

G4VI76 – *Schistosoma mansoni*

G4VI77 – *Schistosoma mansoni*

G4VI75 – *Schistosoma mansoni*

A2DNQ9 – *Trichomonas vaginalis*

D8LB94 – *Ectocarpus siliculosus*

D7FIW6 – *Ectocarpus siliculosus*

H2WPU1 – *Caenorhabditis japonica*

G0N8L6 – *Caenorhabditis brenneri*

A7AVL8 – *Babesia bovis*

F7GZI8 – *Callithrix jacchus*

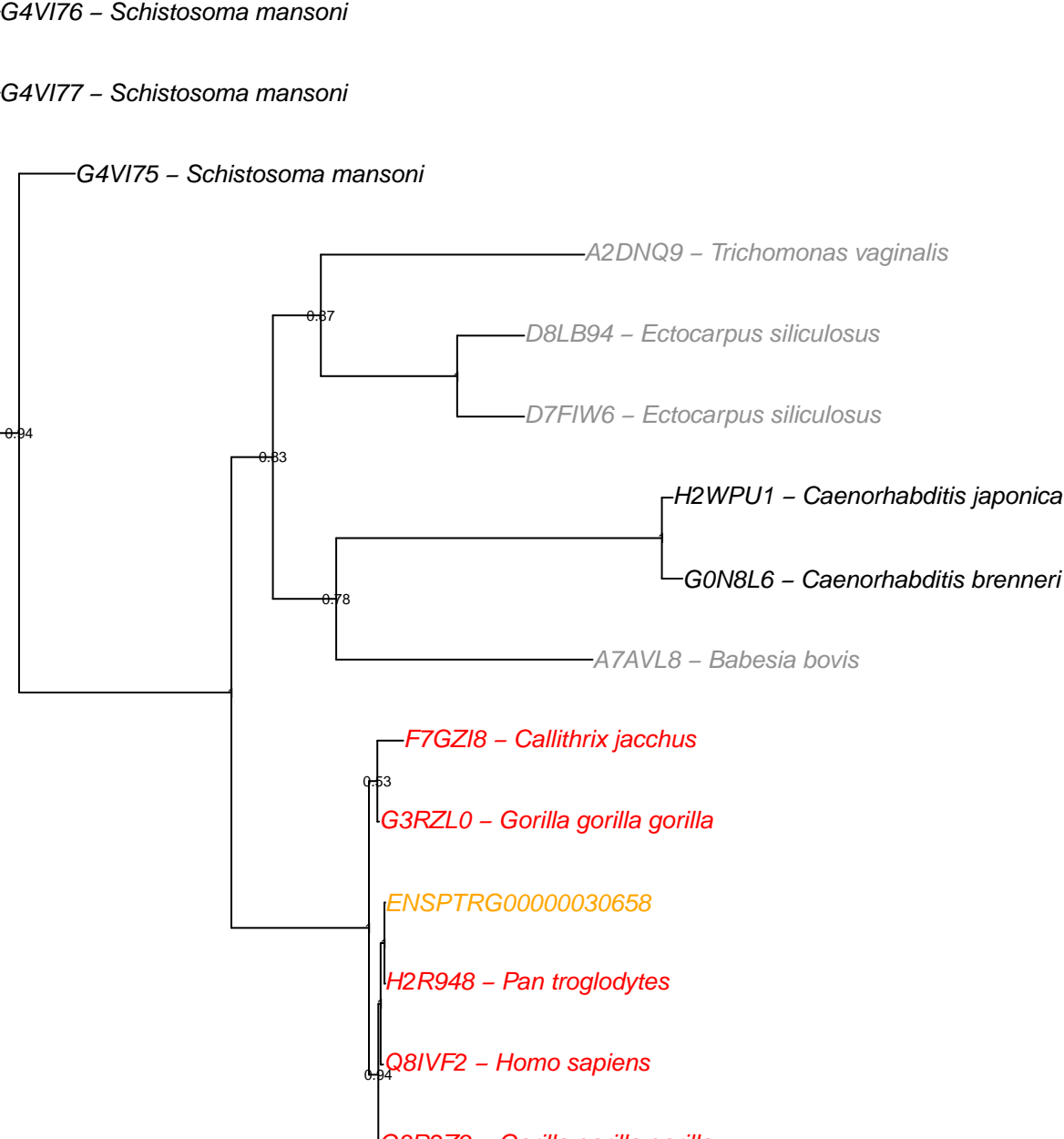
G3RZL0 – *Gorilla gorilla gorilla*

ENSPTRG00000030658

H2R948 – *Pan troglodytes*

Q8IVF2 – *Homo sapiens*

G3R2Z9 – *Gorilla gorilla gorilla*



C4R7M5 – *Komagataella pastoris*

F2QZG7 – *Komagataella pastoris*

B2AA70 – *Podospira anserina*

ENSPTRG00000030017

0.89  
0.63  
H2R7V5 – *Pan troglodytes*

0.9  
P22792 – *Homo sapiens*

0.94  
G3RG16 – *Gorilla gorilla gorilla*

H2PCE1 – *Pongo abelii*

F7B749 – *Macaca mulatta*

Q10Y31 – *Trichodesmium erythraeum*

B2IUT6 – *Nostoc punctiforme*

C1E953 – *Micromonas* sp.

0.98  
0.97  
C1EIN3 – *Micromonas* sp.

C1EIP5 – *Micromonas* sp.

0.92  
C1FER3 – *Micromonas* sp.

C1FHV9 – *Micromonas* sp.

0.88  
D7G7F2 – *Ectocarpus siliculosus*

0.98  
D7G7J7 – *Ectocarpus siliculosus*

0.84  
E9CF02 – *Capsaspora owczarzaki*

0.57  
E9CHG1 – *Capsaspora owczarzaki*

E9C7Z1 – *Capsaspora owczarzaki*

F4W961 – *Acromyrmex echinatio*

0.99  
E9G3X8 – *Daphnia pulex*

0.71  
D6WJ99 – *Tribolium castaneum*

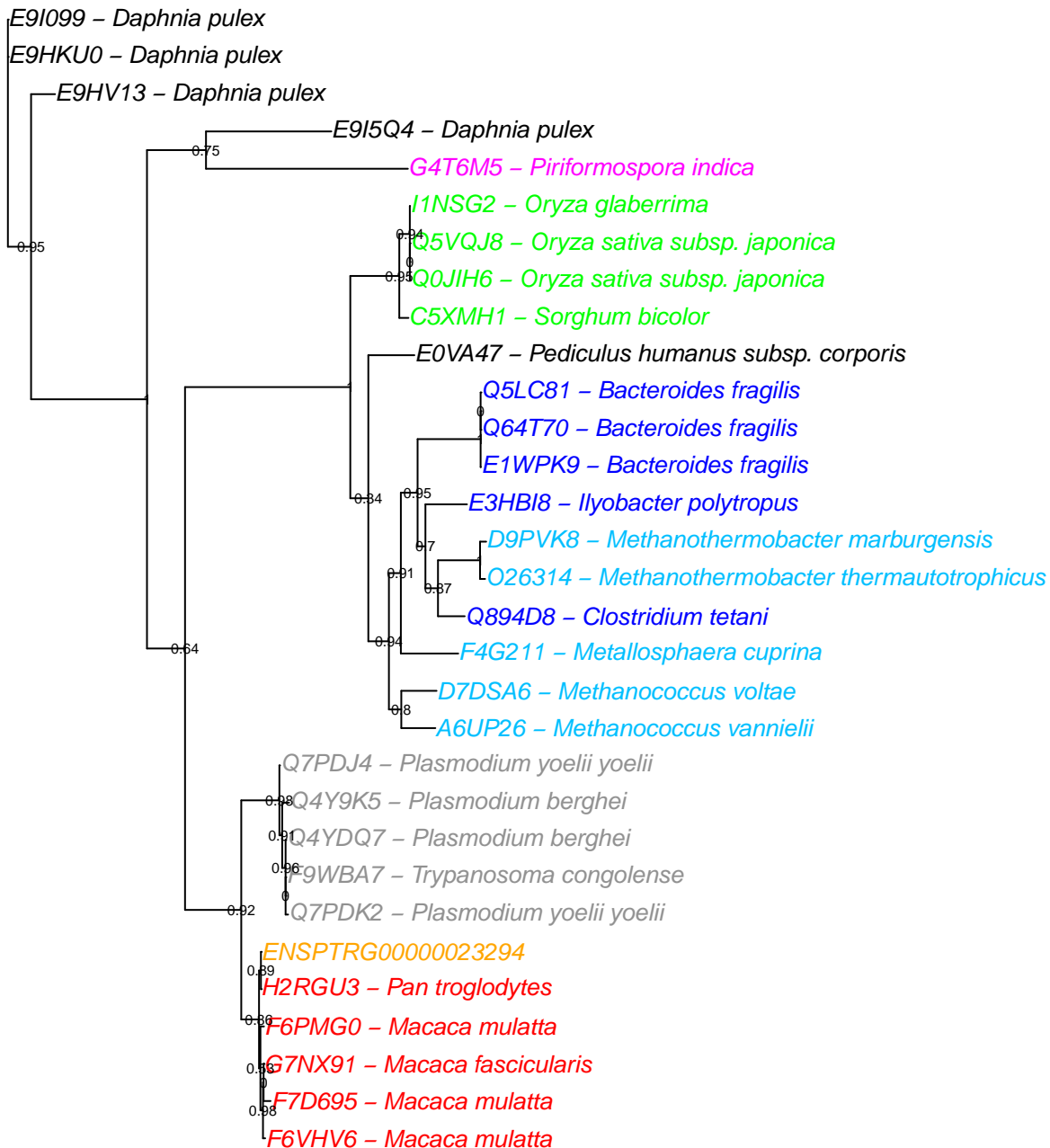
0.73  
B4H1R0 – *Drosophila persimilis*

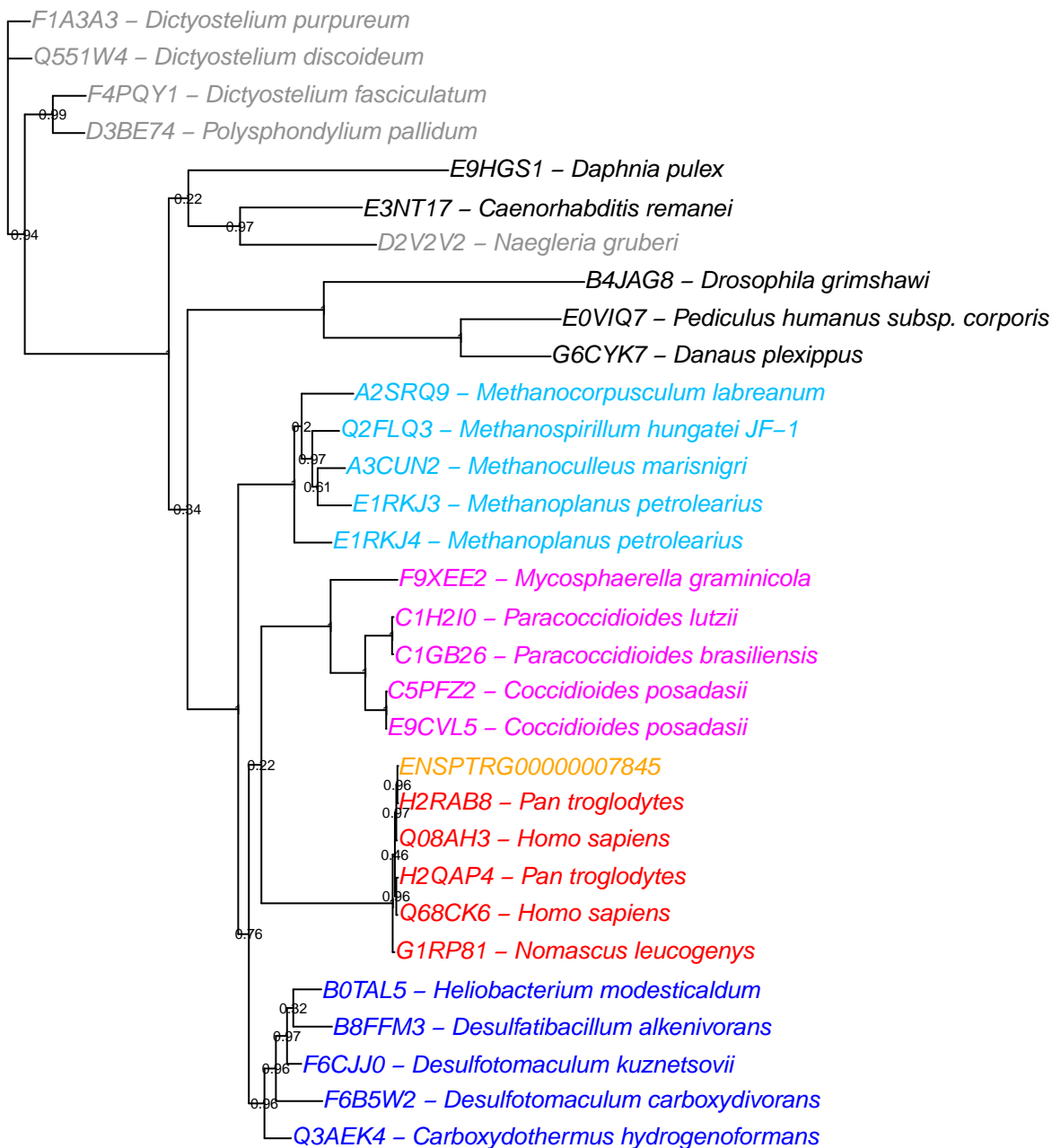
B4MMX3 – *Drosophila willistoni*

0.97  
B4U180 – *Streptococcus equi* subsp. *zooepidemicus*

0.58  
C0MEB5 – *Streptococcus equi* subsp. *zooepidemicus*

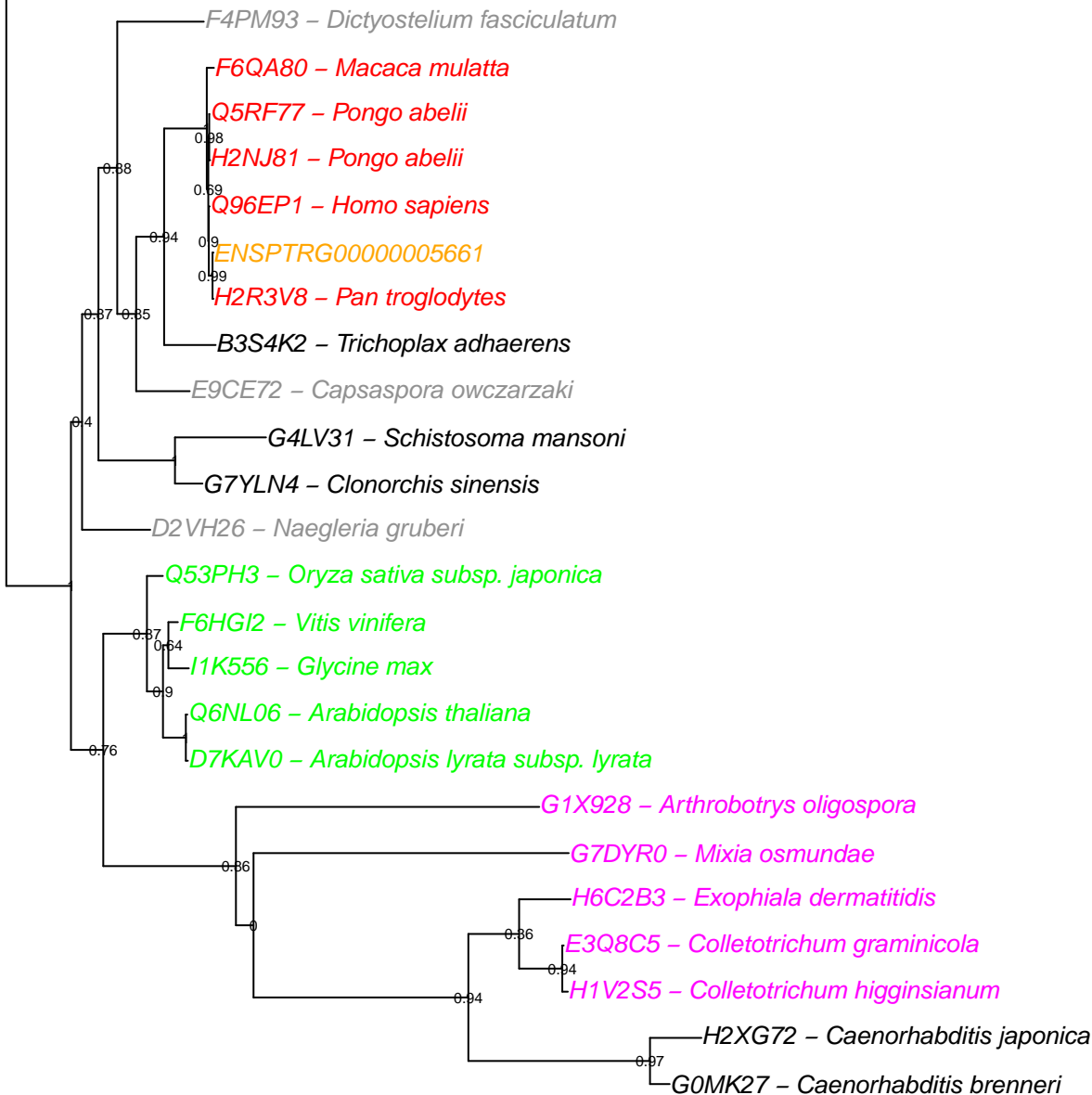
F8IPN2 – *Streptococcus equi* subsp. *zooepidemicus*

