

Supplemental Table. Fungal and Oomycete Genome sequencing projects grouped by comparative cluster and associated online resources

Genus/species	Taxonomy	Growth Form	Genome Sequencing Status ^a	Sequencing Centers	Online Databases
<i>Alternaria brassicicola</i>	Ascomycete	Dothideomycetes	filamentous	in progress	Washington University Genome Sequencing Center http://genome.wustl.edu/genome_index.cgi
<i>Mycosphaerella fijiensis</i>	Ascomycete	Dothideomycetes	filamentous	in progress	Joint Genome Institute http://www.jgi.doe.gov/sequencing/cspseqplans2006.html
<i>Pyrenophora tritici-repentis</i>	Ascomycete	Dothideomycetes	filamentous	in progress	Broad Institute http://www.broad.mit.edu/annotation/fungi/fgi/
<i>Stagonospora nodorum</i> ^c (anamorph of <i>Phaeosphaeria</i>)	Ascomycete	Dothideomycetes	filamentous	completed	Broad Institute & International Stagonospora nodorum Genomics Consortium http://www.broad.mit.edu/annotation/fungi/fgi/
<i>Aspergillus clavatus</i>	Ascomycete	Eurotiomycetes	filamentous	in progress	TIGR http://www.tigr.org/tdb/fungal/index.shtml
<i>Aspergillus fischerianus</i>	Ascomycete	Eurotiomycetes	filamentous	in progress	TIGR http://www.tigr.org/tdb/fungal/index.shtml
<i>Aspergillus flavus</i>	Ascomycete	Eurotiomycetes	filamentous	in progress	TIGR http://www.tigr.org/tdb/fungal/index.shtml ; http://www.tigr.org/tdb/tgi/fungi.shtml (EST data)
<i>Aspergillus fumigatus</i> ^c	Ascomycete	Eurotiomycetes	filamentous	completed	Sanger Institute & TIGR http://www.sanger.ac.uk/Projects/A_fumigatus/ ; http://www.tigr.org/tdb/e2k1/afu1/ ; http://www.cadre.man.ac.uk/ (CADRE); http://www.genedb.org/genedb/asp/index.jsp
<i>Aspergillus oryzae</i>	Ascomycete	Eurotiomycetes	filamentous	completed	Japan National Institute of Technology and Evaluation http://www.bio.nite.go.jp/ngac/e/rib40-e.html
<i>Aspergillus nidulans</i> ^c (aka <i>Emericella</i>)	Ascomycete	Eurotiomycetes	filamentous	completed	Broad Institute & Monsanto http://www.broad.mit.edu/annotation/fungi/fgi/ ; http://aspergillus-genomics.org/ ; http://www.genome.ou.edu/fungal.html ; http://gene.genetics.uga.edu/ (FGR); http://www.tigr.org/tdb/tgi/fungi.shtml (EST data)
<i>Aspergillus niger</i>	Ascomycete	Eurotiomycetes		in progress	Joint Genome Institute http://www.microbialgenome.org/announcement/seq2005.shtml
<i>Aspergillus parasiticus</i>	Ascomycete	Eurotiomycetes	filamentous	in progress	University of Oklahoma http://www.genome.ou.edu/fungal.html
<i>Aspergillus terreus</i>	Ascomycete	Eurotiomycetes	filamentous	completed	Broad Institute http://www.broad.mit.edu/annotation/fungi/fgi/
<i>Blastomyces dermatitidis</i> (anamorph of <i>Ajellomyces</i>)	Ascomycete	Eurotiomycetes	dimorphic	in progress	Washington University Genome Sequencing Center http://genome.wustl.edu/
<i>Coccidioides immitis</i> ^{b,c,d}	Ascomycete	Eurotiomycetes	dimorphic	completed; in progress	Broad Institute http://www.broad.mit.edu/annotation/fungi/fgi/ ; http://www.broad.mit.edu/seq/msc/
<i>Coccidioides posadasii</i> ^{b,d}	Ascomycete	Eurotiomycetes	dimorphic	completed; in progress	TIGR & Broad Institute http://www.tigr.org/tdb/fungal/index.shtml ; http://www.tigr.org/tdb/tgi/fungi.shtml (EST data); http://www.broad.mit.edu/seq/msc/
<i>Histoplasma capsulatum</i> (anamorph of <i>Ajellomyces</i>) ^b	Ascomycete	Eurotiomycetes	dimorphic	in progress	Broad Institute & Washington University Genome Sequencing Center http://genomeold.wustl.edu/projects/hcapsulatum/ ; http://www.broad.mit.edu/annotation/fungi/fgi/
<i>Uncinocarpus reesei</i>	Ascomycete	Eurotiomycetes	filamentous	completed	Broad Institute http://www.broad.mit.edu/annotation/fungi/fgi/
<i>Glomus intraradices</i>	Ascomycete	Glomeromycetes	filamentous	in progress	Joint Genome Institute http://www.jgi.doe.gov/sequencing/DOEmicrobes.html
<i>Xanthoria parietina</i>	Ascomycete	Lecanoromycetes	filamentous	in progress	Joint Genome Institute http://www.jgi.doe.gov/sequencing/cspseqplans2006.html
<i>Botrytis cinerea</i>	Ascomycete	Leotiomycetes	filamentous	completed	Broad Institute & Syngenta AG ; Genoscope http://www.broad.mit.edu/annotation/fungi/fgi/ ; http://www.genoscope.cns.fr/externe/English/Projets/Projet_LN/organisme_LN.html
<i>Sclerotinia sclerotiorum</i>	Ascomycete	Leotiomycetes	filamentous	completed	Broad Institute http://www.broad.mit.edu/annotation/fungi/fgi/ ; http://www.whitemoldresearch.com/ ; http://plantpath.ifas.ufl.edu/plpPeople/Faculty/Rollins/RollinsProgram/SclerotiniaResource.htm
<i>Pneumocystis carinii</i> ^b	Ascomycete	Pneumocystidomycetes	filamentous	in progress	Broad Institute & University of Cincinnati http://www.broad.mit.edu/annotation/fungi/fgi/ ; http://pgp.cchmc.org/
<i>Candida albicans</i> ^{b,c,d}	Ascomycete	Saccharomycetes	psuedo hyphae	completed; in progress	Stanford Genome Technology Center, Sanger Institute, & Broad Institute http://sequence-www.stanford.edu/group/candida/ ; http://www.sanger.ac.uk/Projects/C_albicans/ ; http://www.broad.mit.edu/annotation/fungi/fgi/ ; http://genolist.pasteur.fr/CandidaDB/
<i>Candida dubliniensis</i>	Ascomycete	Saccharomycetes	psuedo hyphae	in progress	Sanger Institute http://www.sanger.ac.uk/Projects/C_dubliniensis/
<i>Candida guilliermondii</i> (anamorph of <i>Pichia</i>)	Ascomycete	Saccharomycetes	yeast	completed	Broad Institute http://www.broad.mit.edu/annotation/fungi/fgi/

