0033091		200594	plant pathogen (conifer parasite; white pocket rot)	44,69	50,00	1684	496	13562	illumina; PacBio
Porodaedalea niemelaei	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Hymenochaetales	Hymenochaetaeae	PN71-100-H; Gp0072274		333975	plant pathogen (conifer white rot)	53,34		951	951	14467	PacBio
Sanghuangporus baumii	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Hymenochaetales	Hymenochaetaeae	821 Gp0150193	LNZH02	304358	pharmaceutical importance (medicinal mushroom)	31,64	186,00	339	217	8455	47,6 Illumina
Rickenella fibula	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Hymenochaetales	Rickenellaceae	HBK330-10 v1.0	1064682		saprotroph, probable	59,35	91,45	529	529	18997	PacBio
Schizophora paradoxa	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Hymenochaetales	Schizoporaceae	KUC8140 Gp0036252	JGI	239088	wood-inhabiting	44,41	108	1342	1291	17098	illumina HiSeq
Jaapia argillanea	Basidiomycota	Agaricomycotina	Agaricomycetes	Agaricomycetidae	Jaapiales	Jaapiaceae	MUC1 3360 Gp0012165	AYUL01	207685	saprotroph	45,05	20,58	1182	295	16419	49,8 454; illumina
Mutinus elegans	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Phallales	Phallaceae	ME.BST v1.0	1019445		saprotroph	52,78		3570	1095	14626	illumina
Taiwanofungus camphoratus	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Coriolaceae	S27 Gp0109109	JNBV01	244959	pharmaceutical importance (traditional medicine)	32,16	878,00	348	360		50,6 illumina GAllx; 454
Trametes cinnabarina	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Coriolaceae	DSM 3022 Gp0107556	JSY01	261270	saprotrophic (white rot)	31,62	180,00	9648	10233		55,6 illumina HiSeq
Trametes hirsuta	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Coriolaceae	072 Gp0124682	LIYB01	271118	saprotrophic (white rot)	33,62	101,00	1022	140		56,8 illumina HiSeq; MiSeq
Trametes sp. AH28-2	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Coriolaceae	AH28-2 Gp0124683	LUIJ01	294859	saprotrophic (white rot); industrial importance (lacc)	38,9	100,00	502	306		58,8 illumina HiSeq
Antrodia sinuosa	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Fomitopsidaceae	LB1 Gp0019259	JGI	196036	saprotroph	30,17	128,10	1482	1387	11327	illumina HiSeq
Daedalea quercina	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Fomitopsidaceae	L-15889 Gp0025092	JGI	196055	saprotroph	32,74	144,4	1025	357	12199	illumina HiSeq
Fomitopsis pinicola	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Fomitopsidaceae	FP-58527 S; Gp0008479	AEHC02	52941	saprotroph (brown rot)	41,61	85,9	988	504	13885	55,8 Illumina; PacBio
Laetiporus sulphureus	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Fomitopsidaceae	93-53 Gp0025315	JGI	196057	saprotroph	39,92	85,20	1207	403	13774	illumina HiSeq
Postia placenta	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Fomitopsidaceae	MAD 698 Gp0017841	ABWF01	19789	saprotroph (brown rot)	90,9	7,20	10568	1243	17173	54 Sanger
Ganoderma lucidum	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Ganodermataceae	BCRC 3718 Gp0038562	AGAX00000000.1	61379	traditional use	43,29		194			56,1 454; illumina; Sanger
Ganoderma sp. 10597 SS1	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Ganodermataceae	10597 SS1 Gp0010017	JGI	68313	saprotroph	39,52	33,74	503	156	12910	Sanger; 454; illumina
Trametopsis cervina	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Hapalopilaceae	CIRM-BRFM 1824 v1.0	1051569		bioccontrol (mycoparasite)	29,82	89	310	110	11836	illumina
Hydnopolyporus fibriliatus	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Meripilaceae	CBS384.51 Gp0111656	1051179	334190	saprotroph	34,57	92,20	894	256	12424	illumina
Bjerkandera adusta	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Meruliaceae	HHB-1282E Gp0008855	JGI	74757	saprotrophic (white rot)	42,73	47,59	1263	508	15473	454; illumina
Ceriporiopsis (Gelatoporia) sul	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Meruliaceae	B Gp0003878	JGI	60419	saprotrophic (white rot)	39	56,6	740	740	12125	454; Sanger
Obba rivulosa	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Meruliaceae	3A-2 Gp0046819		247915	saprotrophic (white rot)	34,04	127	808	712	13206	illumina
Phlebia brevispora	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Meruliaceae	HHB-7030 Gp0010049	JGI	64423	saprotrophic (white rot)	49,96	42,56	3178	1645	16170	454; illumina
Phanerochaete carnosae	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Phanerochaetaceae	HHB-10118 Gp0003186	AEHB01	38425	saprotrophic (white rot)	46,29	58,10	2272	1137	13937	53,1 Sanger; 454; illumina
Phanerochaete chrysosporium	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Phanerochaetaceae	RP-78 Gp0000577	AADS01	135	saprotrophic (white rot)	35,15	10,60	1253	232	13602	57 Sanger
Phlebiopsis gigantea	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Phanerochaetaceae	11061_1 CF; Gp0017782	JGI	207860	saprotrophic (white rot)	30,14	144,9	1195	573	11891	illumina