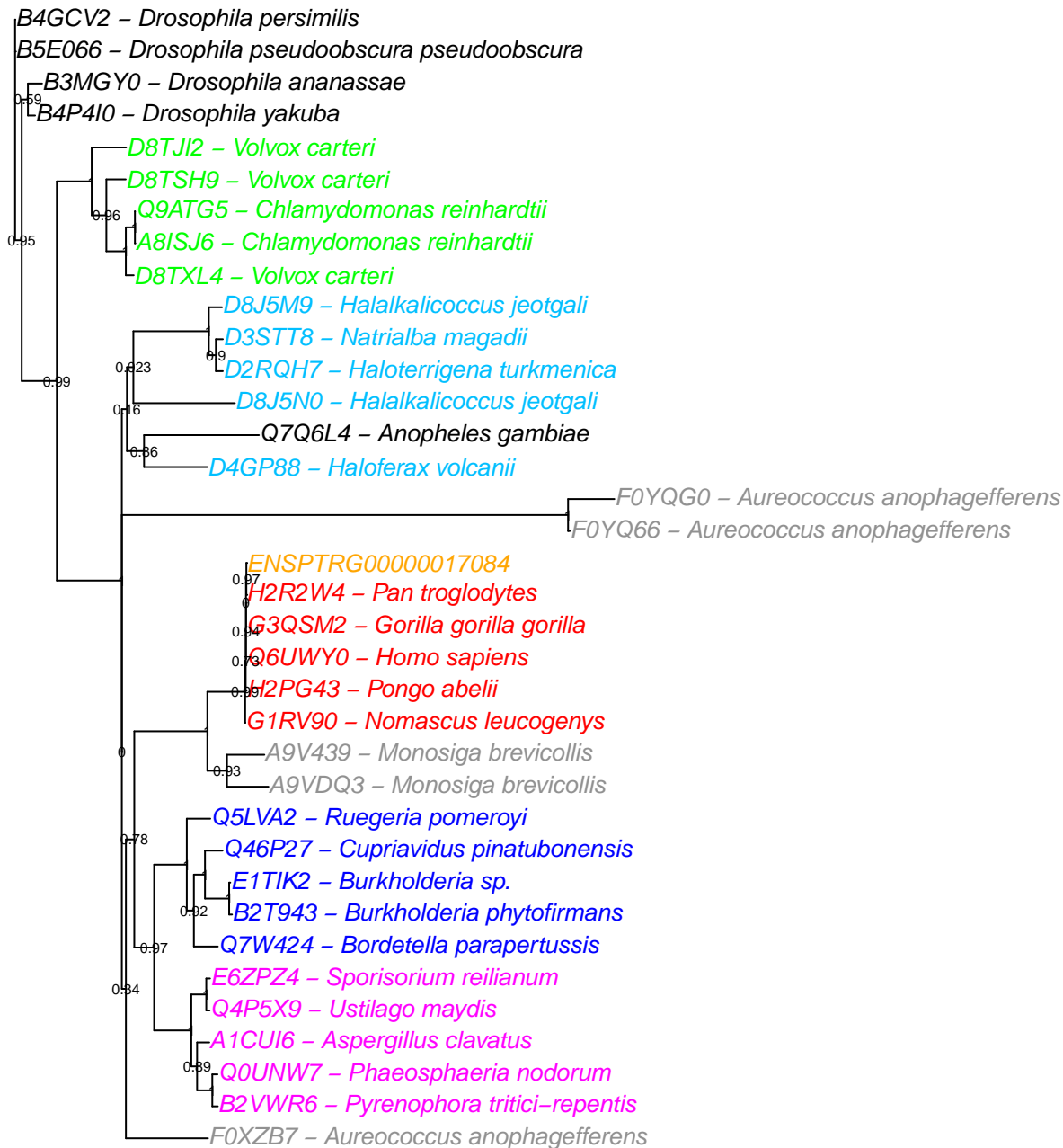




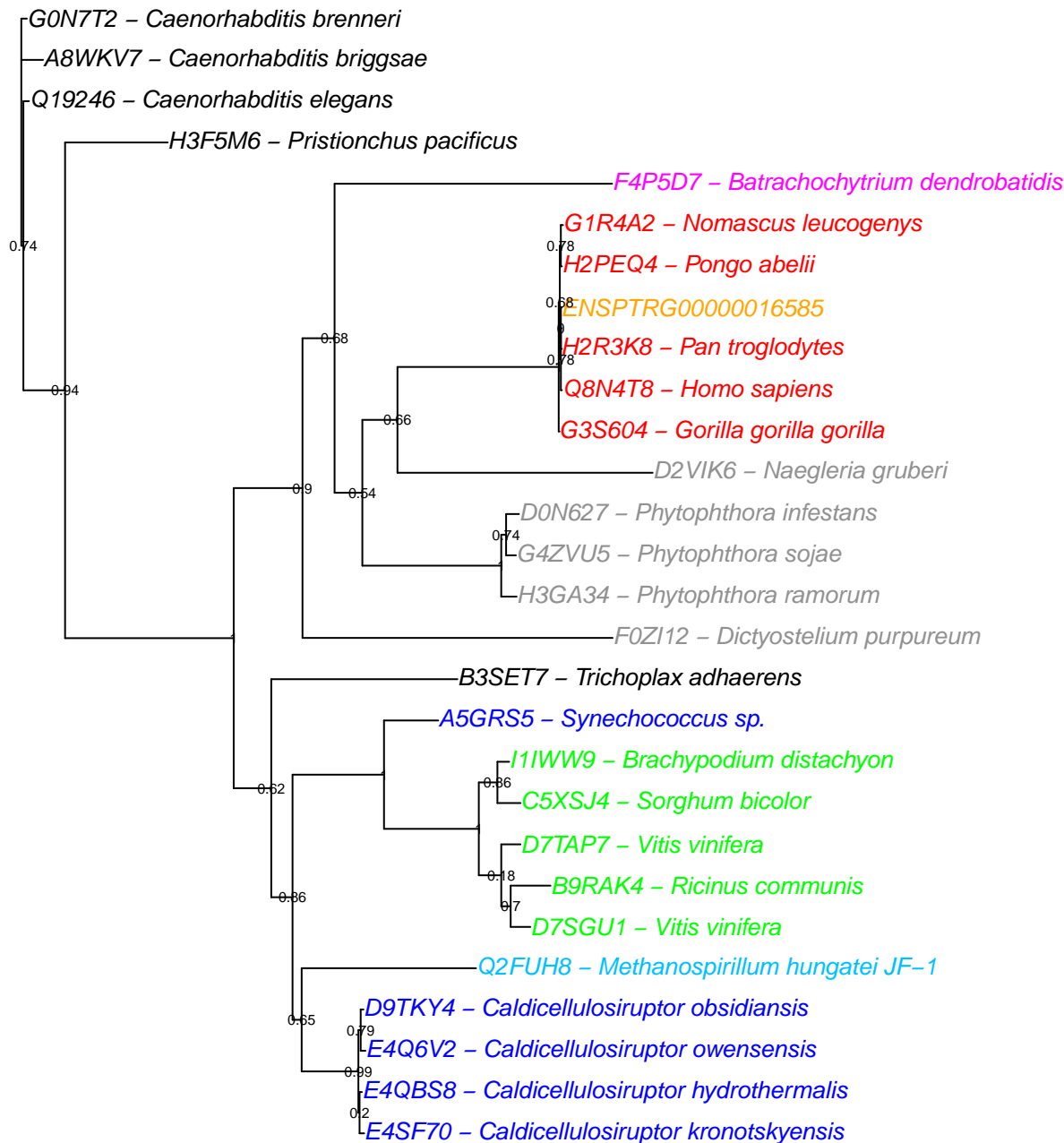
D0A993 – *Trypanosoma brucei gambiense*

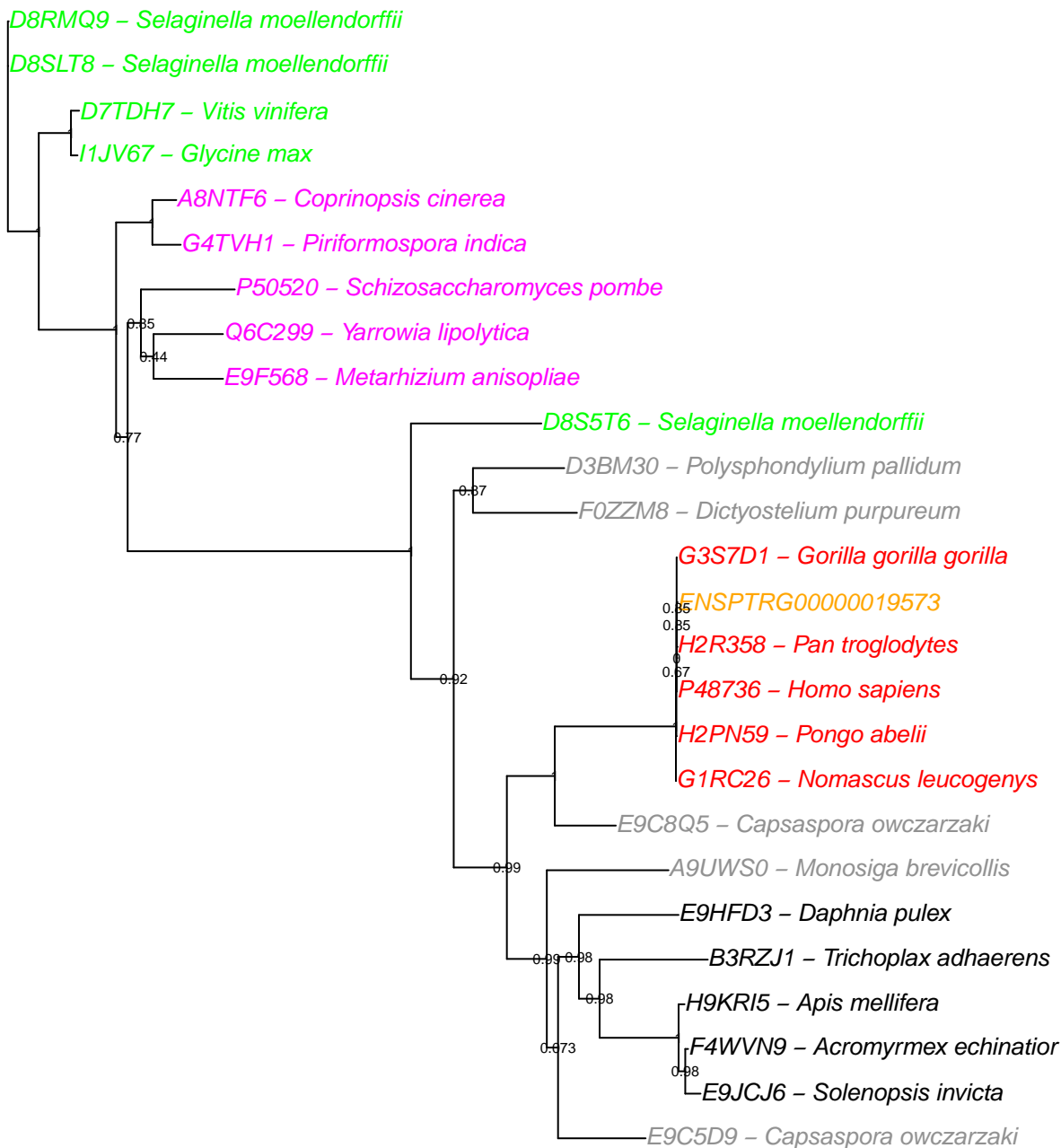
Q382W2 – *Trypanosoma brucei brucei*

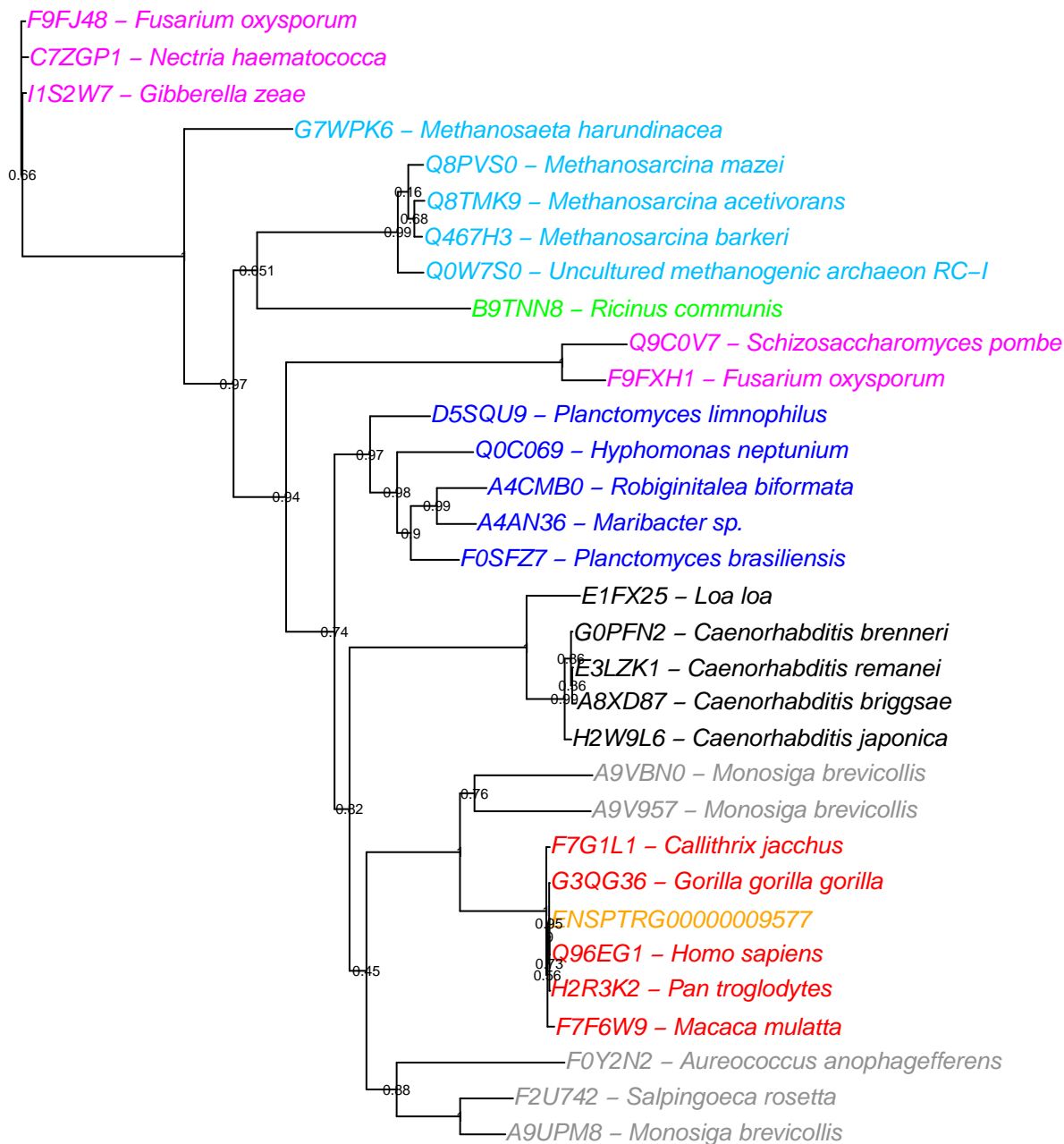




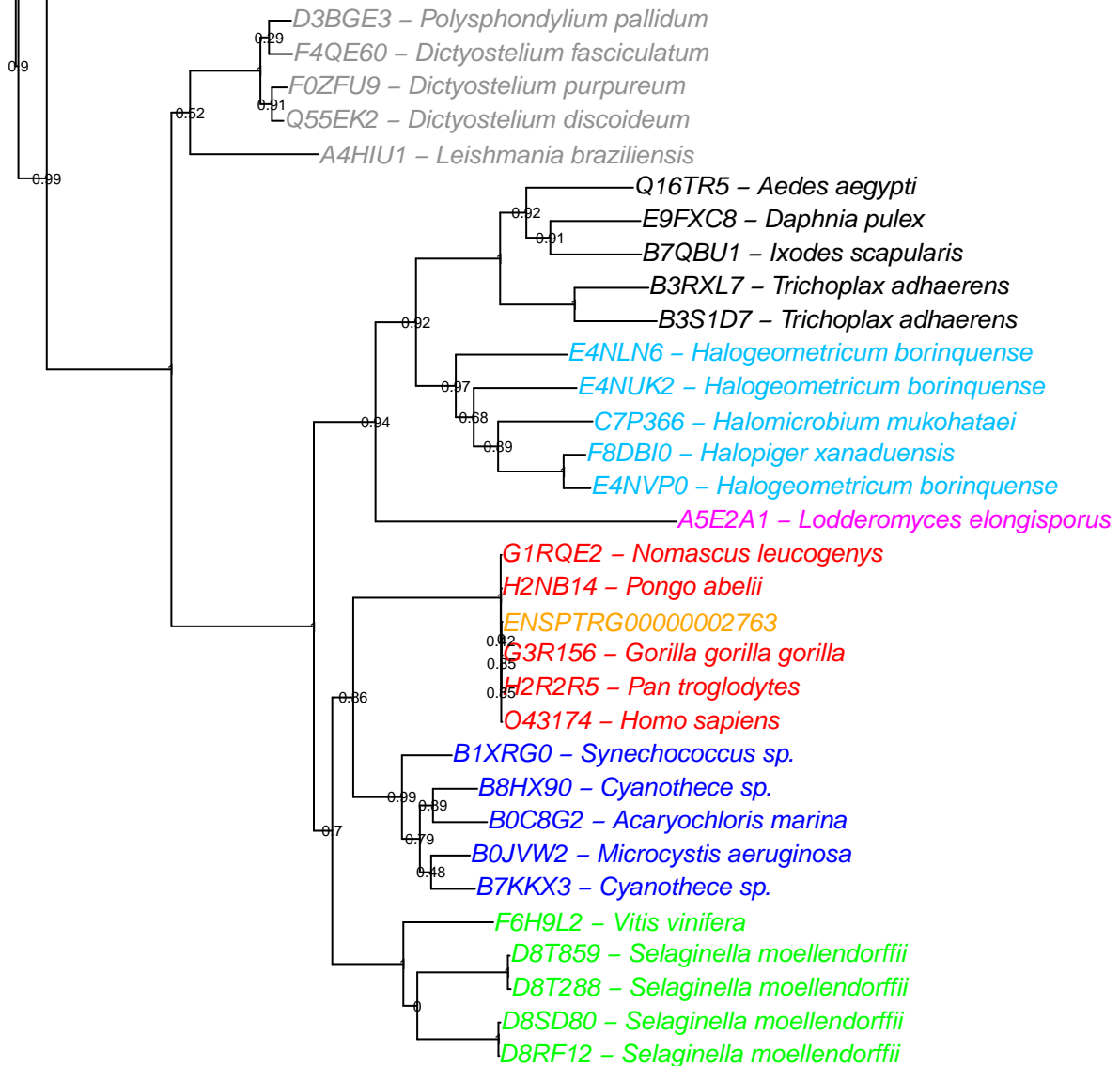


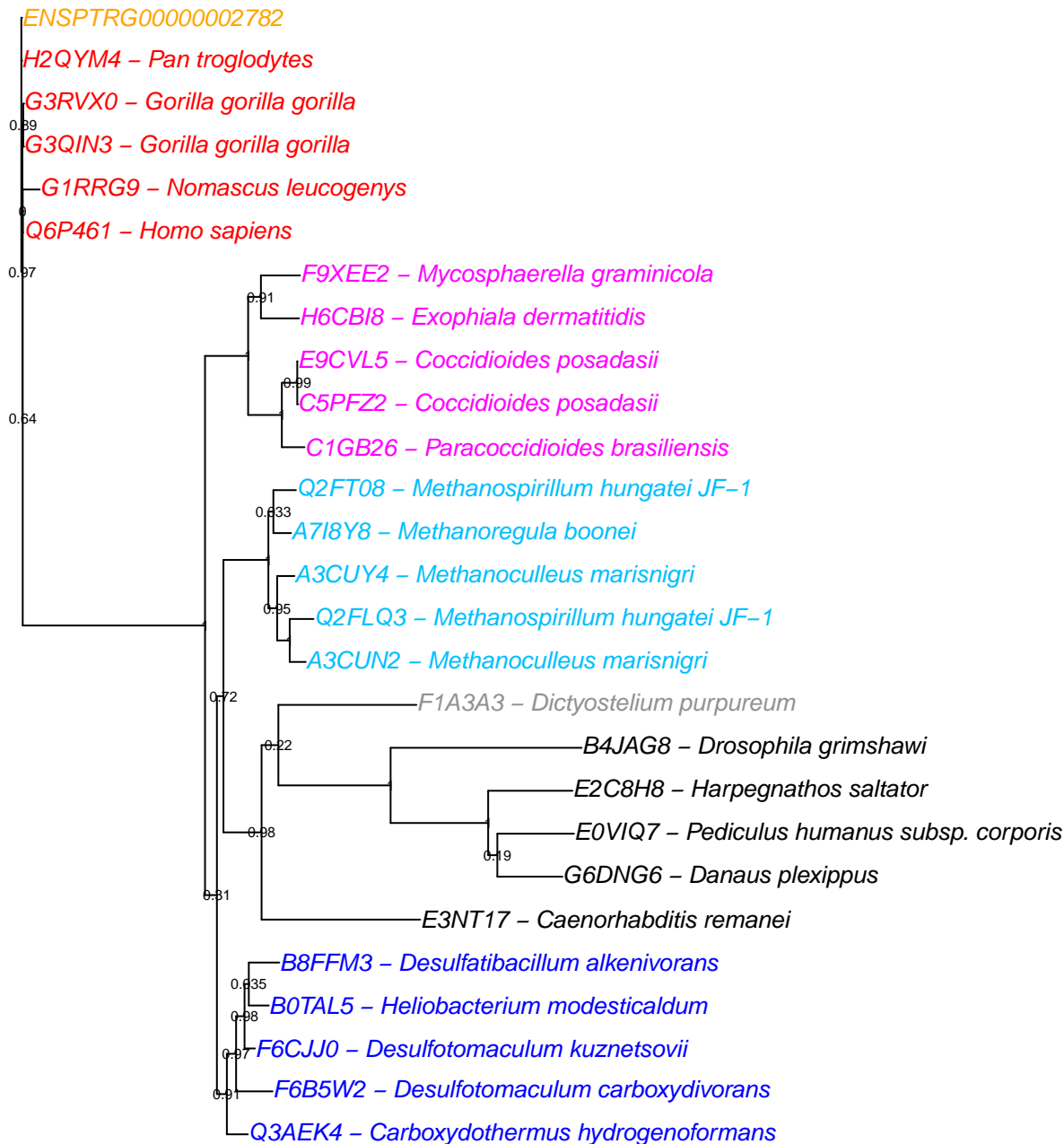


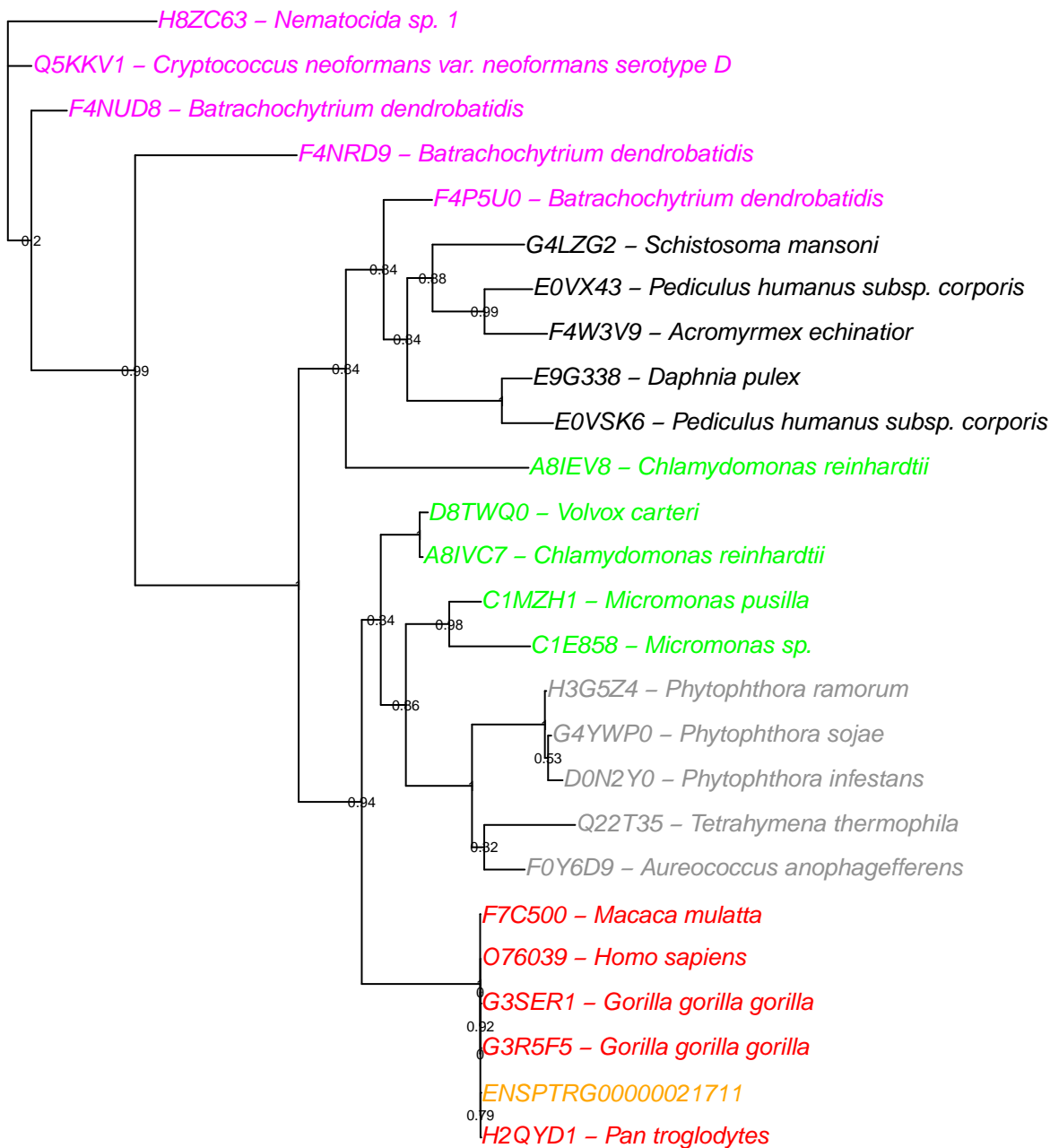


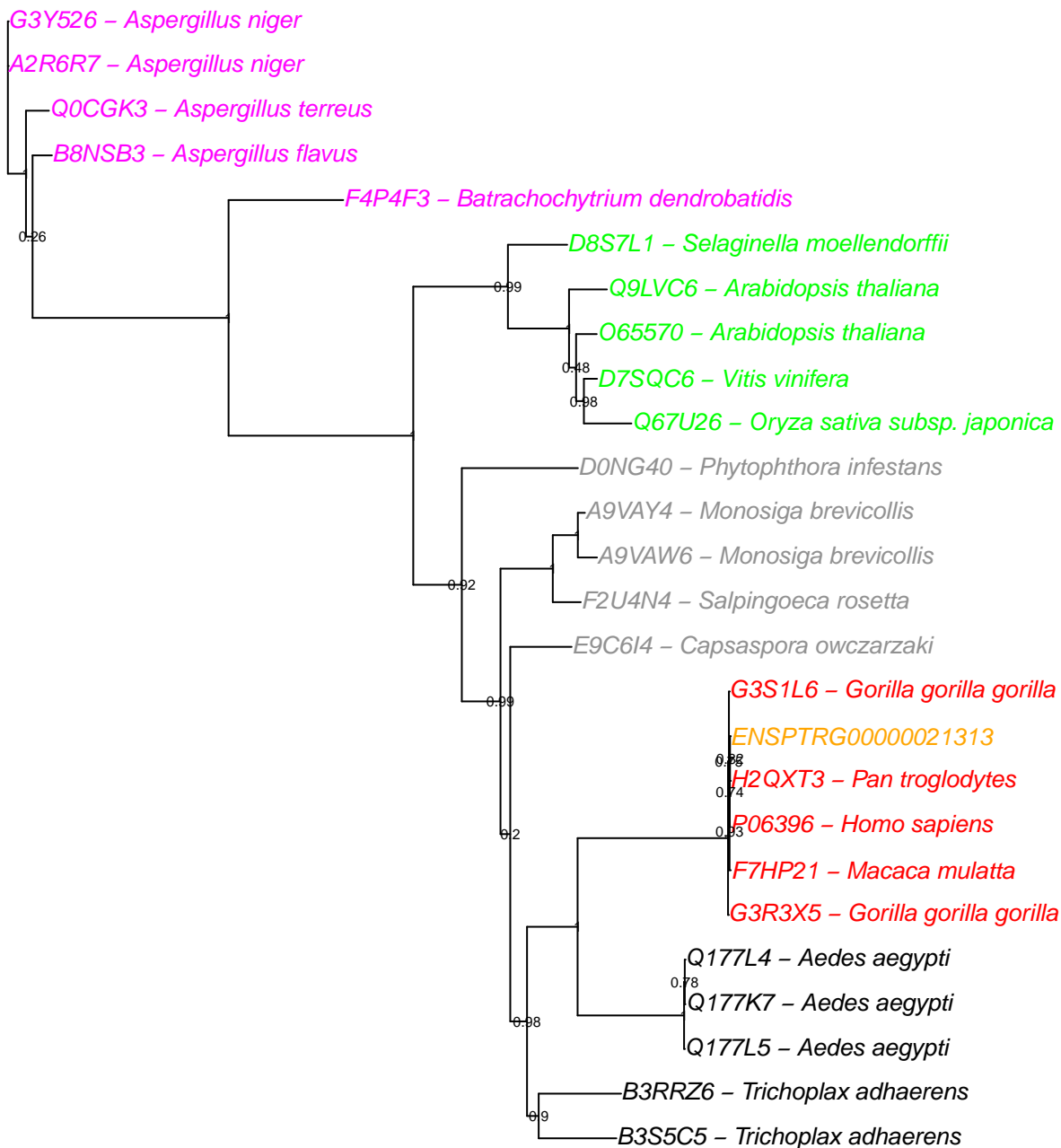


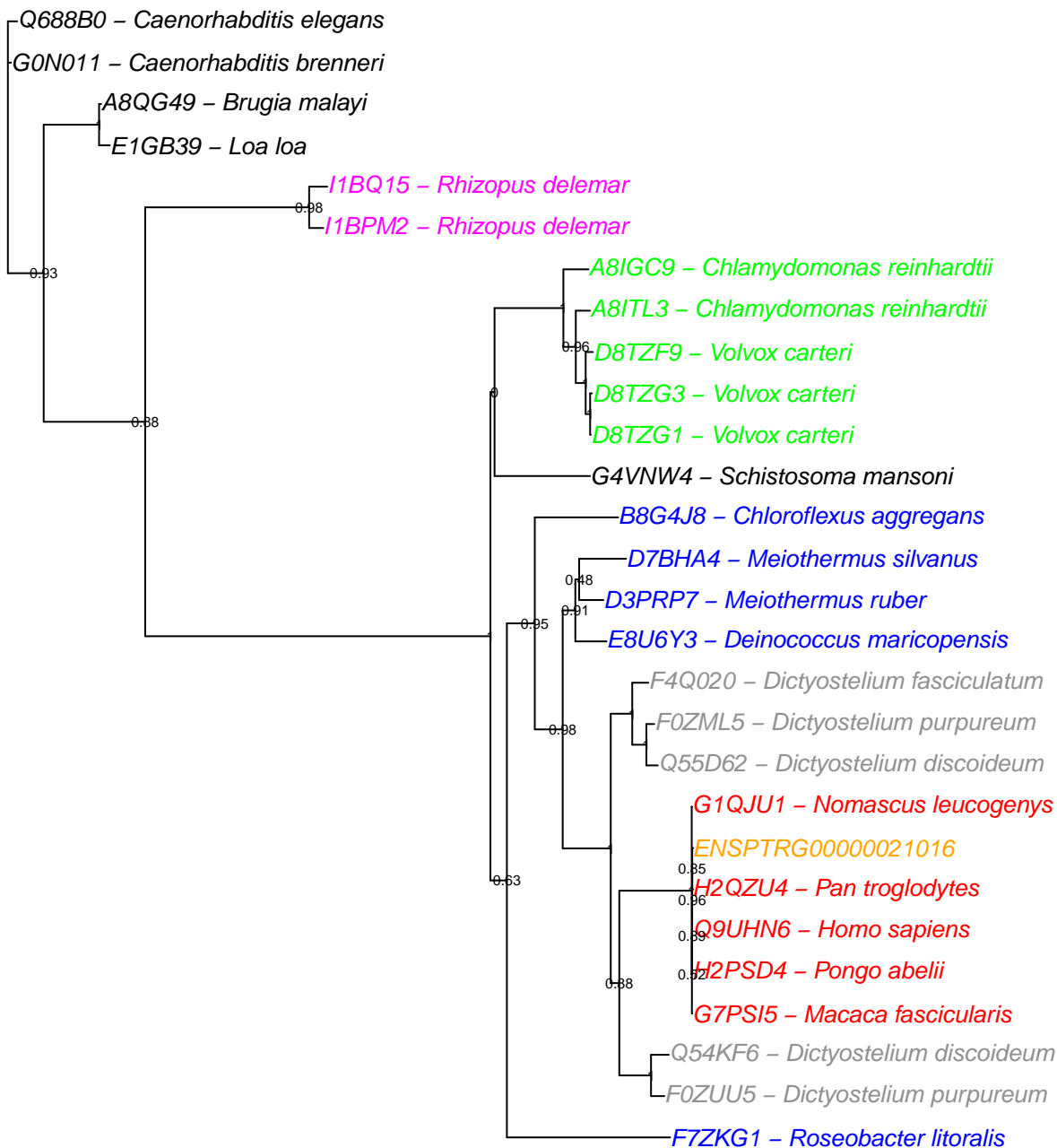
C4JVF4 – *Uncinocarpus reesii*













F7Y687 – *Mesorhizobium opportunistum*

E8TIT1 – *Mesorhizobium ciceri* bv. *biserrulae*

E4SPX6 – *Streptococcus thermophilus*

Q03MS9 – *Streptococcus thermophilus*

Q0CAX2 – *Aspergillus terreus*

ENSPTRG000000020544

G7PCR1 – *Macaca fascicularis*

G1QZB2 – *Nomascus leucogenys*

H2QWN3 – *Pan troglodytes*

F7H1Z7 – *Callithrix jacchus*

F6UTD9 – *Macaca mulatta*

I1C447 – *Rhizopus delemar*

F9FZM0 – *Fusarium oxysporum*

B8PCC4 – *Postia placenta*

B8PKM3 – *Postia placenta*