<i>Candida lusitanae</i> (aka <i>Clavispora</i>)	Ascomycete	Saccharomycetes	yeast	completed	Broad Institute	http://www.broad.mit.edu/annotation/fungi/fgi/
<i>Candida parapsilosis</i>	Ascomycete	Saccharomycetes	psuedo hyphae	in progress	Sanger Institute	http://www.sanger.ac.uk/Projects/Fungi/
<i>Candida tropicalis</i> ^b	Ascomycete	Saccharomycetes	psuedo hyphae	completed	Broad Institute & Génolevures	http://www.broad.mit.edu/annotation/fungi/fgi/ ; http://cbi.labri.fr/Genolevures/
<i>Debaryomyces hansenii</i> ^c	Ascomycete	Saccharomycetes	yeast	completed	Génolevures	http://cbi.labri.fr/Genolevures/elt/DEHA
<i>Lodderomyces elongisporus</i>	Ascomycete	Saccharomycetes	yeast	in progress	Broad Institute	http://www.broad.mit.edu/annotation/fungi/fgi/
<i>Ashbya gossypii</i> ^c (aka <i>Eremothecium</i>)	Ascomycete	Saccharomycetes	yeast	completed	Biozentrum an Snygenta AG	http://agd.unibas.ch/ ;
<i>Candida glabrata</i> ^c	Ascomycete	Saccharomycetes	yeast	completed	Génolevures	http://cbi.labri.fr/Genolevures/elt/CAGL
<i>Kluyveromyces lactis</i> ^c	Ascomycete	Saccharomycetes	yeast	completed	Génolevures	http://cbi.labri.fr/Genolevures/elt/KLLA
<i>Kluyveromyces marxianus</i>	Ascomycete	Saccharomycetes	yeast	in progress	Génolevures	http://cbi.labri.fr/Genolevures/elt/
<i>Kluyveromyces thermotolerans</i>	Ascomycete	Saccharomycetes	yeast	in progress	Génolevures	http://cbi.labri.fr/Genolevures/elt/
<i>Kluyveromyces waltii</i>	Ascomycete	Saccharomycetes	yeast	in progress	Broad Institute	http://www.broad.mit.edu/annotation/fungi/fgi/ ; http://www.yeastgenome.org/
<i>Pichia angusta</i>	Ascomycete	Saccharomycetes	yeast	in progress	Génolevures	http://cbi.labri.fr/Genolevures/elt/
<i>Pichia farinosa</i>	Ascomycete	Saccharomycetes	yeast	in progress	Génolevures	http://cbi.labri.fr/Genolevures/elt/
<i>Saccharomyces bayanus</i> ^{b,d}	Ascomycete	Saccharomycetes	yeast	completed; in progress	Washington University Genome Sequencing Center, Broad Institute, Génolevures	http://genomeold.wustl.edu/projects/yeast/index.php ; http://www.broad.mit.edu/annotation/fungi/comp_yeasts/ ; http://www.yeastgenome.org/ ; http://cbi.labri.fr/Genolevures/elt/
<i>Saccharomyces castellii</i>	Ascomycete	Saccharomycetes	yeast	completed	Washington University Genome Sequencing Center	http://genomeold.wustl.edu/projects/yeast/index.php
<i>Saccharomyces cerevisiae</i> ^{b,c}	Ascomycete	Saccharomycetes	yeast	completed	Stanford Genome Technology Center, Sanger Institute, & Broad Institute	http://med.stanford.edu/sbtc/research/yjm789.html ; http://www.sanger.ac.uk/Projects/S_cerevisiae/ ; http://www.broad.mit.edu/annotation/fungi/fgi/ ; http://www.yeastgenome.org/ ; http://www.genedb.org/genedb/cerevisiae/ ; http://mips.gsf.de/genre/proj/yeast/
<i>Saccharomyces exiguus</i>	Ascomycete	Saccharomycetes	yeast	in progress	Génolevures	http://cbi.labri.fr/Genolevures/elt/