Cerrena unicolor	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Polyporaceae	303 Gp0016934	JGI	207864	saprotrophic (white rot)	36	189,6	1462	547	12966	illumina
Dichomitus squalens	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Polyporaceae	LYAD-421 S Gp0008772	AEID01	53511	saprotroph	42,75	50,63	2852	542	12290	55,6 454; illumina
Fibroporia radiculosa	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Polyporaceae	TFH 294 Gp0018298	CAGC01	72357	saprotroph (brown rot)	28,378		1823	861	9262	51,2 illumina GAll
Leiotrametes sp. BRFM 1775	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Polyporaceae	BRFM 1775 Gp0092279	1037392	252879	lignocellulolytic	34,52	142,4	588	549	13763	illumina
Lentinus polychrous	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Polyporaceae	BCC7694 Gp0107385	JSYW01	261275	saprotroph; edible	38,05	180,00	10349			51
Lentinus tigrinus	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Polyporaceae	ALCF2551-7 Gp0036550	1006930	200609	saprotroph	39,76	103,6	572	263	15653	illumina HiSeq
Lignosus rhinocerotis	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Polyporaceae	TM02 Gp0106247	AXZM01	212725	pharmaceutical importance (traditional medicine)	34,31	100	2317	1338		53,7 illumina HiSeq
Polyporus arcularius	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Polyporaceae	HHB13444 Gp0025526	JGI	196048	saprotrophic (white rot)	43,45	118,00	2601	2540	17525	illumina HiSeq
Polyporus brumalis	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Polyporaceae	BRFM 1820 v1.0	1051563		saprotroph	45,72	94,9	1040	621	18244	illumina
Pycnoporus cinnabarinus	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Polyporaceae	BRFM 137	CCBP01	251621	saprotrophic (white rot)	33,67		2036	784	10442	55,6
Pycnoporus coccineus	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Polyporaceae	CIRM1662 Gp0025336	JGI	254894	saprotrophic (white rot)	32,1	128,70	643	599	12798	illumina HiSeq
Pycnoporus sanguineus	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Polyporaceae	BRFM 1264	JGI		saprotrophic (white rot)	36,04		2046	657	14165	454
Trametes cingulata	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Polyporaceae	BRFM 1805 v1.0	1051575		saprotrophic (white rot)	35	108,30	625	367	14110	illumina
Trametes elegans	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Polyporaceae	CIRM1663 Gp0035623	JGI	239086	saprotrophic (white rot)	33,08	86,1	638	243	12851	illumina
Trametes ljubarskyi	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Polyporaceae	CIRM1659 Gp0035668	JGI	239085	saprotrophic (white rot)	34	86,3	761	311	13180	illumina HiSeq
Trametes versicolor	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Polyporaceae	FP-101664 Gp0007183	AEJ101	46097	saprotrophic (white rot)	44,794	40	977	283	14572	57,7
Trichaptum abietinum	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Polyporaceae	L-15831 ss Gp0025314	JGI	210203	saprotrophic (white rot)	40,61	125,6	1345	587	14978	illumina HiSeq
Wolfiporia cocos	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Polyporaceae	MD-104 SS; Gp0001013	AEHD01	52943	saprotroph (brown rot); traditional use	50,48	40,48	2228	348	12746	52 Sanger; 454; illumina
Xenasmataella vaga	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Polyporales	Xenasmataceae	CBS212.54 Gp0112339	1051167	333496	saprotroph	64,17	91,3	3416	1275	20933	illumina
Artemycetes pyxidatus	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Russulales	Auriscalpiaceae	HHB10654 Gp0072265	JGI	239090	saprotroph	37,99	90,3	1188	477	15130	illumina HiSeq
Auriscalpium vulgare	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Russulales	Auriscalpiaceae	FP105234-S Gp0072261	1031308	247917	saprotroph	39,65	122,7	2195	1349	16945	illumina HiSeq
Lentinellus vulpinus	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Russulales	Auriscalpiaceae	AHS73672-sp v1.0	1058270		saprotroph (white rot)	34,71	94,9	1554	578	13477	
Heterobasidium annosum	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Russulales	Bondarzewiaceae	03012 Gp0093680	AOSL01	182499	plant pathogen (conifers)	31,009	66,5	2415			51,5 illumina
Heterobasidium irregulare	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Russulales	Bondarzewiaceae	TC 32-1 Gp0002642	AEJO1	46703	plant pathogen (conifers and hardwoods)	33,649	8,5	18	15	13272	52,2 Sanger
Dentipellis sp.	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Russulales	Hericiaceae	KUC8613 v1.0	1036192		bioremediation; white rot	36,71	88,6	1184	425	14320	illumina
Scytinostroma sp.	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Russulales	Lachnocladiaceae	KUC9335 Gp0112034	1036200	333305	uncertain	60,64	N/A	597	597	14908	PacBio
Vararia minispora	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Russulales	Lachnocladiaceae	EC-137 Gp0033094	1006141	196070	saprotroph	36,81	149,80	1675	1435	10962	illumina HiSeq
Peniophora aff. cinerea.	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Russulales	Peniophoraceae	CBS 579.87 Gp0034226	JGI	196016	saprotroph	46,03	141,30	1236	1092	18952	illumina HiSeq