A9KK06 – *Clostridium phytofermentans*

Q4JCD1 – *Sulfolobus acidocaldarius*

F4G0D4 – *Metallosphaera cuprina*

A4YDN3 – *Metallosphaera sedula*

Q97YM4 – *Sulfolobus solfataricus*

D7G7X6 – *Ectocarpus siliculosus*

E4NTD4 – *Halogeometricum borinquense*

D8LPB5 – *Ectocarpus siliculosus*

A8PV21 – *Brugia malayi*

A8XE88 – *Caenorhabditis briggsae*

G5ECD6 – *Caenorhabditis elegans*

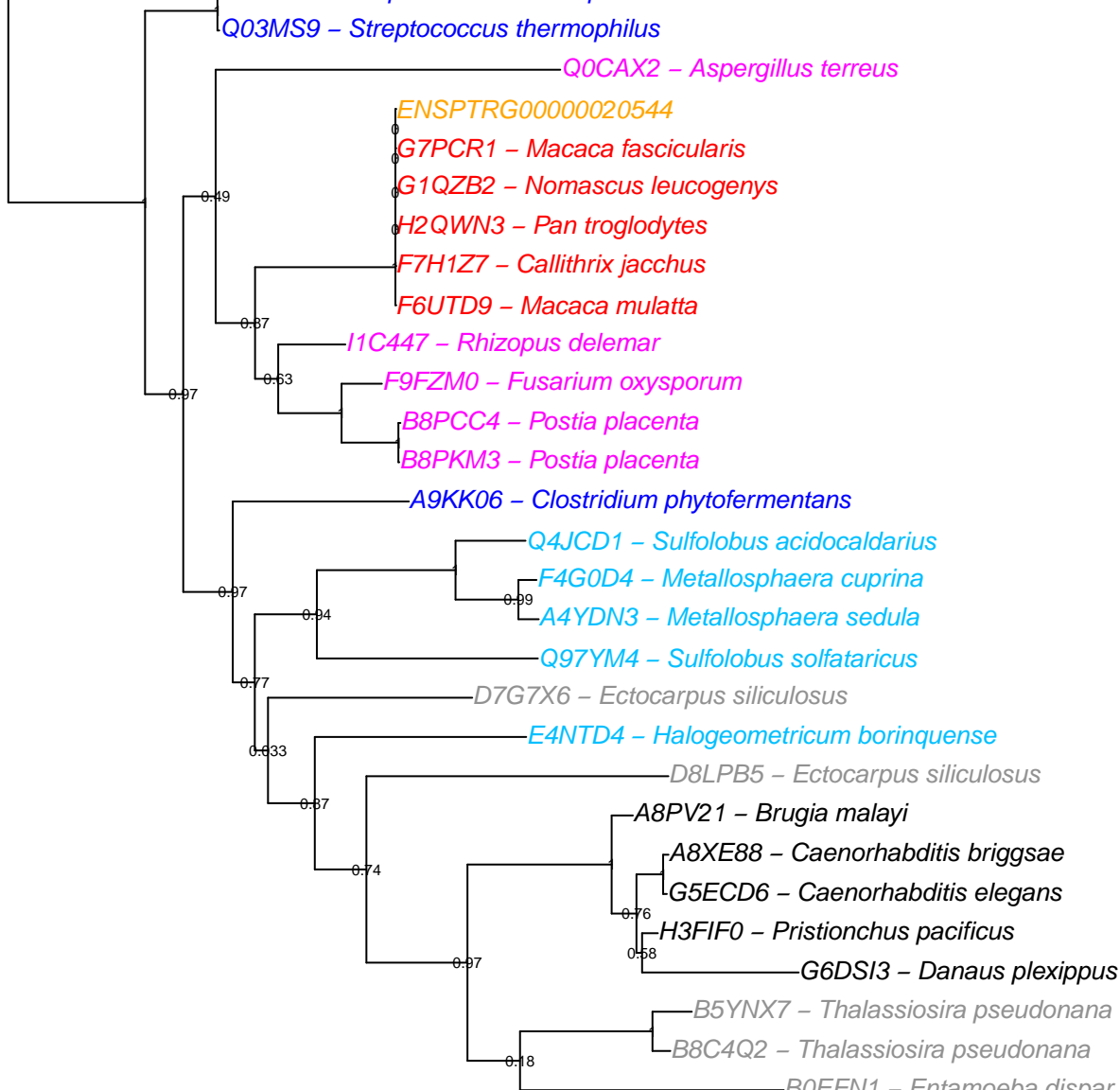
H3FIF0 – *Pristionchus pacificus*

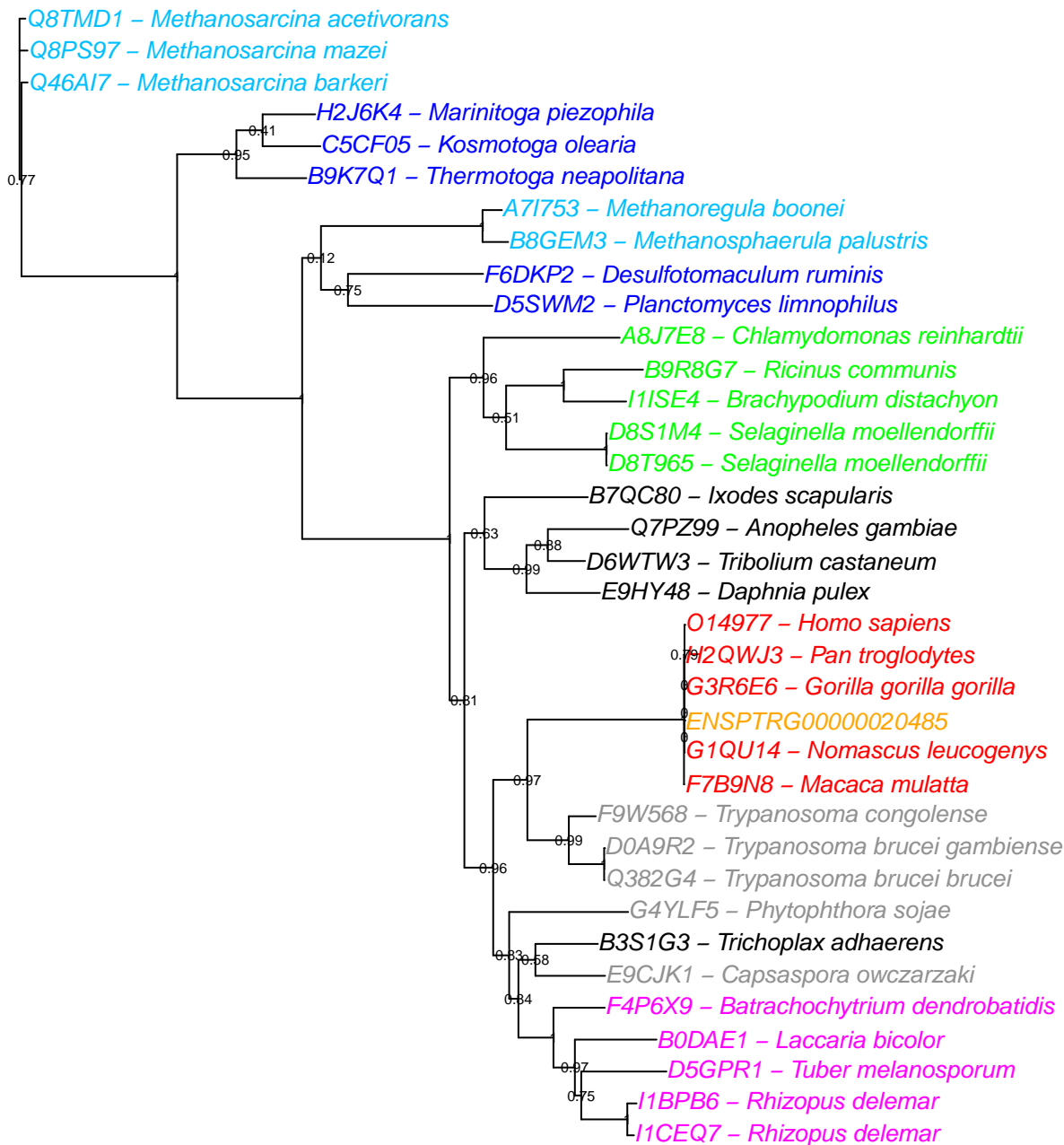
G6DSI3 – *Danaus plexippus*

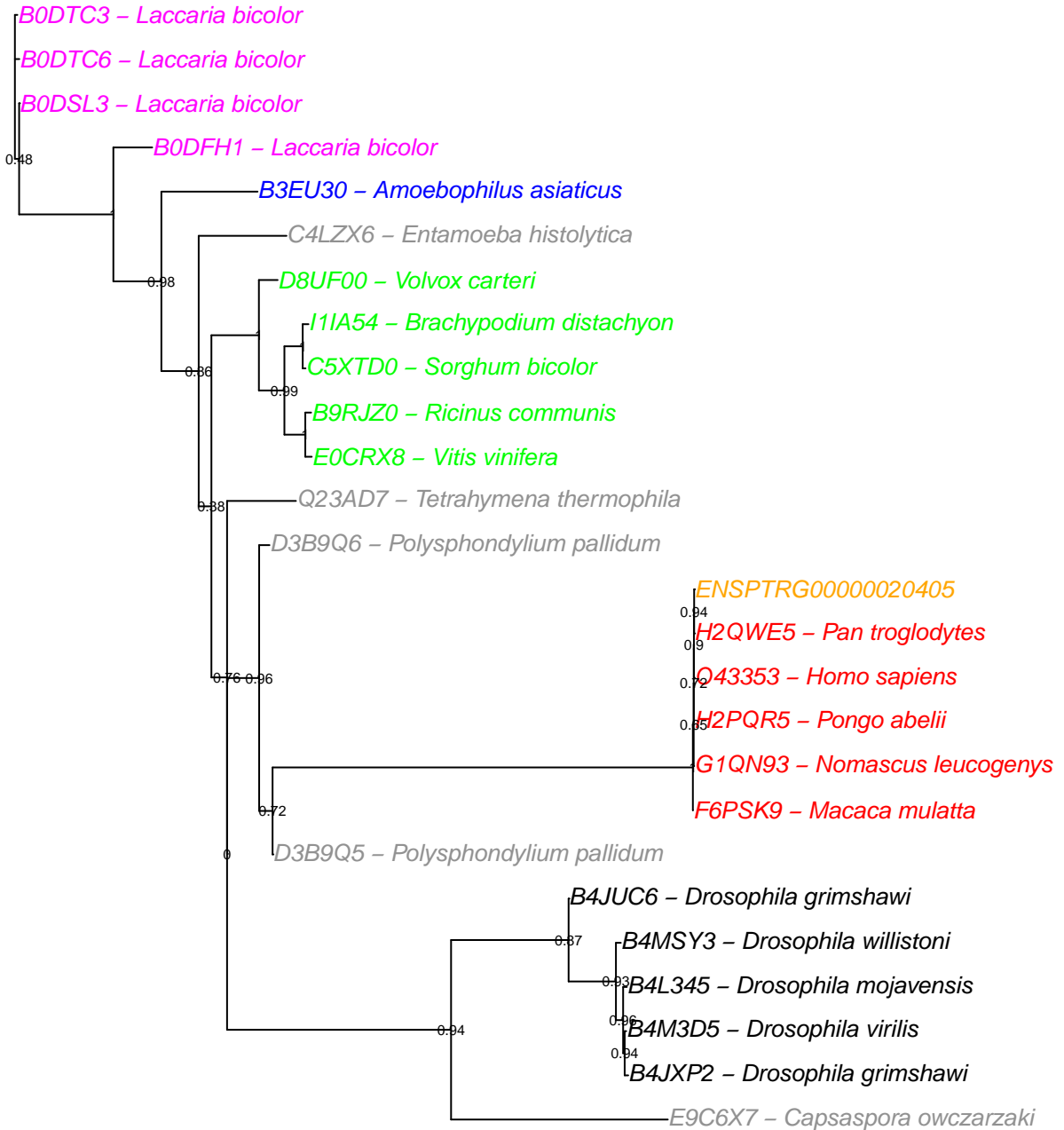
B5YNX7 – *Thalassiosira pseudonana*

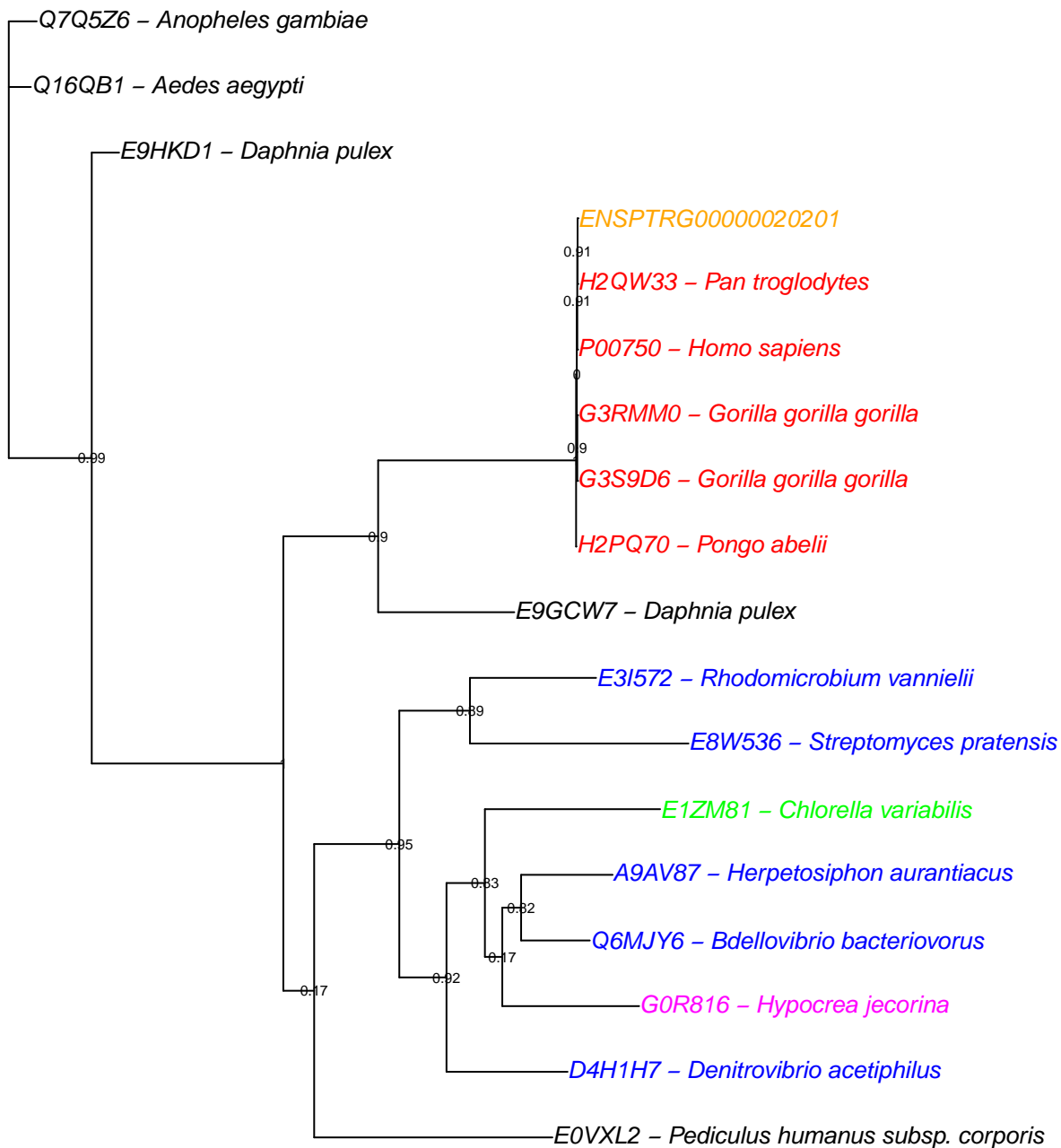
B8C4Q2 – *Thalassiosira pseudonana*

B0EFN1 – *Entamoeba dispar*









C5JR05 – *Ajellomyces dermatitidis*

F2TMN0 – *Ajellomyces dermatitidis*

C5GDB3 – *Ajellomyces dermatitidis*

C1GAY4 – *Paracoccidioides brasiliensis*

G4NFA9 – *Magnaporthe oryzae*

E9C2C5 – *Capsaspora owczarzaki*

B3RNK9 – *Trichoplax adhaerens*

Q8PUD6 – *Methanosarcina mazei*

