

*Aspergillus nidulans*

*Saccharomyces cerevisiae*

*Schizosaccharomyces pombe*

*Phytophthora cinnamomi*

*Albugo laibachii*

*Ectocarpus siliculosus*

*Dictyostelium purpureum*

*Dictyostelium discoideum*

*Polysphondylium pallidum*

*Branchiostoma floridae*

*Branchiostoma floridae*

*Takifugu rubripes*

*Danio rerio*

*Gallus gallus*

*Homo sapiens*

*Ciona intestinalis*

*Amphimedon queenslandica*

*Drosophila melanogaster*

*Nematostella vectensis*

*Trichoplax adhaerens*

*Mnemiopsis leidyi*

*Caenorhabditis elegans*

*Monosiga brevicollis*

*Chlamydomonas reinhardtii*

*Volvox carteri*

*Populus trichocarpa* (1)

*Populus trichocarpa* (2)

*Arabidopsis thaliana* (1)

*Oryza sativa* (1)

*Oryza sativa* (2)

*Oryza sativa* (3)

*Populus trichocarpa* (3)

*Populus trichocarpa* (4)

*Arabidopsis thaliana* (2)

*Physcomitrella patens* (1)

*Physcomitrella patens* (2)

*Physcomitrella patens* (3)

*Physcomitrella patens* (4)

*Physcomitrella patens* (5)

*Physcomitrella patens* (6)

*Physcomitrella patens* (7)

*Populus trichocarpa* (5)

*Populus trichocarpa* (6)

*Populus trichocarpa* (7)

*Arabidopsis thaliana* (3)

*Oryza sativa* (4)

*Populus trichocarpa* (8)

*Oryza sativa* (5)

*Selaginella moellendorffii*

*Batrachochytrium dendrobatidis*

*Cryptococcus neoformans*

*Entamoeba moshkovskii* Laredo

*Entamoeba histolytica*

*Entamoeba nuttalli* P19

*Phytomonas EM*

*Phytomonas HART*

*Leishmania donovani*

*Leishmania infantum*

*Leishmania major*

*Leishmania mexicana*

*Leishmania braziliensis*

*Leishmania tarentolae*

*Trypanosoma brucei*

*Trypanosoma gambiense*

*Trypanosoma congolense*

*Trypanosoma vivax*

*Trypanosoma cruzi* Sylvio

*Trypanosoma cruzi* CL Brener Non\_Esmeraldo\_like

*Trypanosoma cruzi* CL BrenerEsmeraldo\_like

*Trypanosoma cruzi* marinkellei B7

*Trypanosoma grayi*

*Leptomonas pyrrocoris*

MrBayes/PhyML

● > 0.99/99%

○ > 0.95/80%

○ > 0.80/50%