Peniophora sp.	Basidiomycota	Agaricomycotina	Agaricomycetes	Incertae sedis	Russulales	Peniophoraceae	CONTA v1.0	1027012		uncertain	48,44	85,80	487	217	18999</	

Cryptococcus depauperatus	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Tremellales	Cryptococcaceae	CBS 7841	Gp0041267	AWGK01	200572	parasite (mycoparasite on Lecanicillium lecanii)	15,8	130	157	68	6521	44,7	Illumina
Cryptococcus gattii	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Tremellales	Cryptococcaceae	R265	Gp0002609	AAF01	13691	human pathogen	17,5	6	701	28	6580	47,87	Sanger
Cryptococcus neoformans	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Tremellales	Cryptococcaceae	JEC 21	Gp0000508	GCA_000091045.1	13856	human pathogen	19,05	12,5	37		6617	49	Sanger
Kwoniella (Cryptococcus) best	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Tremellales	Cryptococcaceae	CBS 10118	Gp0037867	ASCK01	191321	saprotroph	24,36	63	42	12		47,3	Illumina
Kwoniella (Cryptococcus) deje	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Tremellales	Cryptococcaceae	CBS 10117	Gp0038102	ASCI01	191322	saprotroph	23,86	88	69	13		48,4	Illumina
Kwoniella heveanensis	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Tremellales	Cryptococcaceae	BCC8398	Gp0038042	ASQB01	191335	saprotroph	25,469	30	114	67		51,9	Illumina
Kwoniella mangrovensis	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Tremellales	Cryptococcaceae	CBS 8507	Gp0038044	ASQE01	191223	saprotroph (marine)	22,654	44	105	62		44,9	Illumina
Kwoniella pini (Cryptococcus) f	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Tremellales	Cryptococcaceae	CBS 10737	Gp0038280	ASCL01	191226	saprotroph	20,83	62	42	18		40,2	Illumina
Fellomyces penicillatus	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Tremellales	Cuniculitremaceae	Phaff54-35	v1.0	1051257		uncertain	21,05	97,6	37	22	8340		Illumina
Kockovaella imperatae	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Tremellales	Cuniculitremaceae	NRRL Y-179	Go0115733	1075691	334695	uncertain; yeast	17,47	428,26	38	38	7393		PacBio
Phaeotremella (Cryptococcus) fl	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Tremellales	Phaeotremellaceae	JCM 9039	Gp0144038	BCHT01	313820	saprotroph	20,79	289	164	58		50,2	HiSeq 2500
Papiliotrema (Cryptococcus) fl	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Tremellales	Rhynchogastremataceae	NRRL Y-503	Gp0038499	CAUG01	185775	biocontrol (of fusarium head blight)	22,79		1269	712		58,5	
Papiliotrema (Cryptococcus) lz	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Tremellales	Rhynchogastremataceae	RY1	Gp0044996	JDSR01	210827	occasional human pathogen	19,14	50	1154	1152		56,1	Illumina MiSeq
Fibulobasidium inconspicuum	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Tremellales	Sirobasidiaceae	Phaff89-39	v1.0	1052658		saprotroph, probable	20,29	91,6	169	31	8148		Illumina
Tremella fuciformis	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Tremellales	Tremellaceae	Tr26	Gp0120585	LBGW01	281519	biocontrol (mycoparasite)	23,64	40	3502			57	Illumina HiSeq
Tremella mesenterica	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Tremellales	Tremellaceae	DSM 1558	Gp0002624	AFVY01	32829	industrial importance; white rot	28,6	7,4	484	45	8313	46,7	Sanger
Phaeotremella (Cryptococcus) Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetes	Tremellomycetidae	Trichosporonales	Phaeotremellaceae	JCM 13614	Gp0144002	BCHU01	313821	saprotroph	22,65	264	52	30		42,4	Illumina
Apiotrichum (Trichosporon) bi	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Trichosporonales	Trichosporonaceae	JCM 1599	Gp0143984	BCJU01	313856	saprotrophic (cabbage)	23,65	209	135	16		56,5	HiSeq 2500
Apiotrichum (Trichosporon) di	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Trichosporonales	Trichosporonaceae	JCM 9580	Gp0149825	BCFW01	313776	human allergen	24,51	271	92	28			Illumina
Apiotrichum (Trichosporon) g:	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Trichosporonales	Trichosporonaceae	JCM 9941	Gp0144051	BCJN01	313859	saprotrophic (cabbage)	24,61	253	173	29			HiSeq 2500
Apiotrichum (Trichosporon) gr	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Trichosporonales	Trichosporonaceae	JCM 10018	Gp0143992	BCJO01	313860	saprotrophic (soil)	24,11	231	62	17			HiSeq 2500
Apiotrichum (Trichosporon) la	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Trichosporonales	Trichosporonaceae	JCM 2947	Gp0150864	BCKV01	313881	soil or animal-associated	30,62	178	182	26		59,6	Illumina
Apiotrichum (Trichosporon) m	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Trichosporonales	Trichosporonaceae	JCM 9937	Gp0143035	BCFV01	313775	opportunistic human pathogen	24,87	258	149	61			HiSeq 2500
Apiotrichum (Trichosporon) vi	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Trichosporonales	Trichosporonaceae	JCM 10691	Gp0150863	BCKJ01	313871	alkane-assimilating	31,62	196	174	35		59,6	Illumina
Cryptococcus sp. JCM 24511	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Trichosporonales	Trichosporonaceae	JCM 24511	Gp0143988	BCLC01	313899	industrial importance (oleaginous)	28,18	103	232	55		58,5	HiSeq 2500