D5EBF9 – *Methanohalophilus mahii*

D1YXW1 – *Methanocella paludicola*

Q0W0W0 – *Uncultured methanogenic archaeon RC-1*

B7PVF3 – *Ixodes scapularis*

E0VL49 – *Pediculus humanus subsp. corporis*

E1FMN5 – *Loa loa*

D7DTA9 – *Methanococcus voltae*

A9SNB5 – *Physcomitrella patens subsp. patens*

E3NV93 – *Caenorhabditis remanei*

C5KXF2 – *Perkinsus marinus*

C5KE02 – *Perkinsus marinus*

D6Y3K0 – *Thermobispora bispora*

F7HF09 – *Macaca mulatta*

F7BLC3 – *Callithrix jacchus*

G1RYB0 – *Nomascus leucogenys*

ENSPTRG00000019974

F2QVR0 – *Pan troglodytes*

Q9UJ68 – *Homo sapiens*

Q2JX11 – *Synechococcus sp.*

E0UDR1 – *Cyanothece sp.*

C7QL92 – *Cyanothece sp.*

B7K079 – *Cyanothece sp.*

B8BYR2 – *Thalassiosira pseudonana*

A4SAR1 – *Ostreococcus lucimarinus*

C1MXK0 – *Micromonas pusilla*

C1EE30 – *Micromonas sp.*

Q00WF0 – *Ostreococcus tauri*

F2UJV2 – *Salpingoeca rosetta*

B4KP38 – *Drosophila mojavensis*

B4LLK8 – *Drosophila virilis*

Q16UF5 – *Aedes aegypti*

C1FI76 – *Micromonas* sp.