<i>Saccharomyces kluyveri</i>	Ascomycete	Saccharomycetes	yeast	completed	Washington University Genome Sequencing Center & Génolevures	http://genome.wustl.edu/ISAgenome.cgi?GENOME=Saccharomyces%20kluyveri ; http://cbi.labri.fr/Genolevures/ ; http://www.yeastgenome.org/
<i>Saccharomyces kudriazevii</i>	Ascomycete	Saccharomycetes	yeast	completed	Washington University Genome Sequencing Center	http://genomeold.wustl.edu/projects/yeast/index.php ; http://www.yeastgenome.org/
<i>Saccharomyces mikatae</i> ^c	Ascomycete	Saccharomycetes	yeast	completed	Broad Institute & Washington University Genome Sequencing Center	http://www.broad.mit.edu/annotation/fungi/comp_yeasts/ ; http://genomeold.wustl.edu/projects/yeast/index.php ; http://www.yeastgenome.org/
<i>Saccharomyces paradoxus</i> ^c	Ascomycete	Saccharomycetes	yeast	completed	Broad Institute	http://www.broad.mit.edu/annotation/fungi/comp_yeasts/ ; http://www.yeastgenome.org/
<i>Saccharomyces servazzii</i>	Ascomycete	Saccharomycetes	yeast	in progress	Génolevures	http://cbi.labri.fr/Genolevures/elt/
<i>Zygosaccharomyces rouxii</i>	Ascomycete	Saccharomycetes	yeast	completed	Génolevures	http://cbi.labri.fr/Genolevures/elt/
<i>Yarrowia lipolytica</i> ^c	Ascomycete	Saccharomycetes	yeast	completed	Génolevures	http://cbi.labri.fr/Genolevures/elt/YALI
<i>Schizosaccharomyces japonicus</i>	Ascomycete	Schizosaccharomycetes	yeast; dimorphic	in progress	Broad Institute	http://www.broad.mit.edu/annotation/fungi/fgi/
<i>Schizosaccharomyces octosporus</i>	Ascomycete	Schizosaccharomycetes	yeast	in progress	Broad Institute	http://www.broad.mit.edu/annotation/fungi/fgi/
<i>Schizosaccharomyces pombe</i>	Ascomycete	Schizosaccharomycetes	model; yeast	completed	Sanger Institute	http://www.sanger.ac.uk/Projects/S_pombe/ ; http://www.genedb.org/genedb/pombe/index.jsp
<i>Fusarium graminearum</i> ^c (aka <i>Gibberella zeae</i>)	Ascomycete	Sordariomycetes	filamentous	completed	Broad Institute	http://www.broad.mit.edu/annotation/fungi/fgi/ ; http://mips.gsf.de/genre/proj/fusarium/ ; http://www.cdl.umn.edu/scab/scab.html
<i>Fusarium oxysporum</i>	Ascomycete	Sordariomycetes	filamentous	in progress	Broad Institute	http://www.broad.mit.edu/annotation/fungi/fgi/
<i>Fusarium verticillioides</i>	Ascomycete	Sordariomycetes	filamentous	completed	Broad Institute & Syngenta AG	http://www.broad.mit.edu/annotation/fungi/fgi/ ; http://www.tigr.org/tdb/tgi/fungi.shtml (EST data)
<i>Chaetomium globosum</i>	Ascomycete	Sordariomycetes	filamentous	completed	Broad Institute	http://www.broad.mit.edu/annotation/fungi/fgi/ ; http://www.broad.mit.edu/annotation/fungi/fgi/ ;
<i>Neurospora crassa</i> ^c	Ascomycete	Sordariomycetes	filamentous	completed	Broad Institute	http://www.genome.ou.edu/fungal.html ; http://gene.genetics.uga.edu/(FGR) ; http://www.neurosporangenome.org/ ; http://www.tigr.org/tdb/tgi/fungi.shtml (EST data); http://mips.gsf.de/proj/neurospora/