Cutaneotrichosporon (Cryptococcus) Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetes	Tremellomycetidae	Trichosporonales	Trichosporonaceae	JCM 1532	Gp0144007	BCJH01	313855	industrial importance (oleaginous)	18,64	305	182	75		57,9	HiSeq 2500
Trichosporon asahii	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Trichosporonales	Trichosporonaceae	CBS 8904	Gp0037591	AMBO01	172216	human pathogen	25,299	12,4	420	194	8528	59,5	454; Illumina
Trichosporon chiarelli	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Trichosporonales	Trichosporonaceae	MYA-4694	v1.0	1042939		insect-associated (ants)	24,81	86,7	82	7	7766		Illumina
Trichosporon cutaneum	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Trichosporonales	Trichosporonaceae	B3	Gp0149983	LRUG01	310294	industrial importance (lipid production)	38,7	25	592			57,6	Illumina
Trichosporon guehoae	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Trichosporonales	Trichosporonaceae	JCM 10690	Gp0143997	BCJX01	313868	saprotrophic (soil)	33,7	187	851	35		59,2	HiSeq 2500
Trichosporon oleaginosus	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Trichosporonales	Trichosporonaceae	IBC0246	Gp0044565	JGI	239490	industrial importance (lipid producer); biotechnolog	19,84	115,8	196	180	8322		Illumina HiSeq
Trichosporon porosum	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Trichosporonales	Trichosporonaceae	JCM 1458	Gp0144004	BGJ01	313854	saprotrophic (soil)	25,99	196	154	37		59	HiSeq 2500
Vanrija humicola	Basidiomycota	Agaricomycotina	Tremellomycetes	Tremellomycetidae	Trichosporonales	Trichosporonaceae	JCM 1457	Gp0144003	BCJF01	313853	saprotroph	22,65	313	72	10		62,7	HiSeq 2500
Basidioascus undulatus	Basidiomycota	Agaricomycotina	Wallemiomycetes	Uncertae sedis	Geminibasidiales	Geminibasidiaceae	DAOM 2411	Gp0094789	JTJS01	247992	xerotolerant	32,18	28	2993	2992		58	
Wallemia ichthyophaga	Basidiomycota	Agaricomycotina	Wallemiomycetes	Uncertae sedis	Wallemiales	Wallemiaceae	EXF-994	Gp0041105	APLC01	193177	halophile	9,66	280	95	82	4863	45,3	Illumina HiSeq
Wallemia sebi	Basidiomycota	Agaricomycotina	Wallemiomycetes	Uncertae sedis	Wallemiales	Wallemiaceae	CBS 633.66	Gp0005604	AFQX01	64975	xerophile	9,82	71	114	56	5284	40	454; Illumina
Agaricostilbum hyphaenes	Basidiomycota	Pucciniomycotina	Agaricostilbomycetes	Agaricostilbomycetidae	Agaricostilbales	Agaricostilbaceae	ATCC MYA	Gp0036613	JGI	245617	uncertain (associated with palms)	17,89	197,7	121	108	7746		Illumina HiSeq
Chionosphaera apobasidialis	Basidiomycota	Pucciniomycotina	Agaricostilbomycetes	Agaricostilbomycetidae	Agaricostilbales	Chionosphaeraceae	52639	v1.0	1045315		parasite (lichens)	21,83	94,30	1183	398	9875		Illumina
Chionosphaera cuniculicola	Basidiomycota	Pucciniomycotina	Agaricostilbomycetes	Agaricostilbomycetidae	Agaricostilbales	Chionosphaeraceae	CBS10063	v1.0	1051203		insect-associated (conifer-inhabiting bark beetles)	14,16	89,4	43	19	7187		Illumina
Cystobasidiopsis (Sporobolom) Basidiomycota	Pucciniomycotina	Agaricostilbomycetes	Agaricostilbomycetes	Agaricostilbomycetidae	Agaricostilbales	Chionosphaeraceae	JCM 7595	Gp0149823	BCIO01	313839	uncertain	22,18	241,00	53	19		56,2	Illumina
Attractiellales sp. 95	Basidiomycota	Pucciniomycotina	Attractiellomycetes	Uncertae sedis	Attractiellales	unknown	PMI 95	Gp0019383	JGI	234661	endophyte (root)	51,47	66,7	3076	1998	17606		Illumina HiSeq
Classiicula fluitans	Basidiomycota	Pucciniomycotina	Classiiculaeae	Uncertae sedis	Classiiculaeae	Classiiculaeae	ATCC 6471:	Gp0036615	JGI	218039	aquatic	52,67	82,7	4363	1417	13270		Illumina HiSeq
Cystobasidium pallidum	Basidiomycota	Pucciniomycotina	Cystobasidiomycetes	Uncertae sedis	Cystobasidiales	Cystobasidiaceae	JCM 3780	Gp0144029	BCLD01	313836	uncertain	21,72	259	257	69		49,7	HiSeq 2500
Erythrobasidium hasegawianu	Basidiomycota	Pucciniomycotina	Cystobasidiomycetes	Uncertae sedis	Erythrobasidiales	Erythrobasidiaceae	ATCC 9536	Gp0036641	1019585	218035	uncertain	40,69	155,3	265	158	9521		Illumina HiSeq
Erythrobasidium yunnanense	Basidiomycota	Pucciniomycotina	Cystobasidiomycetes	Uncertae sedis	Erythrobasidiales	Erythrobasidiaceae	JCM 10687	Gp0143996	BCJC01	313851	uncertain	20,93	252	35	11		51	HiSeq 2500
Naohidea sebacea	Basidiomycota	Pucciniomycotina	Cystobasidiomycetes	Uncertae sedis	Naohideales	Naohideaceae	CBS 8477	(Fp0036591)	1019588	218030	biocontrol (mycoparasite)	20,43	87,4	294	124	10410		Illumina HiSeq
Heterogastrium pycnidioide	Basidiomycota	Pucciniomycotina	Microbotryomycetes	Uncertae sedis	Heterogastriales	Heterogastriaceae	ATCC MYA	Gp0036643		218038	parasite	17,58	109,00	296	117	7658		Illumina; PacBio; 454; Sanger
Hyalopycnis blepharistoma	Basidiomycota	Pucciniomycotina	Microbotryomycetes	Uncertae sedis	Heterogastriales	Heterogastriaceae	ATCC 48560	v1.0	1045309		saprotroph, probable	17,93	102,2	448	210	7872		Illumina
Meredithblackwellia eburnea	Basidiomycota	Pucciniomycotina	Kriegeriaceae	Uncertae sedis	Kriegeriales	Kriegeriaceae	MCA 4105	Gp0036543	1019597	223132	uncertain; yeast (budding)	30,68	112,00	201	52	11135		