C1FER3 – *Micromonas* sp.

C1FER6 – *Micromonas* sp.

C1DZD8 – *Micromonas* sp.

C1E711 – *Micromonas* sp.

B2IUT6 – *Nostoc punctiforme*

Q10Y31 – *Trichodesmium erythraeum*

Q46A62 – *Methanosarcina barkeri*

Q8TNI4 – *Methanosarcina acetivorans*

Q466H0 – *Methanosarcina barkeri*

Q469S7 – *Methanosarcina barkeri*

Q8Z0H2 – *Nostoc* sp.

E0UBI6 – *Cyanothece* sp.

D3BJD3 – *Polysphondylium pallidum*

D3BLJ5 – *Polysphondylium pallidum*

F4PKM0 – *Dictyostelium fasciculatum*

F1A482 – *Dictyostelium purpureum*

Q55E58 – *Dictyostelium discoideum*

ENSPTRG00000019969

H2QVQ6 – *Pan troglodytes*

Q9Y4C4 – *Homo sapiens*

G1RY51 – *Nomascus leucogenys*

F7CPG7 – *Callithrix jacchus*

F6VEH3 – *Macaca mulatta*

F4NSG9 – *Batrachochytrium dendrobatidis*

B2IZE4 – *Nostoc punctiforme*

B0W215 – *Culex quinquefasciatus*

G1XEP9 – *Arthrobotrys oligospora*

F8NV37 – *Serpula lacrymans* var. *lacrymans*

Q2HD76 – *Chaetomium globosum*

I1RCC9 – *Gibberella zeae*

H9J781 – *Bombyx mori*

ENSPTRG00000019619

Q2QLE5 – *Pan troglodytes*

P13569 – *Homo sapiens*

Q2IBF6 – *Gorilla gorilla gorilla*

Q2IBE4 – *Pongo abelii*

G1RLX5 – *Nomascus leucogenys*

0.9

0

0.099

0.45

H9KT51 – *Apis mellifera*

D6WJN5 – *Tribolium castaneum*

H9KLS4 – *Apis mellifera*

E9CAU2 – *Capsaspora owczarzaki*

F2U8A6 – *Salpingoeca rosetta*

D8LSW3 – *Ectocarpus siliculosus*

F0ZIX3 – *Dictyostelium purpureum*

E1FPA0 – *Loa loa*

F0XSG5 – *Grosmannia clavigera*

F9G4Z3 – *Fusarium oxysporum*

H6C005 – *Exophiala dermatitidis*

A1CAQ8 – *Aspergillus clavatus*

B6HQB6 – *Penicillium chrysogenum*

A9UX43 – *Monosiga brevicollis*

C5Z4P2 – *Sorghum bicolor*

I1GXZ0 – *Brachypodium distachyon*

I1GXY8 – *Brachypodium distachyon*

I1GXY7 – *Brachypodium distachyon*

I1GXZ1 – *Brachypodium distachyon*

Q6MK31 – *Bdellovibrio bacteriovorus*

G7YA78 – *Clonorchis sinensis*

0.52

0.33

0.38

0.64

0.35

0.19

0.16

0.97

0.88

D8SDB4 – *Selaginella moellendorffii*

D8RF61 – *Selaginella moellendorffii*

D7KKS1 – *Arabidopsis lyrata* subsp. *lyrata*

F6HPK8 – *Vitis vinifera*

B9S2J9 – *Ricinus communis*

F4P0B4 – *Batrachochytrium dendrobatidis*

B7P224 – *Ixodes scapularis*

B7PI98 – *Ixodes scapularis*

B7PVF5 – *Ixodes scapularis*

G7P0H4 – *Macaca fascicularis*

ENSPTRG00000019040

H2QUD1 – *Pan troglodytes*

Q9Y239 – *Homo sapiens*

G1RYR7 – *Nomascus leucogenys*

H2PMH7 – *Pongo abelii*

B3S841 – *Trichoplax adhaerens*

G4TPJ4 – *Piriformospora indica*

Q6MBI4 – *Protochlamydia amoebophila*

Q6MCK5 – *Protochlamydia amoebophila*

Q6MAR4 – *Protochlamydia amoebophila*

Q6MEL1 – *Protochlamydia amoebophila*

Q6MB70 – *Protochlamydia amoebophila*

C7YPV1 – *Nectria haematococca*

E9CC15 – *Capsaspora owczarzaki*

E9CJ25 – *Capsaspora owczarzaki*

E9CD29 – *Capsaspora owczarzaki*

E9CD01 – *Capsaspora owczarzaki*

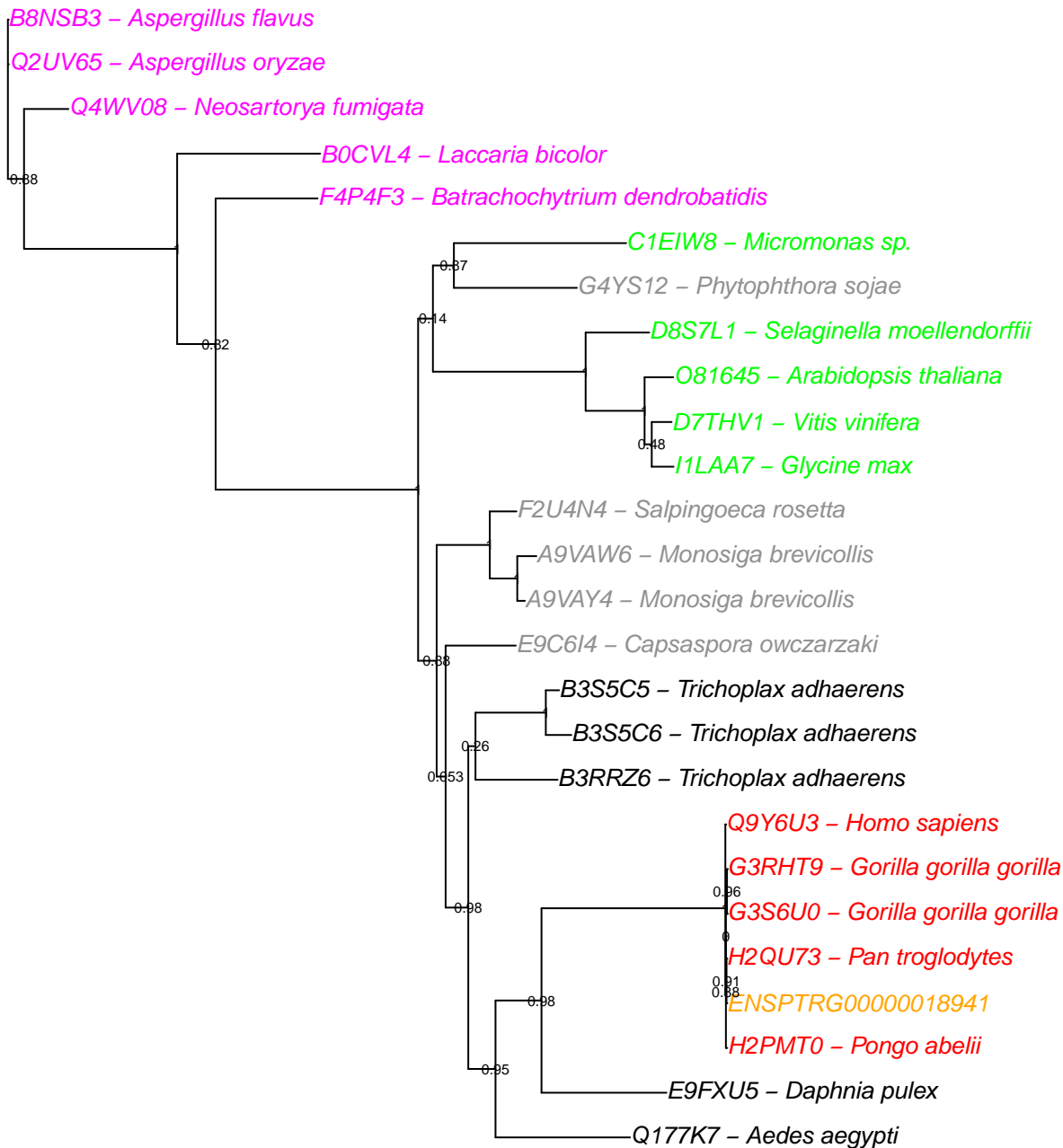
E9CCR0 – *Capsaspora owczarzaki*

F4P4I2 – *Batrachochytrium dendrobatidis*

G4TJ56 – *Piriformospora indica*

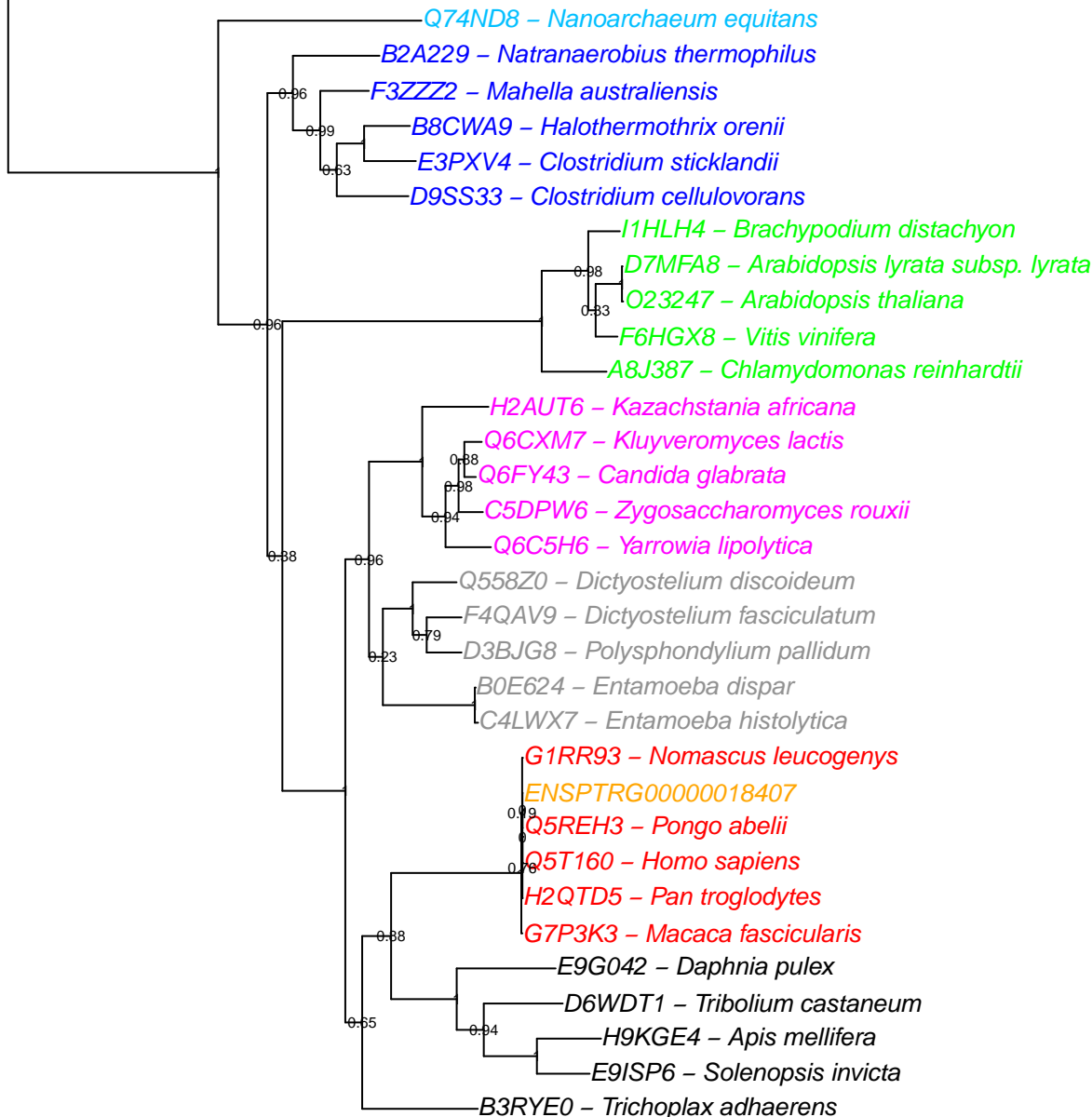
G4VQ91 – *Schistosoma mansoni*

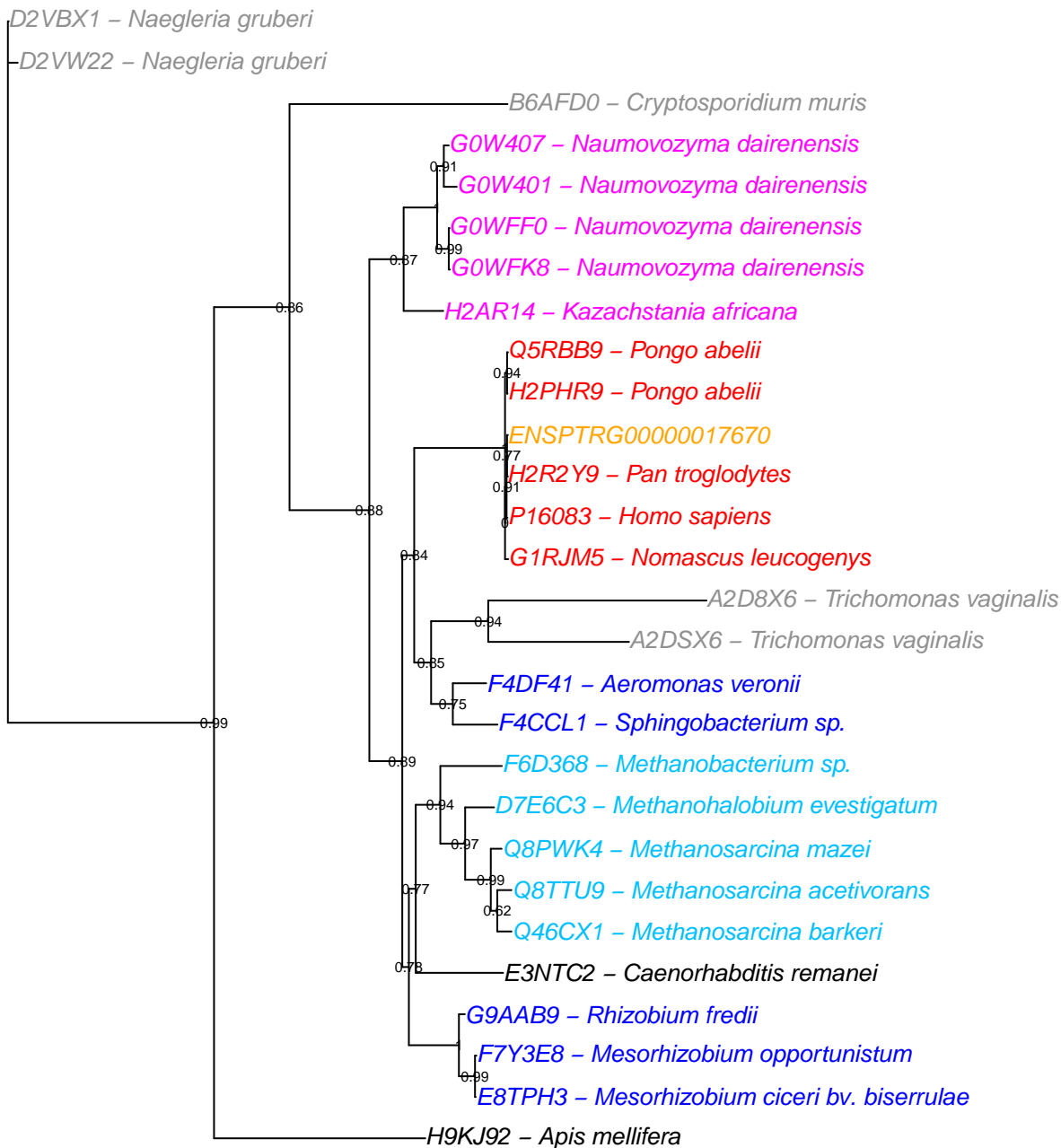


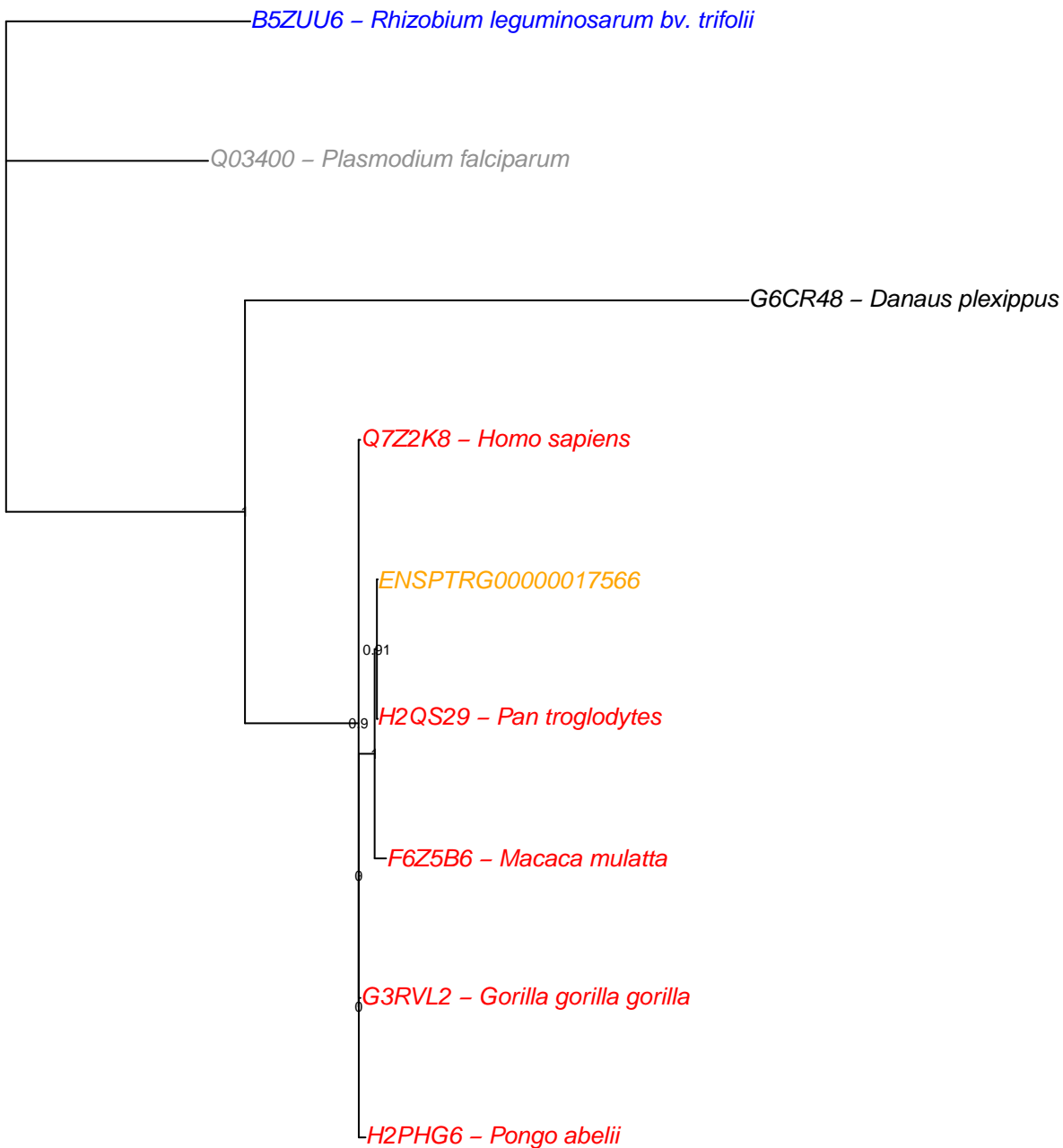


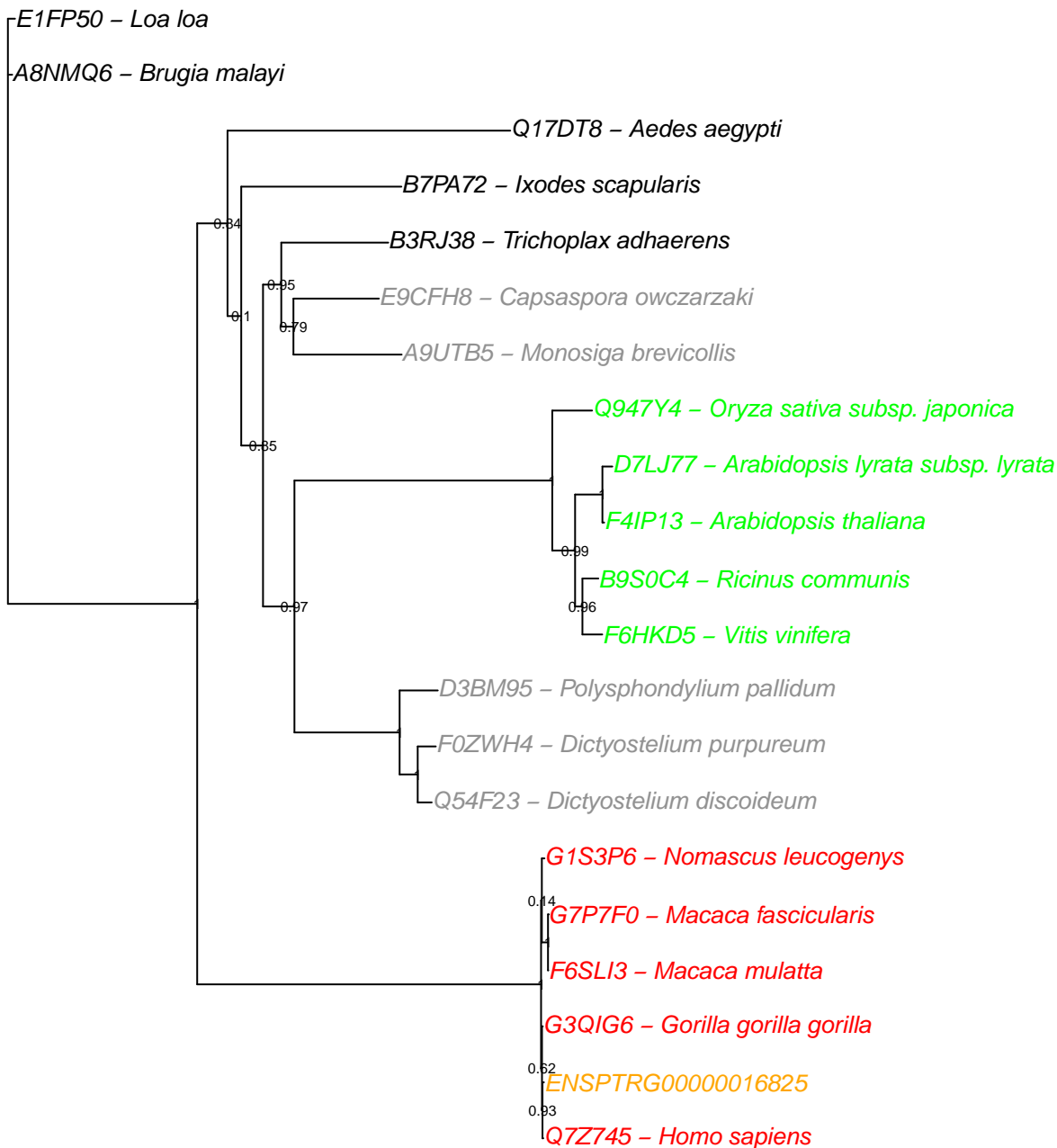
B0R9X1 – *Halobacterium salinarum*

Q9HHN2 – *Halobacterium salinarum*









D8RJE3 – *Selaginella moellendorffii*