<i>Podospora anserina</i>	Ascomycete	Sordariomycetes	filamentous	completed	CNRS & Genoscope	http://podospora.igmors.u-psud.fr/index.html ; http://www.genoscope.cns.fr/externe/English/Projets/Projet_GA/organisme_GA.html
<i>Magnaporthe grisea</i> ^c	Ascomycete	Sordariomycetes	filamentous	completed	Broad Institute	http://www.broad.mit.edu/annotation/fungi/fgi/ ; http://www.riceblast.org/ ; http://www.tigr.org/tdb/tgi/fungi.shtml (EST data)
<i>Nectria haematococca</i>	Ascomycete	Sordariomycetes		in progress	Joint Genome Institute	http://www.microbialgenome.org/announcement/seq2005.shtml
<i>Trichoderma reesei</i> (anamorph of <i>Hypocrea jecorina</i>)	Ascomycete	Sordariomycetes	filamentous	in progress	Joint Genome Institute	http://gsphere.lanl.gov/trire1/trire1.home.html ; http://trichoderma.iq.usp.br/ (EST data)
<i>Trichoderma virens</i>	Ascomycete	Sordariomycetes	filamentous	in progress	Joint Genome Institute	http://www.jgi.doe.gov/sequencing/cspseqplans2006.html
<i>Laccaria bicolor</i>	Basidiomycete	Homobasidiomycetes	filamentous	in progress	Joint Genome Institute	http://www.jgi.doe.gov/sequencing/DOEmicrobes.html
<i>Phanerochaete chrysosporium</i> ^c	Basidiomycete	Homobasidiomycota	filamentous	completed	Joint Genome Institute	http://genome.jgi-psf.org/whiterot1/whiterot1.info.html ; https://fungalgenomics.concordia.ca/feadb/search.php?sp_index=pchr
<i>Cryptococcus neoformans</i> (anamorph of <i>Filobasidiella</i>) ^{b,c}	Basidiomycete	Homobasidiomycete	dimorphic	completed	Broad Institute, Genome Sciences Center Canada, Duke Center for Genome Research, Stanford Genome Technology Center, & TIGR	http://www.broad.mit.edu/annotation/fungi/fgi/ ; http://www.bcgsc.ca/gc/cryptococcus/ ; http://www-sequence.stanford.edu/group/C.neoformans/ ; http://www.tigr.org/tdb/e2k1/cna1/ ; http://cneo.genetics.duke.edu/
<i>Coprinus cinereus</i>	Basidiomycete	Homobasidiomycete	filamentous	completed	Broad Institute	http://www.broad.mit.edu/annotation/fungi/fgi/ ; http://coprinus.genome.duke.edu/ ; http://genome.semo.edu/cgi-bin/gbrowse?source=coprinus
<i>Melampsora larici-populina</i>	Basidiomycete	Urediniomycetes	filamentous	in progress	Joint Genome Institute	http://www.jgi.doe.gov/sequencing/cspseqplans2006.html
<i>Phakopsora meibomia</i>	Basidiomycete	Urediniomycetes	filamentous	in progress	Joint Genome Institute	http://www.jgi.doe.gov/whoweare/evogen.html
<i>Phakopsora pachyrhizi</i>	Basidiomycete	Urediniomycetes	filamentous	in progress	Joint Genome Institute	http://www.jgi.doe.gov/sequencing/seqplans.html
<i>Puccinia graminis</i>	Basidiomycete	Urediniomycetes	filamentous	in progress	Broad Institute	http://www.broad.mit.edu/annotation/fungi/fgi/
<i>Ustilago maydis</i> ^c	Basidiomycete	Ustilaginomycota	filamentous	completed	Broad Institute, Bayer CropScience AG, & Exelixis	http://www.broad.mit.edu/annotation/fungi/fgi/ ; http://mips.gsf.de/projects/fungi/ustilago.html
<i>Batrachochytrium dendrobatidis</i> ^b	Chytridiomycete	Chytridiomycete	filamentous	in progress	Broad Institute & Joint Genome Institute	http://www.broad.mit.edu/annotation/fungi/fgi/ ; http://www.jgi.doe.gov/sequencing/why/CSP2006/frogfungus.html
<i>Piromyces</i> sp.	Chytridiomycete	Chytridiomycete	filamentous	in progress	Joint Genome Institute	http://www.jgi.doe.gov/sequencing/cspseqplans2006.html
<i>Rhizopus oryzae</i> ^c	Zygomycete	Zygomycota	filamentous	completed	Broad Institute	http://www.broad.mit.edu/annotation/fungi/fgi/
<i>Encephalitozoon cuniculi</i>	Microsporidia	Microsporidia	microsporidia	completed	Genoscope	http://www.genoscope.cns.fr/externe/English/Projets/Projet_AD/AD.html
<i>Nosema locustae</i> ^c (aka <i>Antonospora</i>)	Microsporidia	Microsporidia	microsporidia	in progress	Marine Biological Laboratory	http://jbpc.mbl.edu/Nosema/
<i>Phytophthora capsici</i>	Oomycete	Oomycete	filamentous	in progress	Joint Genome Institute	http://www.jgi.doe.gov/sequencing/cspseqplans2006.html
<i>Phytophthora infestans</i>	Oomycete	Oomycete	filamentous	in progress	Broad Institute & Sanger Institute	http://www.broad.mit.edu/annotation/fungi/fgi/ ; http://www.sanger.ac.uk/Projects/P_infestans/ ; www.pfgd.org (EST data)
<i>Phytophthora ramorum</i>	Oomycete	Oomycete	filamentous	completed	Joint Genome Institute	http://genome.jgi-psf.org/ramorum1/ramorum1.home.html
<i>Phytophthora sojae</i>	Oomycete	Oomycete	filamentous	completed	Joint Genome Institute	http://genome.jgi-psf.org/sojae1/sojae1.home.html
<i>Peronospora parasitica</i>	Oomycete	Oomycetes	filamentous	in progress	Washington University Genome Sequencing Center	http://genome.wustl.edu/home.cgi