Leucosporidiella creatinivora	Basidiomycota	Pucciniomycotina	Leucosporidiales	Uncertae sedis	Leucosporidiales	Leucosporidiaceae	JCM 10699	Gp0150858	BCKL01	313873	aquatic saprotroph	27,97	190,00	296	122		58,7	Illumina
Microbotryum lynchidis-dioice	Basidiomycota	Pucciniomycotina	Microbotryales	Uncertae sedis	Microbotryales	Microbotryaceae	p1A1 Lamo	Gp0142947	CDLV01	285970	plant pathogen (anther smut of campion flowers)	3,47	3,00	1			55,5	
Microbotryum violaceum	Basidiomycota	Pucciniomycotina	Microbotryomycetes	Uncertae sedis	Microbotryales	Microbotryaceae	p1A1 Lamo	Gp0005981	AEI01	41281	plant pathogen (anther smut of Caryophyllaceae); s	26,138	15	2104	1231	7500	55,4	454
Rhodospiridium toruloides	Basidiomycota	Pucciniomycotina	Microbotryomycetes	Uncertae sedis	Sporidiobolales	Sporidiobolaceae	MTCC 457	Gp0038702	AJMJ01	112573	industrial importance (lipid producer)	20,06	121,35	689	462	8171	62	Illumina GAlIx
Rhodotorula glutinis	Basidiomycota	Pucciniomycotina	Microbotryomycetes	Uncertae sedis	Sporidiobolales	Sporidiobolaceae	ATCC 2040:	Gp0009345	AERV02	40971	industrial importance (lipid producer)	20,478	40	5971	3361	61,9	Sanger; 454; Illumina	
Rhodotorula graminis	Basidiomycota	Pucciniomycotina	Microbotryomycetes	Uncertae sedis	Sporidiobolales	Sporidiobolaceae	WP1	Gp0003185	JGI	32711	endophyte	21,01	8,55	620	26	7283	454; Sanger	
Rhodotorula minuta	Basidiomycota	Pucciniomycotina	Microbotryomycetes	Uncertae sedis	Sporidiobolales	Sporidiobolaceae	MCA 4210	Gp0036376	JGI	218034	occasional human pathogen	20,82	94,7	57	38	7814		Illumina HiSeq
Rhodotorula mucilaginos	Basidiomycota	Pucciniomycotina	Microbotryomycetes	Uncertae sedis	Sporidiobolales	Sporidiobolaceae	C2.511	Gp0118226	JWTJ01	270792	human pathogen (fungemia)	19,98	70	1382	1034		60,5	
Rhodotorula sp. JG-1b	Basidiomycota	Pucciniomycotina	Microbotryomycetes	Uncertae sedis	Sporidiobolales	Sporidiobolaceae	JG-1b	Gp0033786	LQXB01	195770	Opportunistic Pathogen	19,4	133,90	171	156	6790	60,6	Illumina HiSeq
Rhodotorula toruloides	Basidiomycota	Pucciniomycotina	Microbotryomycetes	Uncertae sedis	Sporidiobolales	Sporidiobolaceae	JCM 10020	Gp0143993	BCIY01	313847	industrial importance (oleaginous)	20,49	143	127	88	8140	62	HiSeq 2500
Sporidiobolus salmonicolor	Basidiomycota	Pucciniomycotina	Microbotryomycetes	Uncertae sedis	Sporidiobolales	Sporidiobolaceae	SPOSA6832	Gp0143875	CENE01	279947	opportunistic human pathogen	50,52		744	395	4672	61,3	Illumina HiSeq
Sporobolomyces linderae	Basidiomycota	Pucciniomycotina	Microbotryomycetes	Uncertae sedis	Sporidiobolales	Sporidiobolaceae	CBS 7893	(Fp0036589)	JGI	218037	uncertain; only known strain in existence	18,24	93,9	56	35	9062		Illumina HiSeq
Sporobolomyces roseus	Basidiomycota	Pucciniomycotina	Microbotryomycetes	Uncertae sedis	Sporidiobolales	Sporidiobolaceae	IAM 13481	Gp0017897	JGI	207682	free-living; non-pathogenic	21,2	8,1		76	5536		Illumina
Mixia osmundae	Basidiomycota	Pucciniomycotina	Mixiomycetes	Uncertae sedis	Mixiales	Mixiaceae	IAM 14324	Gp0010143	JGI	205560	plant pathogen (fern parasite)	13,63	150,9	204	156	6903	55,5	454; Illumina
Cronartium comandrae	Basidiomycota	Pucciniomycotina	Pucciniales	Uncertae sedis	Cronartiales	Cronartiaceae	C4	Gp0038527	AUZW01	190832	plant pathogen; rust fungus (pine)	68,6	549	54532	35717		40,7	Illumina HiSeq
Cronartium quercuum	Basidiomycota	Pucciniomycotina	Pucciniales	Uncertae sedis	Cronartiales	Cronartiaceae	G11	Gp0044798	JGI	67371	plant pathogen; rust fungus (fusiform rust of pine)	76,57	70,4	10431	1198	13903		Illumina
Cronartium ribicola	Basidiomycota	Pucciniomycotina	Pucciniales															

Malassezia furfur	Basidiomycota	Ustilaginomycotina	Malasseziomycetes	Uncertae sedis	Malasseziales	Malasseziaceae	CBS 1878	Gp0133469	LFGL01	286710	skin-associated; lipophilic	7,88	500	1777	1694	64,1	llumina HiSeq	
Malassezia globosa	Basidiomycota	Ustilaginomycotina	Malasseziomycetes	Uncertae sedis	Malasseziales	Malasseziaceae	CBS 7966	Gp0003180	AAAY01	18719	human pathogen	8,958	7	67	1286	52	Sanger	
Malassezia japonica	Basidiomycota	Ustilaginomycotina	Malasseziomycetes	Uncertae sedis	Malasseziales	Malasseziaceae	JCM 11963	Gp0143982	BCKY01	313884	skin-associated; lipophilic	8,36	466,00	27	16	62,3	HiSeq 2500	
Malassezia nana	Basidiomycota	Ustilaginomycotina	Malasseziomycetes	Uncertae sedis	Malasseziales	Malasseziaceae	JCM 12085	Gp0143983	BCLA01	313886	opportunistic animal pathogen	7,58	489	29	13	58	HiSeq 2500	
Malassezia obtusa	Basidiomycota	Ustilaginomycotina	Malasseziomycetes	Uncertae sedis	Malasseziales	Malasseziaceae	CBS 7876	Gp0133473	LFGC01	286710	skin-associated; lipophilic	7,84	455	1905	1709	62,2	llumina HiSeq	
Malassezia pachydermatis	Basidiomycota	Ustilaginomycotina	Malasseziomycetes	Uncertae sedis	Malasseziales	Malasseziaceae	CBS 1879	Gp0143141	LGAV01	288787	animal pathogen (dermatitis)	8,15	250	118	91	4202	55,1	llumina HiSeq