D8QRF8 – *Selaginella moellendorffii*

D1CEP3 – *Thermobaculum terrenum*

D1C273 – *Sphaerobacter thermophilus*

B9KX13 – *Thermomicrobium roseum*

Q2JJ39 – *Synechococcus* sp.

C7PVW8 – *Catenulispora acidiphila*

F2L1D6 – *Thermoproteus uzoniensis*

Q8ZY90 – *Pyrobaculum aerophilum*

A1RTP0 – *Pyrobaculum islandicum*

B1L6M0 – *Korarchaeum cryptofilum*

G1R463 – *Nomascus leucogenys*

H2PEQ0 – *Pongo abelii*

ENSPTRG00000016582

H2QQE6 – *Pan troglodytes*

Q5H9U9 – *Homo sapiens*

G3RFR0 – *Gorilla gorilla gorilla*

E1Z6X1 – *Chlorella variabilis*

D8TRE7 – *Volvox carteri*

A8P3R8 – *Brugia malayi*

E3LYR5 – *Caenorhabditis remanei*

G0MLM2 – *Caenorhabditis brenneri*

Q09475 – *Caenorhabditis elegans*

A8X7Y0 – *Caenorhabditis briggsae*

F4Q478 – *Dictyostelium fasciculatum*

Q54XN7 – *Dictyostelium discoideum*

F0ZME4 – *Dictyostelium purpureum*

F4PHU3 – *Dictyostelium fasciculatum*

E5A985 – *Leptosphaeria maculans*

B8MUU2 – *Talaromyces stipitatus*

G7XJ82 – *Aspergillus kawachii*

F9X772 – *Mycosphaerella graminicola*

A7EYJ5 – *Sclerotinia sclerotiorum*

D8TRE6 – *Volvox carteri*

F2U1T7 – *Salpingoeca rosetta*

Q46DX3 – *Methanosarcina barkeri*

Q5CRN9 – *Cryptosporidium parvum*

Q5CMX5 – *Cryptosporidium hominis*

C5LT87 – *Perkinsus marinus*

A8P3R8 – *Brugia malayi*

Q09475 – *Caenorhabditis elegans*

E3LYR5 – *Caenorhabditis remanei*

G0MLM2 – *Caenorhabditis brenneri*

A8X7Y0 – *Caenorhabditis briggsae*

G7P6J3 – *Macaca fascicularis*

ENSPTRG00000016581

H2QQE5 – *Pan troglodytes*

Q8IY21 – *Homo sapiens*

G1R461 – *Nomascus leucogenys*

F7FXI3 – *Macaca mulatta*

E1Z6X1 – *Chlorella variabilis*

D8TRE7 – *Volvox carteri*

F4PHU3 – *Dictyostelium fasciculatum*

F4Q478 – *Dictyostelium fasciculatum*

A7EYJ5 – *Sclerotinia sclerotiorum*

B8MUU2 – *Talaromyces stipitatus*

G7XJ82 – *Aspergillus kawachii*

A2R2S0 – *Aspergillus niger*

G3XNV9 – *Aspergillus niger*

D8TRE6 – *Volvox carteri*

B5ICF6 – *Aciduliprofundum boonei*

D5U0F4 – *Thermosphaera aggregans*

F2L1D6 – *Thermoproteus uzoniensis*

A1RTP0 – *Pyrobaculum islandicum*

A8AC11 – *Ignicoccus hospitalis*

J1IIP7 – *Brachypodium distachyon*

C5YNH8 – *Sorghum bicolor*

G7WFS2 – *Desulfosporosinus orientis*

Q24W91 – *Desulfitobacterium hafniense*

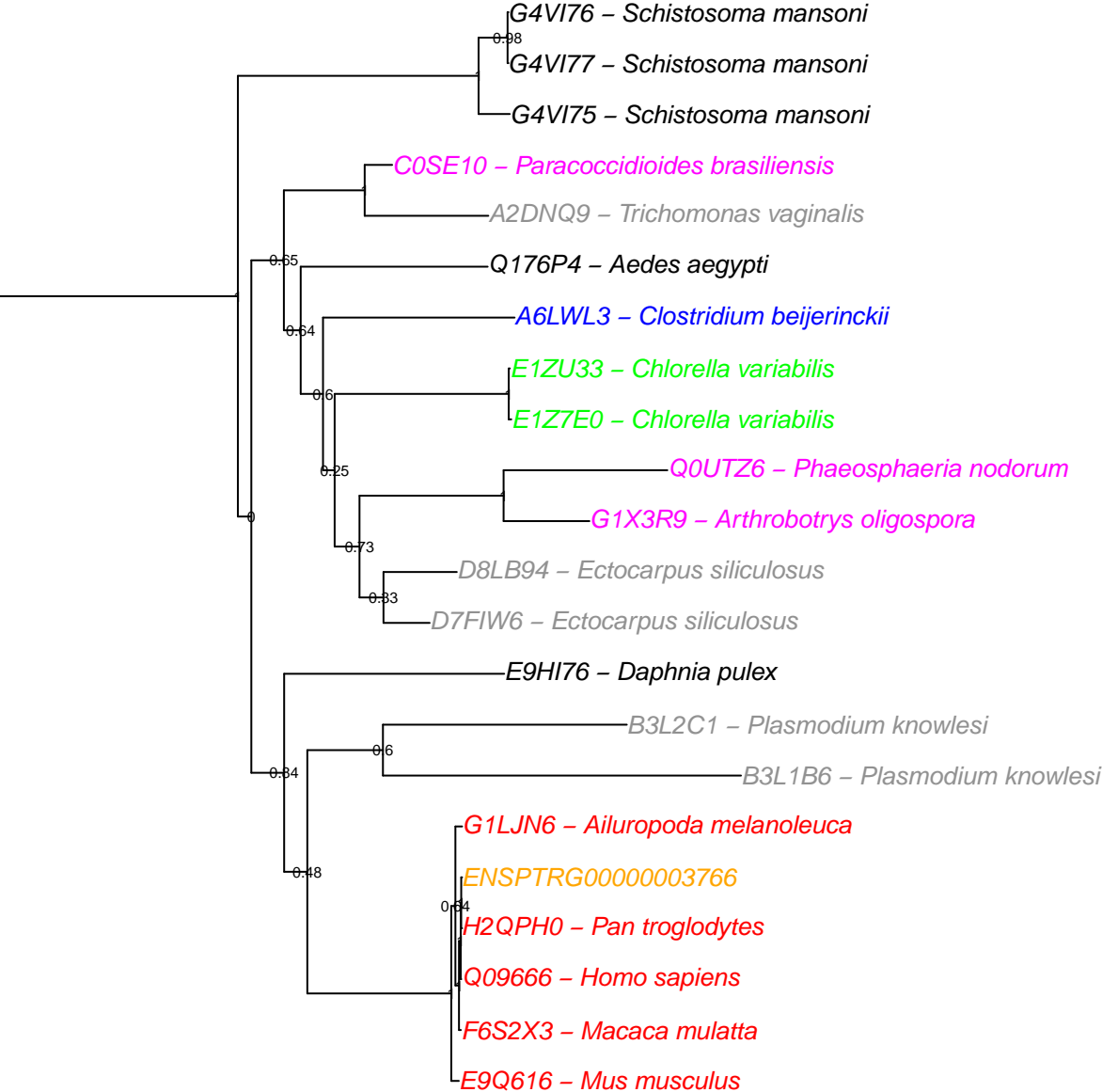
B8G035 – *Desulfitobacterium hafniense*

D1C273 – *Sphaerobacter thermophilus*

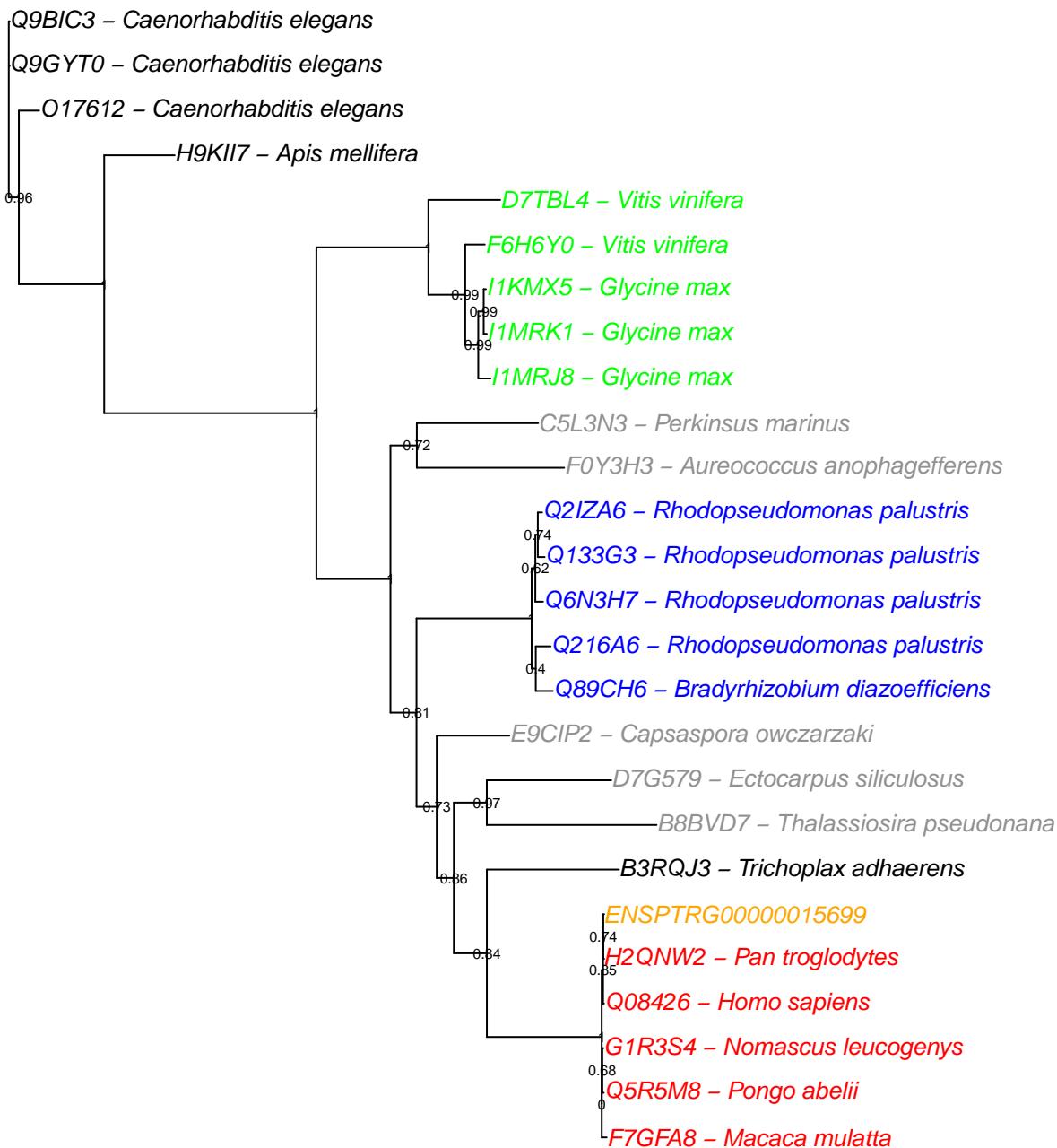
B9KXI3 – *Thermomicrobium roseum*

A5VKZ1 – *Lactobacillus reuteri*

B2G8C6 – *Lactobacillus reuteri*







G2REC6 – *Thielavia terrestris*

G2Q0S2 – *Thielavia heterothallica*

G8Y9J1 – *Pichia sorbitophila*

G3RHA4 – *Gorilla gorilla gorilla*

0.81  
FNSPTRG00000015607

0.82  
H2QNQ1 – *Pan troglodytes*

A6NIV6 – *Homo sapiens*

H2PBY5 – *Pongo abelii*

G1QZ31 – *Nomascus leucogenys*

Q46A62 – *Methanosarcina barkeri*

Q8TNI4 – *Methanosarcina acetivorans*

0.44  
Q466H0 – *Methanosarcina barkeri*

0.13  
Q469S7 – *Methanosarcina barkeri*

0.8  
Q54AX5 – *Dictyostelium discoideum*

0.32  
F0ZC01 – *Dictyostelium purpureum*

0.99  
B0E9Q3 – *Entamoeba dispar*

0.84  
F4NUK7 – *Batrachochytrium dendrobatidis*

0.76  
E9C0I1 – *Capsaspora owczarzaki*

0.86  
C1FHV9 – *Micromonas* sp.

0.61  
C1EBH5 – *Micromonas* sp.

0.26  
C1FER3 – *Micromonas* sp.

C1E711 – *Micromonas* sp.