^aStatus is as of September 10, 2005.^bMultiple strains^cAnnotated^dSome strains still in progress

Phylogenetic omparative clusters are denoted by boxes

Other Databases

General

MetaDB

<http://www.neurotransmitter.net/metadb/>

Entrez Genome Project

<http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=genomeprj>

Genomes OnLine Database

<http://www.genomesonline.org/>

Fungal Genome Stock Center

<http://www.fgsc.net/>

Functional Data

The Munich Information Center for Protein Sequences or MIPS

<http://mips.gsf.de/projects/fungi>

JGI integrated microbial resources

<http://img.jgi.doe.gov/cgi-bin/pub/main.cgi>

NCBI dbEST

<http://www.ncbi.nlm.nih.gov/dbEST/index.html>

Pathogen Functional Genomics Resource Center

<http://pfgrc.tigr.org/>

Protein Families Database (Pfam)

<http://www.sanger.ac.uk/Software/Pfam/>

CandidaDB

<http://genolist.pasteur.fr/CandidaDB/>

SaccharomycesDB

<http://www.yeastgenome.org/>

TIGR Gene Indices

<http://www.tigr.org/tdb/tgi/fungi.shtml>

Programs

Joint Genome Institute Community Sequencing Program

<http://www.jgi.doe.gov/CSP/>

Broad Fungal Genome Initiative

<http://www.broad.mit.edu/annotation/fgi/>

Broad Microbial Sequencing Center

<http://www.broad.mit.edu/seq/msc/>

TIGR Microbial Sequencing Center

<http://www.tigr.org/msc/status.shtml>

Sequencing Centers

Broad

No. of Genomes

35

Genoluevres

13

JGI

15

Sanger

7

Stanford

3

TIGR

4

Washington U.

9

No. of Genomes

Plant Pathogens

21

Human Pathogens

17

Model Organisms

4

Yeast

25