Malassezia restricta	Basidiomycota	Ustilaginomycotina	Malasseziomycetes	Uncertae sedis	Malasseziales	Malasseziaceae	CBS 7877	Gp0003181	AAXK01	18721	human pathogen	4,628	1	3812		55,3	Sanger	
Malassezia slooffiae	Basidiomycota	Ustilaginomycotina	Malasseziomycetes	Uncertae sedis	Malasseziales	Malasseziaceae	CBS 7956	Gp0132990	LFGK01	286710	opportunistic animal pathogen	8,43	262	1897	1641	4202	65,9	llumina HiSeq
Malassezia sympodialis	Basidiomycota	Ustilaginomycotina	Malasseziomycetes	Uncertae sedis	Malasseziales	Malasseziaceae	ATCC 4213	Gp0039243	CANK01	192188	opportunistic human and animal pathogen (cutaneous)	7,67	130,00	87	65	3517	59,1	454; llumina HiSeq
Malassezia yamatoensis	Basidiomycota	Ustilaginomycotina	Malasseziomycetes	Uncertae sedis	Malasseziales	Malasseziaceae	MY9725	Gp0133476	LFCX01	286710	human pathogen (dermatitis)	8,11	235,00	88	49		49,7	llumina HiSeq
Ustilaginomycotina sp. SA 807	Basidiomycota	Ustilaginomycotina	unknown	unknown	unknown	unknown	SA 807	Gp0042889	1019621	254893	uncertain; plant-associated	27,32	140,8	1563	1406	8060	llumina HiSeq	
Melanotaenium endogenum	Basidiomycota	Ustilaginomycotina	Ustilaginomycetes	Ustilaginomycetidae	Urocystidales	Melanotaeniaceae	CBS481.91	v1.0	1051185		plant pathogen (bedstraw); smut	19,17	97,9	316	87	6624	llumina	
Kalmanozyma (Pseudozyma) t	Basidiomycota	Ustilaginomycotina	Ustilaginomycetes	Ustilaginomycetidae	Ustilaginales	Ustilaginaceae	GHG001	Gp0070930	AWX001	217085	industrial importance	17,3254	585	132	45	5889	58,1	llumina HiSeq
Moesziomyces (Pseudozyma)	Basidiomycota	Ustilaginomycotina	Ustilaginomycetes	Ustilaginomycetidae	Ustilaginales	Ustilaginaceae	T-34	Gp0038467	BAFG01	186736	industrial importance	18,07	20	744	27	6640	61,1	454
Moesziomyces (Pseudozyma)	Basidiomycota	Ustilaginomycotina	Ustilaginomycetes	Ustilaginomycetidae	Ustilaginales	Ustilaginaceae	DSM70725	Gp0070929	AWN101	215967	industrial importance	17,921	90	1968		6011	60,9	llumina HiSeq
Moesziomyces antarcticus	Basidiomycota	Ustilaginomycotina	Ustilaginomycetes	Ustilaginomycetidae	Ustilaginales	Ustilaginaceae	JCM 10317	Gp0103432	BBIZ01	257785	industrial importance (psychrophilic lipid and lipase)	18,11	200	276	197	6766	60,9	llumina HiSeq
Pseudozyma flocculosa	Basidiomycota	Ustilaginomycotina	Ustilaginomycetes	Ustilaginomycetidae	Ustilaginales	Ustilaginaceae	DAOM 196	Gp0044988	AOUS01	185206	biocontrol (powdery mildew)	23,305	28	1583	37	6877	65,3	454
Pseudozyma hubeiensis	Basidiomycota	Ustilaginomycotina	Ustilaginomycetes	Ustilaginomycetidae	Ustilaginales	Ustilaginaceae	SY62	Gp0040215	BAOW01	203274	industrial importance (biosurfactant producing)	18,44	200	159	74	7472	56,5	llumina HiSeq
Sporisorium reilianum	Basidiomycota	Ustilaginomycotina	Ustilaginomycetes	Ustilaginomycetidae	Ustilaginales	Ustilaginaceae	SRZ2	Gp0038426	GCA_000230245	64587	plant pathogen (maize); smut	18,39		818	23	6648	59,68	454
Sporisorium scitamineum	Basidiomycota	Ustilaginomycotina	Ustilaginomycetes	Ustilaginomycetidae	Ustilaginales	Ustilaginaceae	2014001	Gp0118304	JFOL01	240344	plant pathogen (sugarcane); smut	19,78	100	329	69		64,64	HiSeq 2500
Ustilago esculenta	Basidiomycota	Ustilaginomycotina	Ustilaginomycetes	Ustilaginomycetidae	Ustilaginales	Ustilaginaceae	MMT	Gp0109108	JTLW01	263330	plant pathogen (wild rice); smut	20,2	139	298			54,4	llumina HiSeq
Ustilago hordei	Basidiomycota	Ustilaginomycotina	Ustilaginomycetes	Ustilaginomycetidae	Ustilaginales	Ustilaginaceae	Uh4857-4	Gp0038438	CAGI01	79049	plant pathogen (barley); smut	21,15		713		7230	51,9	
Ustilago maydis	Basidiomycota	Ustilaginomycotina	Ustilaginomycetes	Ustilaginomycetidae	Ustilaginales	Ustilaginaceae	521	Gp0000206	AACP01	1446	plant pathogen (maize and teosinte); smut	19,799	10	277		6631	54	Sanger

Sequenced early-diverging fungal species

Classification							Genome statistics											
SPECIES	PHYLUM	SUBPHYLUM	CLASS	SUBCLASS	ORDER	FAMILY	Strain	GOLD Accession	GENOME Accession	NCBI Project ID	Significance	Size (Mb)	coverage	# of contigs	# of scaffolds	# genes	GC	Technology
Allomyces macrogynus	Blastocladiomycota	none	Blastocladiomycetes	none	Blastocladales	Blastocladiaceae	ATCC 38327	Gp0002500	ACDU00000000.1	20563	model organism (sexual cycle); cosmopolitan	57	11,39	8973	101			
Catenaria anguillulae	Blastocladiomycota	none	Blastocladiomycetes	none	Blastocladales	Catenariaceae	PL171	Gp0016932	JGI	69551	biocontrol (nematode parasite)	41,34	93,4	2577	509		12804	Illumina; PacBio
Globomyces pollinis-pini	Chytridiomycota	none	Chytridiomycetes	Chytridiomycetidae	Rhizophydiales	Globomycetaceae	Arg68	G00136949	1098991	331560	aquatic saprotroph	21,65	163,00	1402	1155	11537		Illumina
Batrachochytrium dendrobatidis	Chytridiomycota	none	Chytridiomycetes	Chytridiomycetidae	Rhizophydiales	unknown	JEL423	Gp0002494	AATT01	13653	animal pathogen	23,89	7,40		70	8700	39,3	Sanger
Homolophyctis punctrhiza	Chytridiomycota	none	Chytridiomycetes	Chytridiomycetidae	Rhizophydiales	unknown	JEL 142	Gp0039389	AFSM01	68115	saprotroph	26,11	11,00	14231	11986		49,7	454
