

Agaricales

6-gene ML phylogeny
18S = 274 sequences
LSU = 389
ITS1-5.8-ITS2 = 389
RPB1 = 147
RPB2 = 138

After Matheny 2006
Jerry Cooper 2014

Agaricineae

Strophariaceae SL

Strophariaceae SS

Hymenogasteraceae (Hysterog)

Psilocybe sp

Psilocybe

Oecocoria/Kuhneromyces

Gyromyces (+Galerina-Mycorhizal)

Galerina s.s. inc. Naucoropsis

Agaricaceae

Inocybaceae

Crepidotaceae

Panaeolaceae

Tuberiaceae

Agaricaceae

Agaricaceae

Agaricaceae

Agaricaceae

Psathyrellaceae

Cyrtodermataceae

Lyophyllaceae

Lyophyllaceae

Lyophyllaceae

Lyophyllaceae

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Lyophyllaceae

Lyophyllaceae

Tricholomatineae

Marasmiineae

Hygrophorineae

*Singerocybe/Omphalotus??

Citocybaceae

Stereocystaceae

Tricholomataceae

Entolomataceae

Pseudopanus Ined.

Catathelasma/Catathelasma

Ripartite/Ripartite

Pseudocybaceae

Hydangiaceae

Fayodaceae (=Omphalia, Cactomyces, Ganoderma)

Amanitaceae

Cytodermata/Ripartite

Pileateae

Limoniopsis

Macrocyrtidaceae

Neolygophoraceae

Marasmiaceae

Omphalotaceae

Myrtilaceae

Physalaciaceae

Atheniellaceae Ined.

Cyphellaceae

Hemionaceae

Porothelaceae

Schizophyllaceae

Lachnellaceae

Mycenaceae

Xerophthalma/Hemionaceae

Pleurotaceae

Hygrophoraceae

Typhulaceae

Leucophaea gigantea

Boletales