Resource Summary Report

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MycoCosm

RRID:SCR_005312
Type: Tool

Proper Citation

MycoCosm (RRID:SCR_005312)

Resource Information

URL: http://genome.jgi.doe.gov/programs/fungi/index.jsf

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Description: Fungal genomics database and interactive analytical tools that integrates all fungal genomes for diverse fungi that are important for energy and environment, the focus of the JGI Fungal program. It integrates genomics data from the DOE JGI and its users and promotes user community participation in data submission, annotation and analysis. Over 100 newly sequenced and annotated fungal genomes from JGI and elsewhere are available to the public through MycoCosm, and new annotated genomes are being added to this resource upon completion of annotation. MycoCosm offers web-based genome analysis tools for fungal biologists to "navigate" through sequenced genomes and explore them in the context of "genome-centric" and "comparative views".

Abbreviations: MycoCosm

Synonyms: MycoCosm - the fungal genomics resource

Resource Type: service resource, data analysis service, database, analysis service resource, storage service resource, production service resource, data repository, data or information resource

Defining Citation: PMID:24297253, PMID:22110030

Keywords: gene, genome, geneome map, jgi, fungus, genomics, energy, environment, annotation, FASEB list

Funding: DOE

Availability: Public, Acknowledgement requested, The community can contribute to this resource

Resource Name: MycoCosm

Resource ID: SCR_005312

Alternate IDs: OMICS_01657, nlx_144366, r3d100011751

Alternate URLs: https://doi.org/10.17616/R3QQ0J

Old URLs: http://jgi.doe.gov/fungi

Record Creation Time: 20220129T080229+0000

Record Last Update: 20260728T043215+0000

Ratings and Alerts

No rating or validation information has been found for MycoCosm.

No alerts have been found for MycoCosm.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 240 mentions in open access literature.

Listed below are recent publications. The full list is available at nidm-terms .

Ezzedine JA, et al. (2025) Snow- and ice-ecosystem cleaning capability of the pucciniomycotinous yeast Phenoliferia psychrophenolica. Communications biology, 8(1), 1084.

Busse W, et al. (2025) Super-resolution imaging of native fluorescent photoreceptors in chytrid fungal eyes. The EMBO journal, 44(14), 4088.

Cole J, et al. (2025) Comparative genomic analysis of a metagenome-assembled genome reveals distinctive symbiotic traits in a Mucoromycotina fine root endophyte arbuscular mycorrhizal fungus. BMC genomics, 26(1), 967.

Wesdorp E, et al. (2025) NGS-based Aspergillus detection in plasma and lung lavage of children with invasive pulmonary aspergillosis. NPJ genomic medicine, 10(1), 24.

Díez López C, et al. (2025) Unravelling the hidden side of laundry: malodour, microbiome and pathogenome. BMC biology, 23(1), 40.

Waheed A, et al. (2025) Harnessing Xylanase Potential in Thermothelomyces fergusii: Insights from Computational and Functional Analysis. Journal of fungi (Basel, Switzerland), 11(4).

Agnusdei A, et al. (2025) Histone Methyltransferases AcDot1 and AcRmtA Are Involved in Growth Regulation, Secondary Metabolism, and Stress Response in Aspergillus

carbonarius. Toxins, 17(4).

Kijpornyongpan T, et al. (2025) Cross-kingdom comparative genomics reveal the metabolic potential of fungi for lignin turnover in deadwood. Nature ecology & evolution, 9(9), 1599.

Drott MT, et al. (2025) Population-Specific Transcriptomic Shifts Underlie Secondary Metabolic Diversification in Aspergillus flavus and the Domestication of Aspergillus oryzae. bioRxiv : the preprint server for biology.

Peng M, et al. (2025) Multi-Omics Analyses Reveal Divergent Molecular Mechanisms Underlying Plant Biomass Conversion by Five Fungi. MicrobiologyOpen, 14(6), e70201.

Jin GT, et al. (2025) A de novo Gene Promotes Seed Germination Under Drought Stress in Arabidopsis. Molecular biology and evolution, 42(1).

Lax C, et al. (2025) Symmetric adenine methylation is an essential DNA modification in the early-diverging fungus Rhizopus microsporus. Nature communications, 16(1), 3843.

Mondo SJ, et al. (2025) Consecutive low-frequency shifts in A/T content denote nucleosome positions across microeukaryotes. iScience, 28(5), 112472.

Safronov O, et al. (2025) Independent evolution of betulin biosynthesis in Inonotus obliquus. Scientific reports, 15(1), 21319.

Blair EM, et al. (2025) Genomic and transcriptomic characterization of carbohydrate-active enzymes in the anaerobic fungus Neocallimastix cameroonii var. constans. G3 (Bethesda, Md.), 15(8).

Daghino S, et al. (2025) Comparative genomics reveals substantial divergence in metal sensitive and metal tolerant isolates of the ericoid mycorrhizal fungus Oidiodendron maius. Mycorrhiza, 35(2), 24.

Cheng SY, et al. (2025) Genetic Analysis of Polyunsaturated Fatty Acids Biosynthesis Pathway Determines Four Distinct Thraustochytrid Types. Environmental microbiology, 27(4), e70090.

Reyes C, et al. (2025) Siderophores and secondary metabolites produced by Ganoderma adspersum. Microbiology (Reading, England), 171(11).

Baroncelli R, et al. (2024) Genome evolution and transcriptome plasticity is associated with adaptation to monocot and dicot plants in Colletotrichum fungi. GigaScience, 13.

Qi Z, et al. (2024) Adaptive advantages of restorative RNA editing in fungi for resolving survival-reproduction trade-offs. Science advances, 10(1), eadk6130.