Spizellomyces punctatus	Chytridiomycota	none	Chytridiomycetes	Chytridiomycetidae	Spizellomycetales	Spizellomycetaceae	DAOM BR117	Gp0002502	ACOEO1	77881	model organism	23,906	9,38	329			48	Sanger
Gonapodya prolifera	Chytridiomycota	none	Monoblepharidomycetes	none	Monoblepharidales	Gonapodyaceae	JEL478	Gp0017029	JGI	207863	aquatic	48,79		1154	352	13902		Illumina
Rozella allomycis	Cryptomycota	none	none	none	none	unknown	CSF55	Gp0009558	JGI	223002	parasite (water moulds)	11,86	264,00	1128	1059	6350	454;	Illumina HiSeq
Antonospora locustae	Microsporidia	-	-	-	-	Nosematidae	HM-2013	Gp0038411		185776	biocontrol; parasite (grasshoppers)	6,07	7,90	3116	3116	2606		Illumina
Edhazardia aedis	Microsporidia	-	-	-	-	Amblyosporidae	USNM 41457	Gp0038023	AFBI02	65125	parasite	46,6	20,00	2379		4281	22,5	454
Spraguea lophii	Microsporidia	-	-	-	-	Spraguidae	42_110	Gp0039328	ATCN01	73605	parasite (teleost fish)	4,98	70,00	1392		2596	23,4	Illumina GAI
Enterocytozoon bienewisi	Microsporidia	-	-	-	-	Enterocytozoonidae	H348	Gp0002463	ABGB01	21011	parasite	3,86		1743	1733	3806	34	
Nosema antheraeae	Microsporidia	-	-	-	-	Nosematidae	YY	Gp0038948		183977	parasite (silkworm)	6,6			6215	3413	28	Sanger; Illumina
Nosema apis	Microsporidia	-	-	-	-	Nosematidae	BRL01	Gp0037550	ANPH01	66735	parasite (honeybee)	8,569	27	1133	554	2764	18,8	454
Nosema bombycis	Microsporidia	-	-	-	-	Nosematidae	CQ1	Gp0005763	ACJZ01	30919	parasite (silkworm)	15,7		3558	1605	4458	31	Sanger; Illumina
Nosema ceranae	Microsporidia	-	-	-	-	Nosematidae	BRL01	Gp0004758	ACOL01	32971	parasite (honeybee)	7,86	24,20	5465	2614	25,3		454
Vittaforma corneae	Microsporidia	-	-	-	-	Nosematidae	ATCC 50505	Gp0038026	AEYK01	63501	opportunistic pathogen	3,213	68	314	220	2293	36,5	454
Encephalitozoon bienewisi	Microsporidia	-	-	-	-	Encephalitozoonidae	H348	ABGB01		28163	parasite	3,86	64	1743	1733	3632	33,7	454; Illumina
Encephalitozoon cuniculi	Microsporidia	-	-	-	-	Encephalitozoonidae	GB-M1	Gp0000710	GCA_000091225.1	13833	parasite	2,5		12	11	1997	48	454
Encephalitozoon hellem	Microsporidia	-	-	-	-	Encephalitozoonidae	ATCC 50504	Gp0039296	GCA_000277815.3	73047	parasite	2,25	53,00	12	12	1847		
Encephalitozoon intestinalis	Microsporidia	-	-	-	-	Encephalitozoonidae	ATCC 50506	Gp0006942	GCA_000146465.1	42703	parasite	2,22	40	12	11	1833	42	Sanger
Encephalitozoon romaleae	Microsporidia	-	-	-	-	Encephalitozoonidae	SJ-2008	Gp0039118	GCA_000280035.2	160949	parasite	2,19	300,00	13	13	1677	40,4	
Anncalia algerae	Microsporidia	-	-	-	-	Tubulinosematidae	PRA109	Gp0038024	AOMV02	188094	parasite (aquatic)	17,5	341	8403	7113			Illumina
Nematocida parisii	Microsporidia	-	-	-	-	Incertae sedis	ERTm1	Gp0008837	JGI	51843	parasite (C.elegans)	4,07	97,00	115	65	2661	34,4	454
Pseudoloma neurophilia	Microsporidia	-	-	-	-	Glugeidae		Gp0048063	LGUB01	206217	parasite (zebrafish)	5,25	138,00	1603		3645		Illumina
Trachipleistophora hominis	Microsporidia	-	-	-	-	Pleistophoridae		Gp0038589	ANCC01	84343	parasite	8,498	32,50	1632	310	3253	34,1	454; SOLID
Vavraia culicis	Microsporidia	-	-	-	-	Pleistophoridae	floridensis	Gp0009650	AEGU01	62117	parasite (mosquito)	6,118	27	501	379	2825	39,7	454
Hamiltosporidium tvaerminensis	Microsporidia	-	-	-	-	Dubosqiidae	OER-3-3	Gp0008119	ACSZ01	39213	parasite	13,27		41786		26,5		
Nematocida disploedere	Microsporidia	-	-	-	-	None	JUm2807	Gp0149837	LTDL01	312555	parasite (Caenorhabditis elegans)	3,1	2500,00	99	42	2278	49,1	Illumina
Nematocida ironsii	Microsporidia	-	-	-	-	None	ERTm5	Gp0149836	LTDK01	312551	parasite (Caenorhabditis elegans)	4,4	101,00	223	186	2709	33,5	Illumina
Nematocida sp. 1	Microsporidia	-	-	-	-	None	ERTm2	Gp0038029	AERB01	61785	parasite (Caenorhabditis elegans)	4,7	65,00	289	202	2493	38,4	454
Ordospora colligata	Microsporidia	-	-	-	-	Ordosporidae	OC4	Gp0101994	JOKQ01	210314	parasite (Daphnia)	2,29	627,00	15		1820	38,5	Illumina HiSeq
Mitosporidium daphniae	Microsporidia	-	-	-	-	unknown	UGP3	Gp0107713	JMKJ01	243305	parasite	5,64	300	612		3330	43	Illumina HiSeq
Rhizoglyphus irregularis	Mucoromycota	Glomeromycotina	Glomeromycetes	none	Glomerales	Glomeraceae	DAOM 197198	Gp0002623	AUPC01	208392	mycorrhizal (arbuscular)	91,08	100	28405	28371	30282	27,5	Sanger; 454; Illumina
Lobosporangium transversale	Mucoromycota	Mortierellomycotina	none	none	Mortierellales	Mortierellaceae	NRRL 3116 v1.0		1076126		industrial importance (lipid biosynthesis)	42,77	195,5	138	138	11822		PacBio
Mortierella alpina	Mucoromycota	Mortierellomycotina	none	none	Mortierellales	Mortierellaceae	ATCC 32222	Gp0005982	ADAG01	41211	industrial importance	38,042	31,70	1099		52	454; Illumina; Sanger	
Mortierella elongata	Mucoromycota	Mortierellomycotina	none	none	Mortierellales	Mortierellaceae	AG-77	Gp0019300	JGI	196039	endophyte; saprotroph	49,96	112,80	3314	473	14964		Illumina HiSeq
Mortierella multidivariata	Mucoromycota	Mortierellomycotina	none	none	Mortierellales	Mortierellaceae	RSA 2152 T	G00145900	1098953	331667	saprotroph; soil; garlic-odour	37,67	184,76	217	217	12248		PacBio