C1FD29 – *Micromonas* sp.

0.66  
B2IUT6 – *Nostoc punctiforme*

0.85  
B0CFN4 – *Acaryochloris marina*

0.84  
Q72U35 – *Leptospira interrogans* serogroup Icterohaemorrhagiae serovar copenhageni

B8HU75 – *Cyanothece* sp.

0.9  
Q10Y31 – *Trichodesmium erythraeum*

0.94  
F0Y6Y8 – *Aureococcus anophagefferens*

B4QWP1 – *Drosophila simulans*

0.33  
B4ICM6 – *Drosophila sechellia*

0.94  
B4NKQ3 – *Drosophila willistoni*

0.98  
O61967 – *Caenorhabditis elegans*

H2VST3 – *Caenorhabditis japonica*

H8ZAA6 – *Nematocida* sp. 1

F7UK63 – *Synechocystis* sp.

-E0U7S8 – *Cyanothece* sp.

– *D8TTE1 – Volvox carteri*

-G7WKC5 – *Methanosaeta harundinacea*

**A5FH24 – *Flavobacterium johnsoniae***

–F0Y127 – *Aureococcus anophagefferens*

– *B0D0L7* – *Laccaria bicolor*

—A8N6Y7 – *Coprinopsis cinerea*

—D8QC52 – *Schizophyllum commune*

-D5GJR6 – *Tuber melanosporum*

– G1XKA8 – *Arthrobotrys oligospora*

– *F2IIT1 – Fluviicola taffensis*

-D2VWR8 – *Naegleria gruberi*

-D2VBP8 – *Naegleria gruberi*

—D2VC27 – *Naegleria gruberi*

-A8BLL1 – *Giardia intestinalis*

ENSPTRG00000015426

*H2QNF2 – Pan troglodytes*

G3QY08 – *Gorilla gorilla gorilla*

19 G1QUG1 – *Nomascus leucogenys*

*F6Q8F7 – Equus caballus*

**G7NXY0 – *Macaca fascicularis***

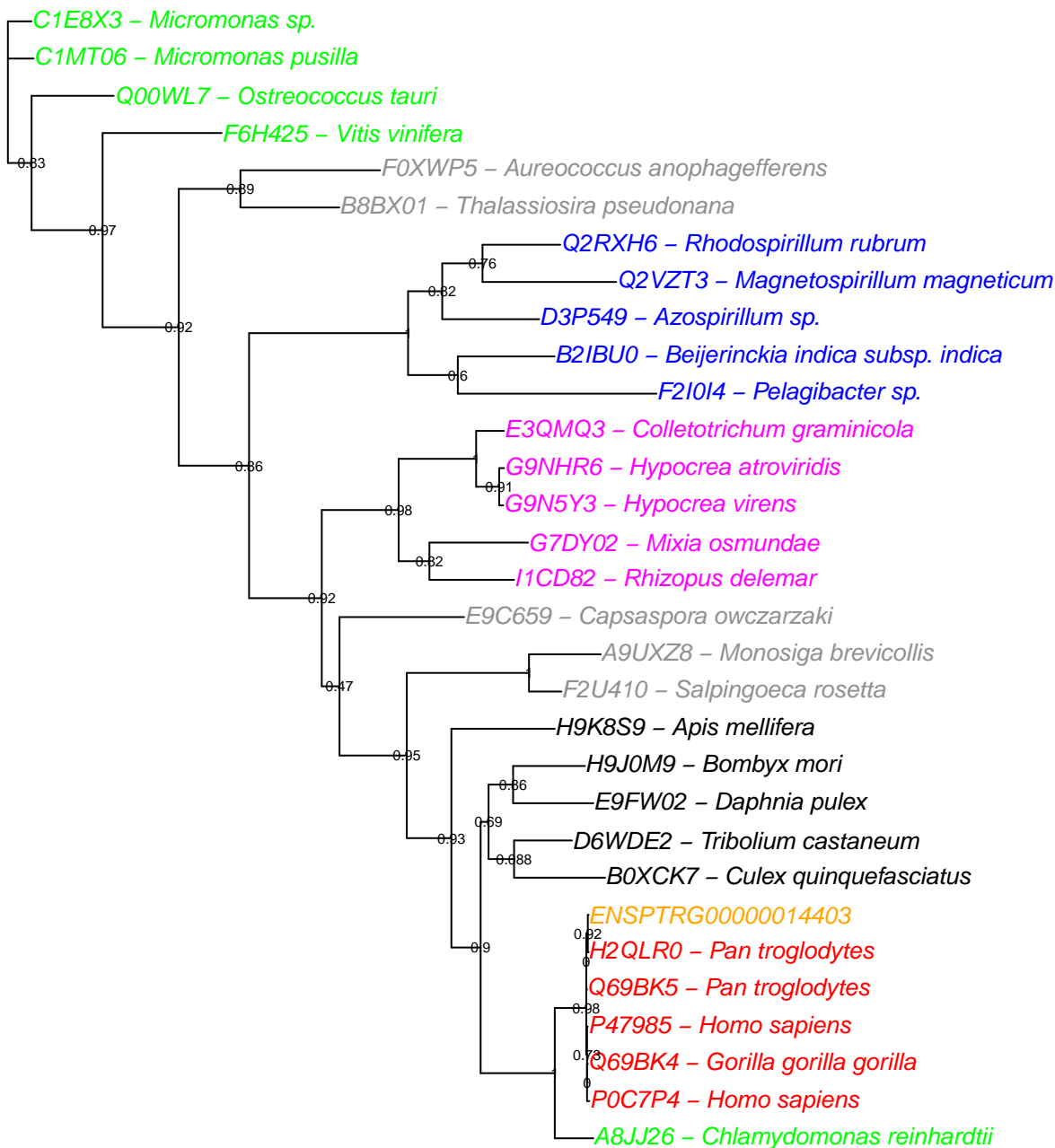
**H9J384 – *Bombyx mori***

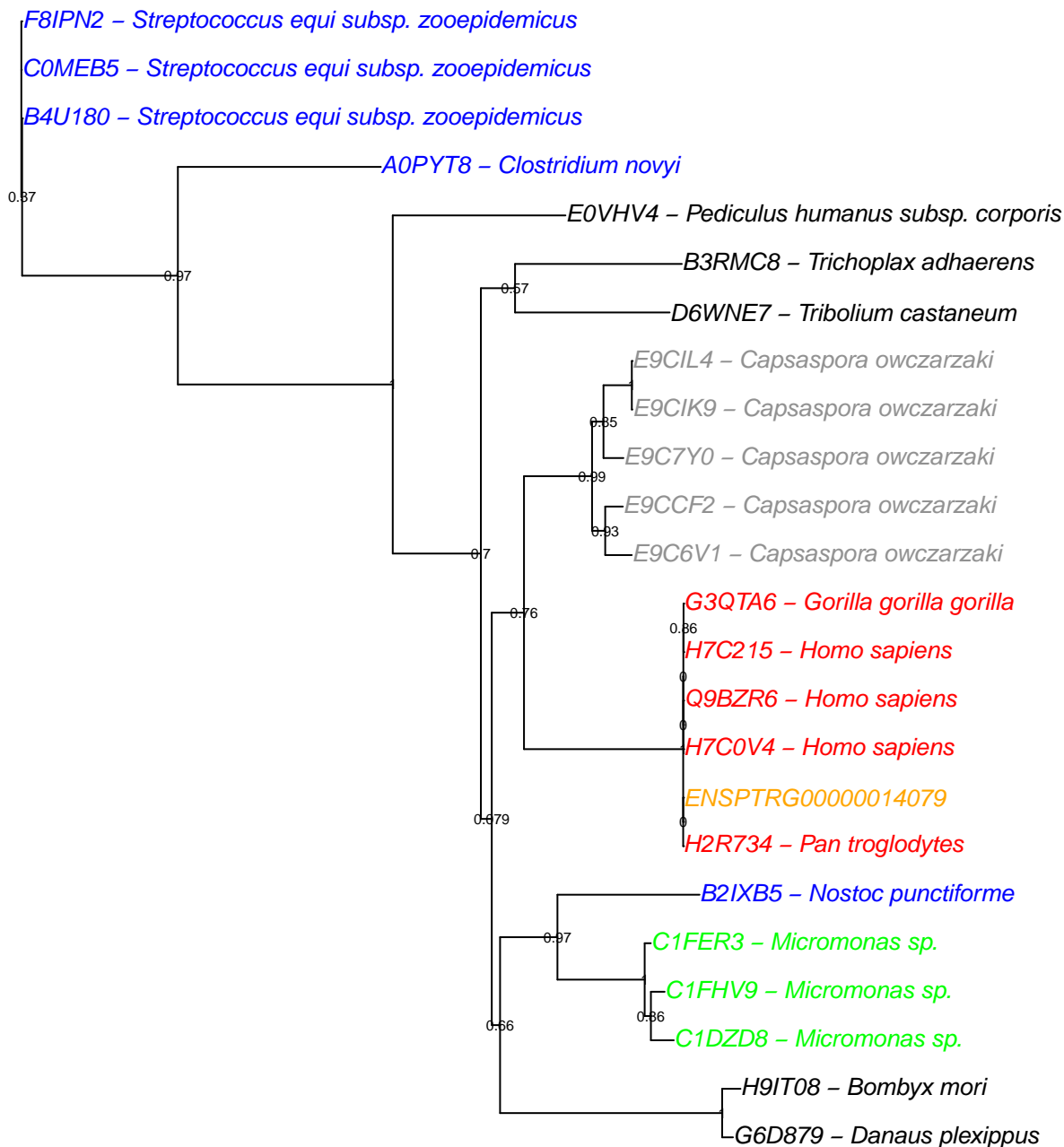
B3MIU8 – *Drosophila ananassae*

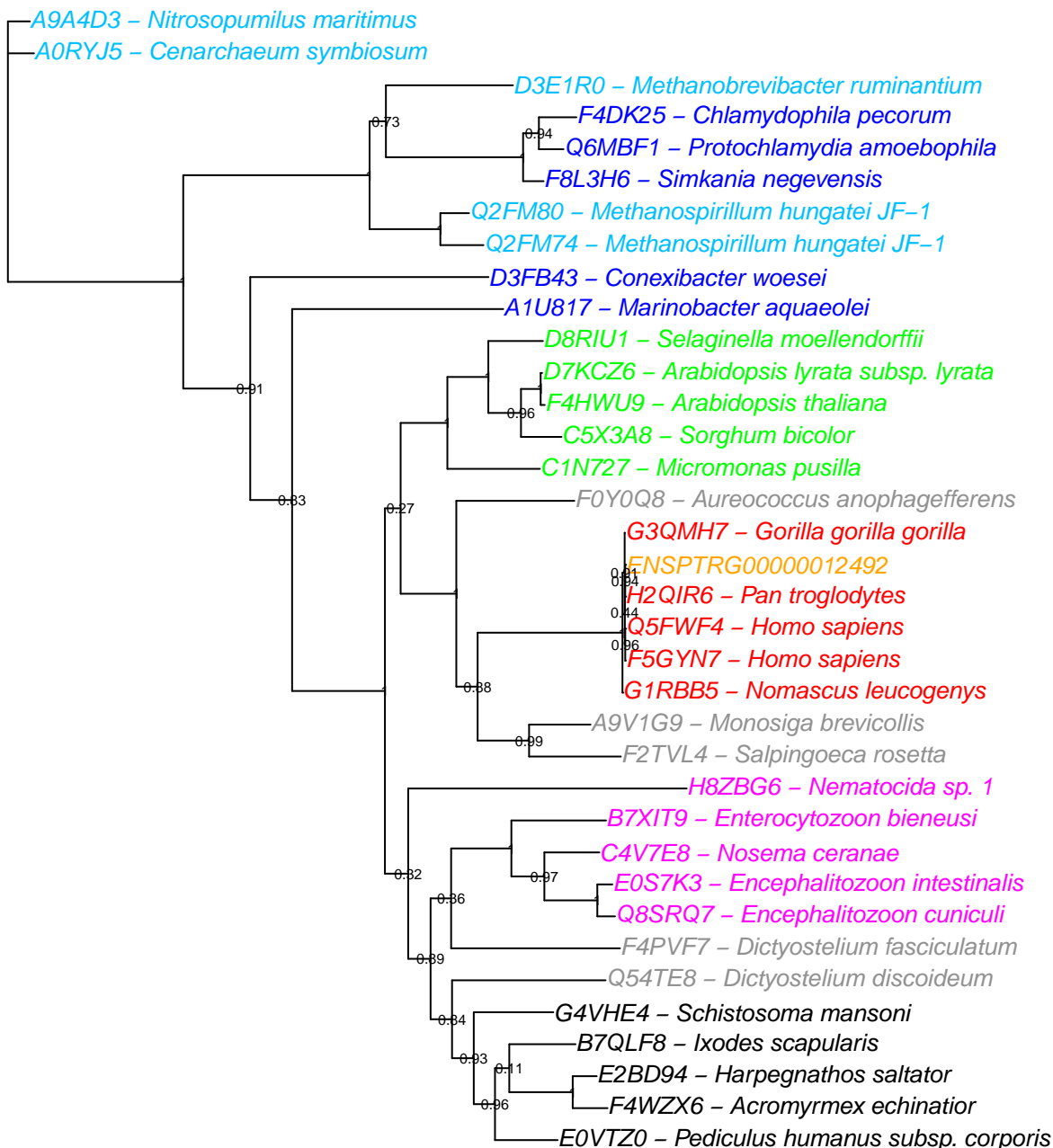
B4J948 - *Drosophila grimshawi*

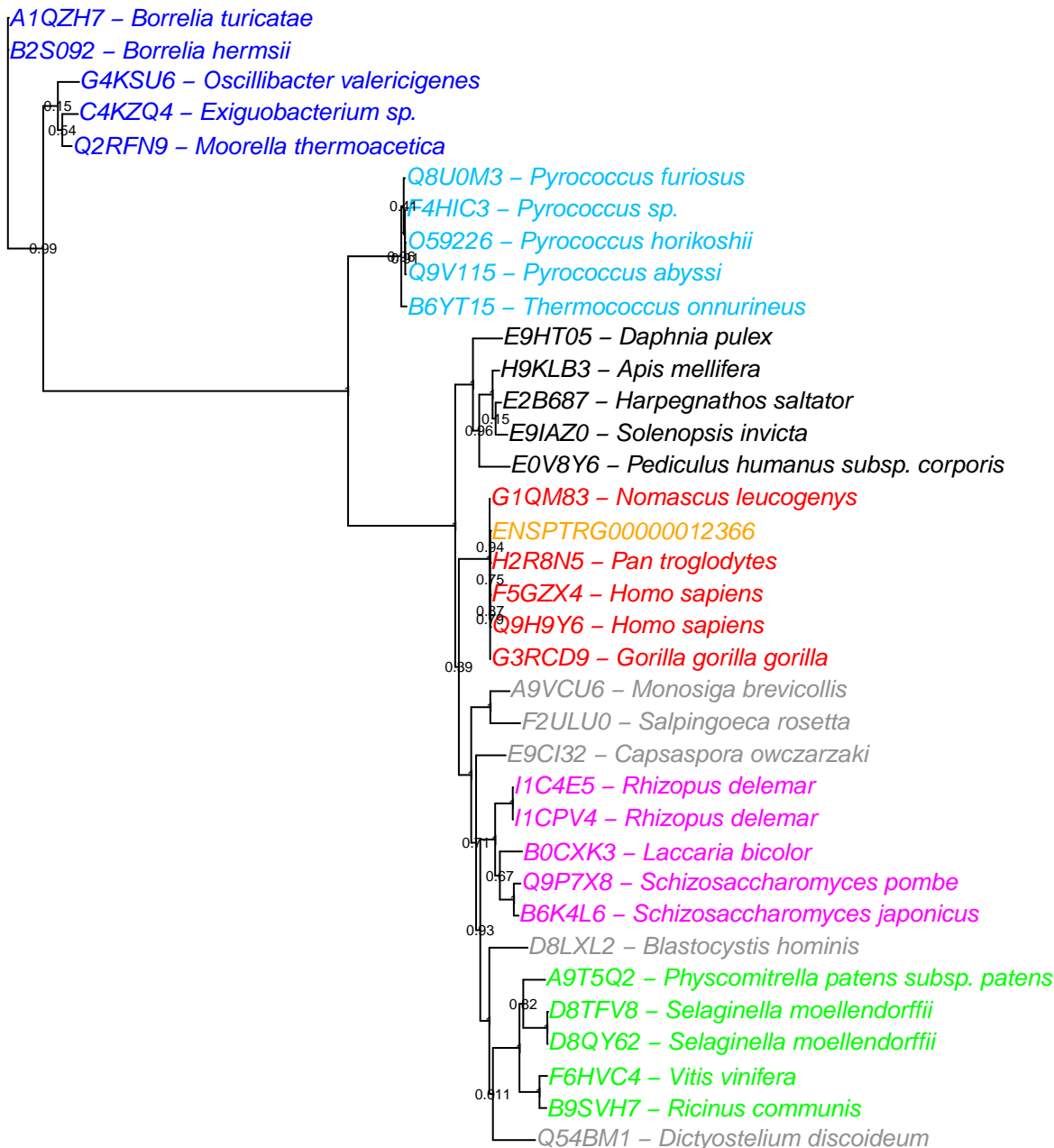
0.44 Q28ZN9 – *Drosophila pseudoobscura pseudoobscura*