Mortierella verticillata	Mucoromycota	Mortierellomycotina	none	none	Mortierellales	Mortierellaceae	NRRL 6337	Gp0002501	AEVJ01	20603	animal pathogen	41,912	225	701	56	12774	48,9	Illumina; Sanger
Backusella circaea	Mucoromycota	Mucoromycotina	none	none	Mucorales	Backusellaceae	FSU 941	Gp0032377	JGI	196083	thermophile	48,65	100,50	2354	1095	17039		Illumina HiSeq
Blakeslea trispora	Mucoromycota	Mucoromycotina	none	none	Mucorales	Choanephoraceae	NRRL 2456 v1.0		1085219		industrial importance (beta-carotene); plant pathogen	37,51	80	328	328	11687		PacBio
Absidia (Chlamydoabsidia) padenii	Mucoromycota	Mucoromycotina	none	none	Mucorales	Cunninghamellaceae	NRRL 2977	G00141635	1099015	331669	uncertain	34,33	139,05	117	117	13495		PacBio
Cunninghamella bertholletiae	Mucoromycota	Mucoromycotina	none	none	Mucorales	Cunninghamellaceae	B7461	Gp0044997	JNEL01	211905	human pathogen (mucoromycosis)	31,1	82,92	880		24,8		Illumina HiSeq
Cunninghamella elegans	Mucoromycota	Mucoromycotina	none	none	Mucorales	Cunninghamellaceae	B9769	Gp0038540	JNDR01	184885	degrades xenobiotics, some herbicides and fungicides	31,74	115,42	1380		24,5		Illumina HiSeq
Gongronella butleri	Mucoromycota	Mucoromycotina	none	none	Mucorales	Cunninghamellaceae	CBS 227.36	G00141634	1098955	331668	industrial importance (chitosan production)	33,01	150,81	112	112	11004		PacBio
Hesseltinella vesiculosa	Mucoromycota	Mucoromycotina	none	none	Mucorales	Cunninghamellaceae	NRRL 3301	Gp0046759	1026982	243954	uncertain	25,86	157,80	1202	252	10675		Illumina
Lichtheimia corymbifera	Mucoromycota	Mucoromycotina	none	none	Mucorales	Lichtheimiaceae	CBS 429.75	Gp0039842	CBTN01	248798	human pathogen (mucoromycosis)	33,53		589	209	13404	43,9	HiSeq 2500; 454
Lichtheimia hyalospora	Mucoromycota	Mucoromycotina	none	none	Mucorales	Lichtheimiaceae	FSU 10163	Gp0033114	JGI	196074	industrial importance (thermotolerant)	33,28	140,1	2294	2222	12062		Illumina
Lichtheimia ramosa	Mucoromycota	Mucoromycotina	none	none	Mucorales	Lichtheimiaceae	:FSU:6197	Gp0119779		257263	opportunistic human pathogen (mucoromycosis)	30,71		85	74	11542	41,1	HiSeq 2500; 454
Phascalomyces articholus	Mucoromycota	Mucoromycotina	none	none	Mucorales	Lichtheimiaceae	RSA 2281	G00126192	1098949	331828	coprophilous	47,61	121,30	150	150	14495		PacBio
Rhizomucor miehei	Mucoromycota	Mucoromycotina	none	none	Mucorales	Lichtheimiaceae	CAU432	Gp0037929	AGBC01	66605	industrial importance (thermophile)	27,442	16	3599	870	44,3	454; Illumina HiSeq	
Rhizomucor variabilis	Mucoromycota	Mucoromycotina	none	none	Mucorales	Lichtheimiaceae	B7584	Gp0044976	JNES01	211914	human pathogen	33,037	59,39	967		37,8		Illumina HiSeq
Thermomucor indiciae-seudaticeae	Mucoromycota	Mucoromycotina	none	none	Mucorales	Lichtheimiaceae	HACC 243	Gp0107552	JSYX01	261109	industrial importance (dairy industry)	29,57	180,00	1958		45,8		Illumina HiSeq
Zychaea mexicana	Mucoromycota	Mucoromycotina	none	none	Mucorales	Lichtheimiaceae	RSA 1403	G00126193	1098951	331829	coprophilous	50,64	260	357	357	14004		PacBio
Actinomucor elegans	Mucoromycota	Mucoromycotina	none	none	Mucorales	Mucoraceae	JCM 22485	Gp0144022	BCHK01	313812	human pathogen; mucormycosis	34,17	317,00	494	192	35,9		HiSeq 2500
Apophysomyces elegans	Mucoromycota	Mucoromycotina	none	none	Mucorales	Mucoraceae	B7760	Gp0038478	JNDQ01	184884	human pathogen (mucoromycosis); thermotolerant	38,5	53,91	1528		35,4		Illumina HiSeq
Apophysomyces trapeziformis	Mucoromycota	Mucoromycotina	none	none	Mucorales	Mucoraceae	B9324	Gp0038504	JNDP01	184883	human pathogen (mucoromycosis)	35,8	102,48	1400		37,8		Illumina HiSeq
Cokeromyces recurvatus	Mucoromycota	Mucoromycotina	none	none	Mucorales	Mucoraceae	B5483	Gp0044990	JNEH01	211901	human pathogen (mucoromycosis)	29,34	63,16	2637		30,4		
Mucor (Kirkomyces) cordense	Mucoromycota	Mucoromycotina	none	none	Mucorales	Mucoraceae	RSA 1222	G00141636	1099019	331670	uncertain	40,95	157,38	150	150	16794		PacBio
Mucor ambiguus	Mucoromycota	Mucoromycotina	none	none	Mucorales	Mucoraceae	NBRC 6742	Gp0122235	BBKB01	275080	industrial importance (novel carbonyl reductase)	40,74	200,00	8422	1283	11343	40,7	Illumina MiSeq
Mucor circinelloides	Mucoromycota	Mucoromycotina	none	none	Mucorales	Mucoraceae	1006PHL	Gp0023048	AOCV01	172437	opportunistic pathogen; model organism	36,348	45,00	1459	470	12410	39,5	Illumina
Mucor heterogamus	Mucoromycota	Mucoromycotina	none	none	Mucorales	Mucoraceae	NRRL 1489	G00118600	1085225	332253	soil-associated; homothallic	54,49	285,03	1219	1219	14998		PacBio
Mucor indicus	Muc																	

Linderina pennispora	Zoopagomycota	Kickxellomycotina	none	none	Kickxellales	Kickxellaceae	ATCC 12442 v1.0	Gp0036322	1019509	243942 saprotroph (soil)	26,2	1	227	227	9351	PacBio
Martensiomycetes pterosporus	Zoopagomycota	Kickxellomycotina	none	none	Kickxellales	Kickxellaceae	CBS 209.56	Gp0093918	1040168	251778 saprotroph	19,82	115,7	1156	529	8435	Illumina HiSeq
Ramicandelaber brevisporus	Zoopagomycota	Kickxellomycotina	none	none	Kickxellales	Kickxellaceae	CBS 109374	Gp0093945	JGI	251765 saprotroph (soil)	25,53	168,2	2789	1262	9281	Illumina HiSeq