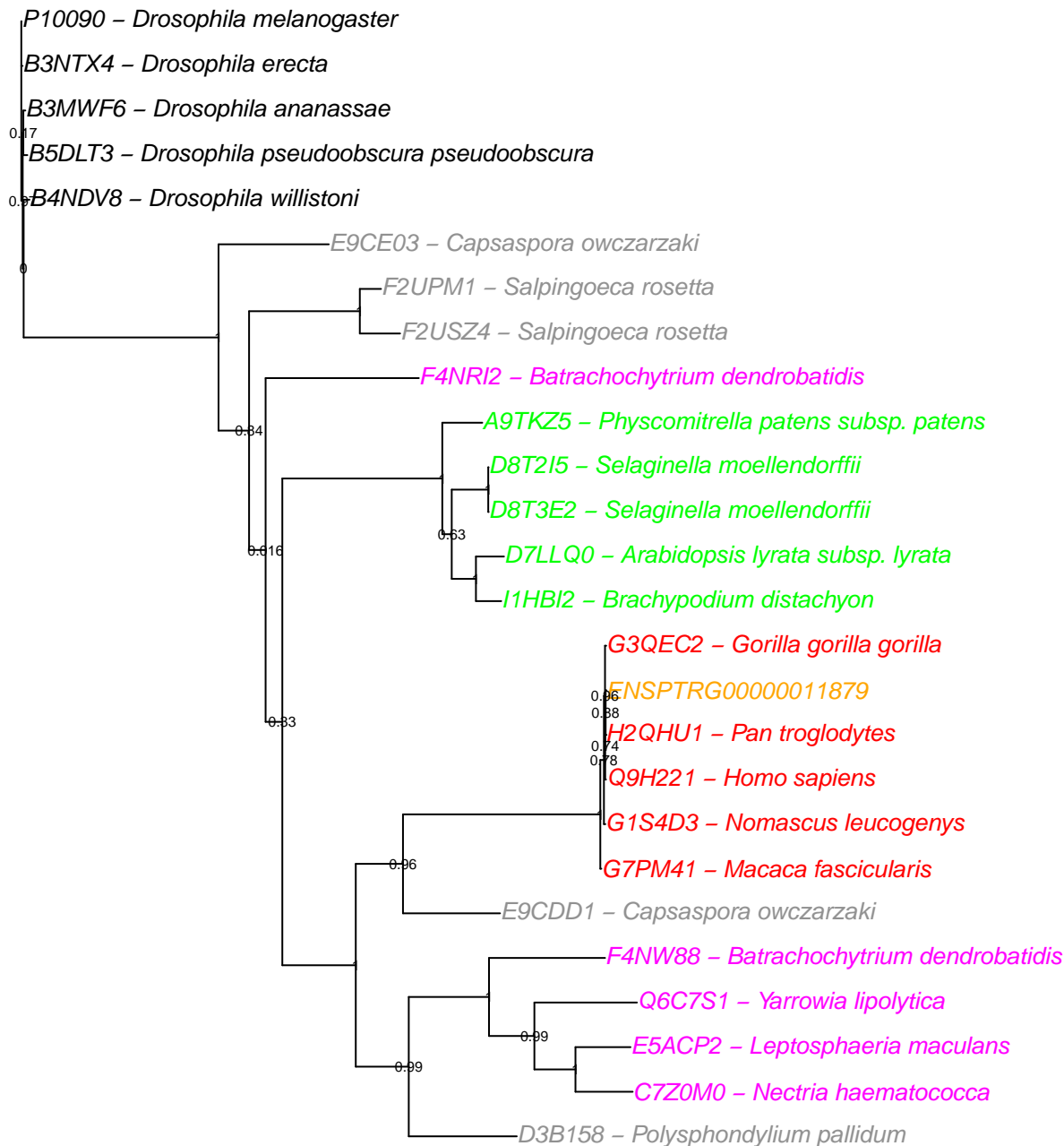
<sup>019</sup>*B4GH04 – Drosophila persimilis*



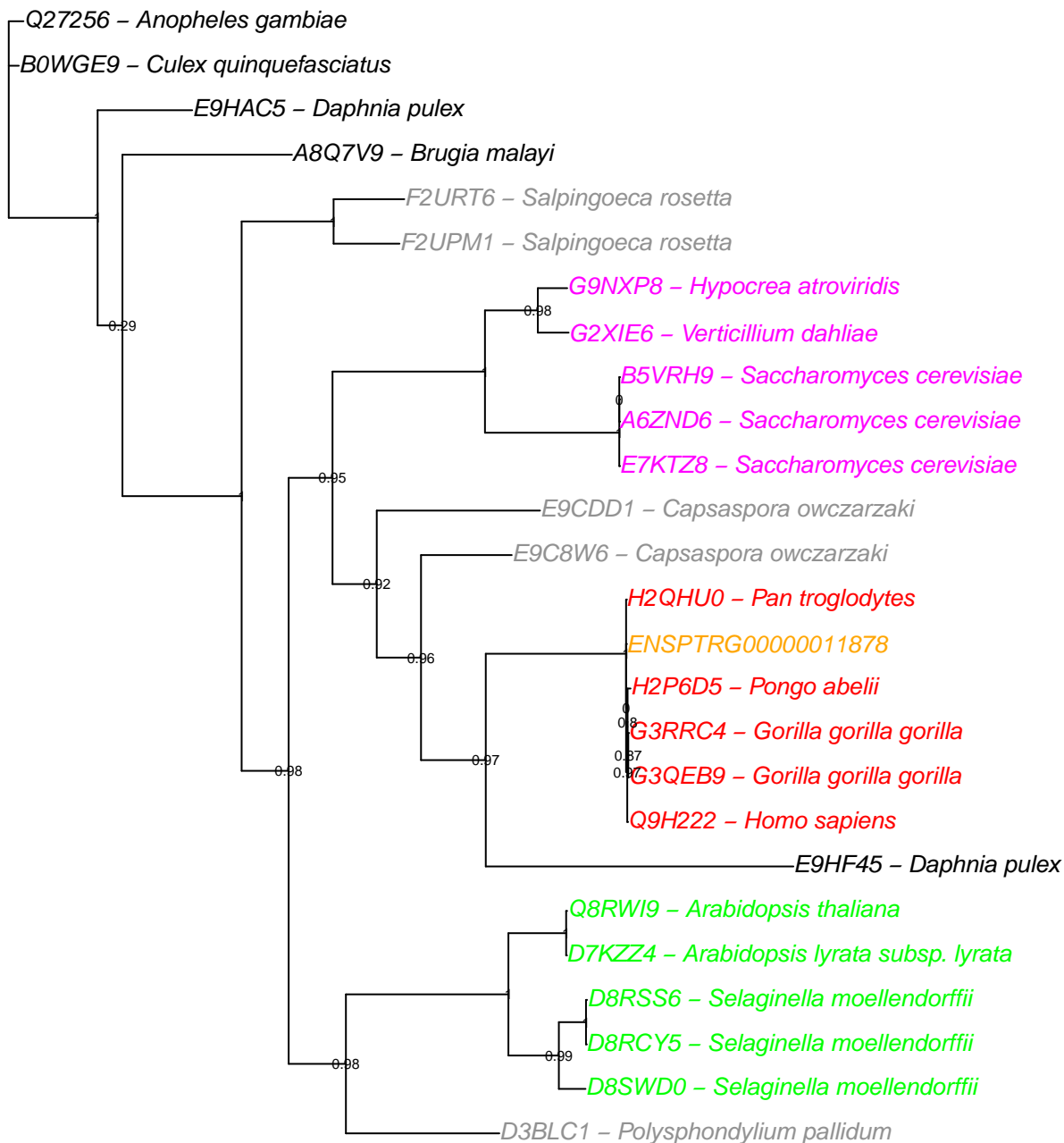


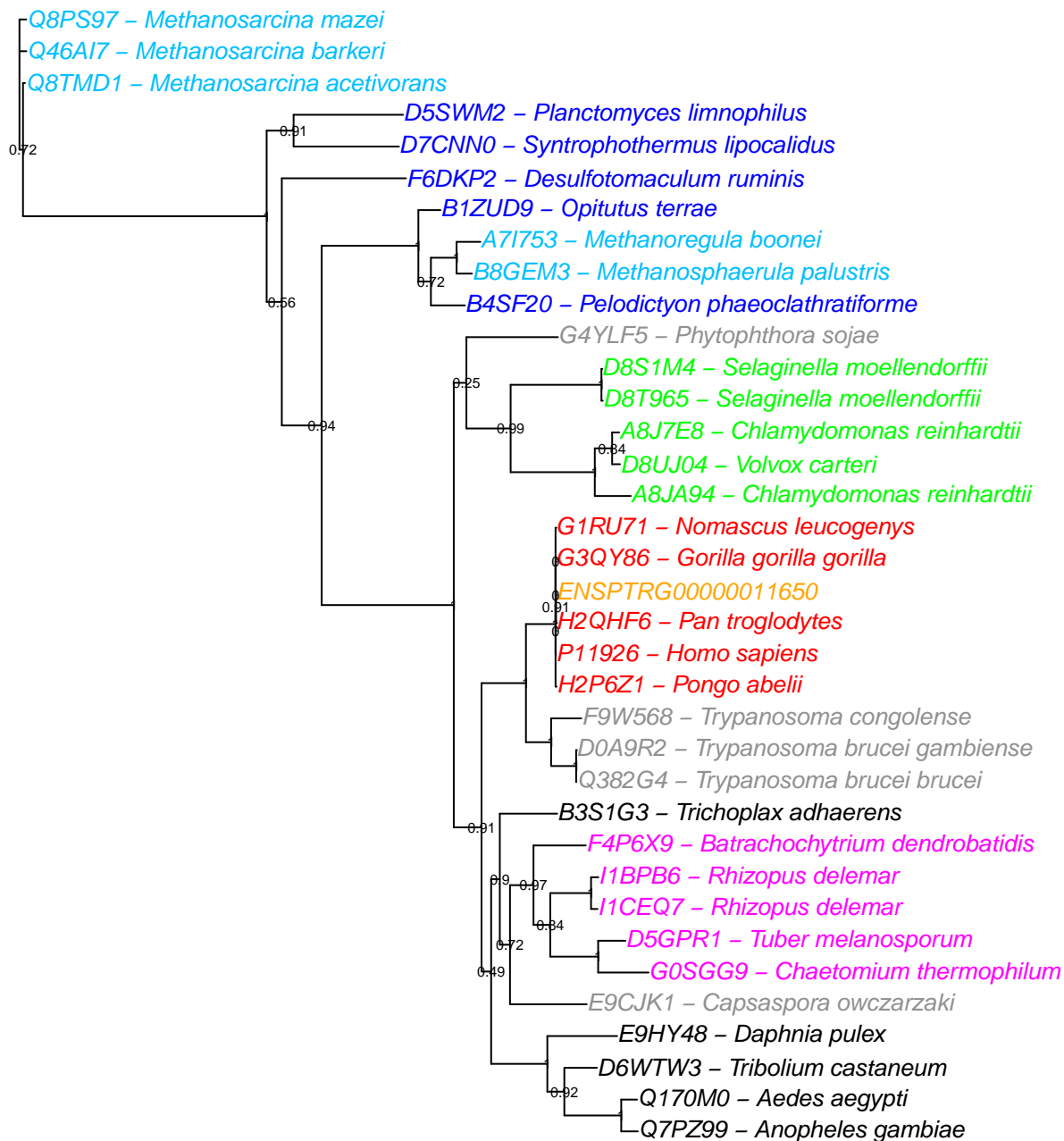


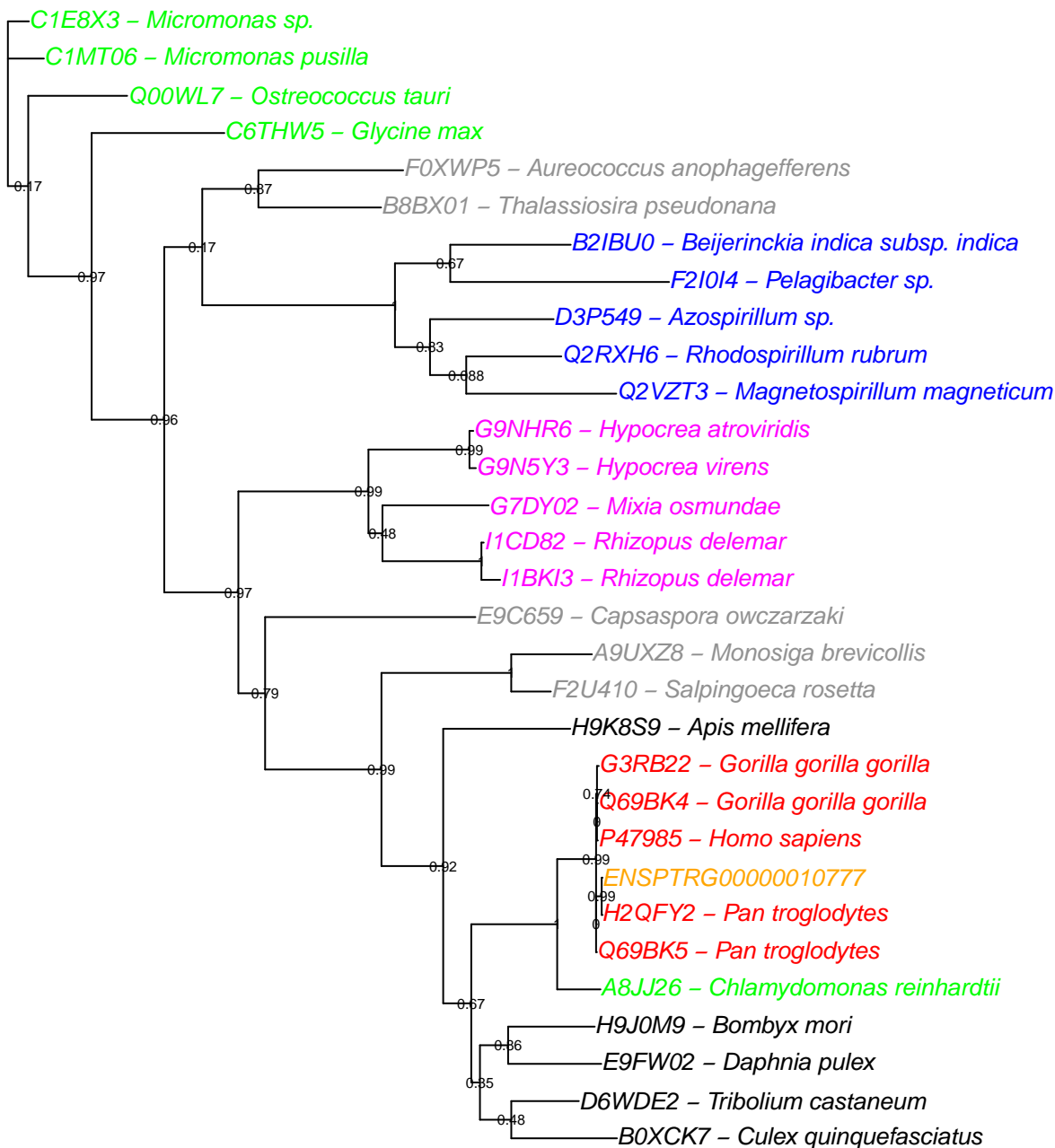


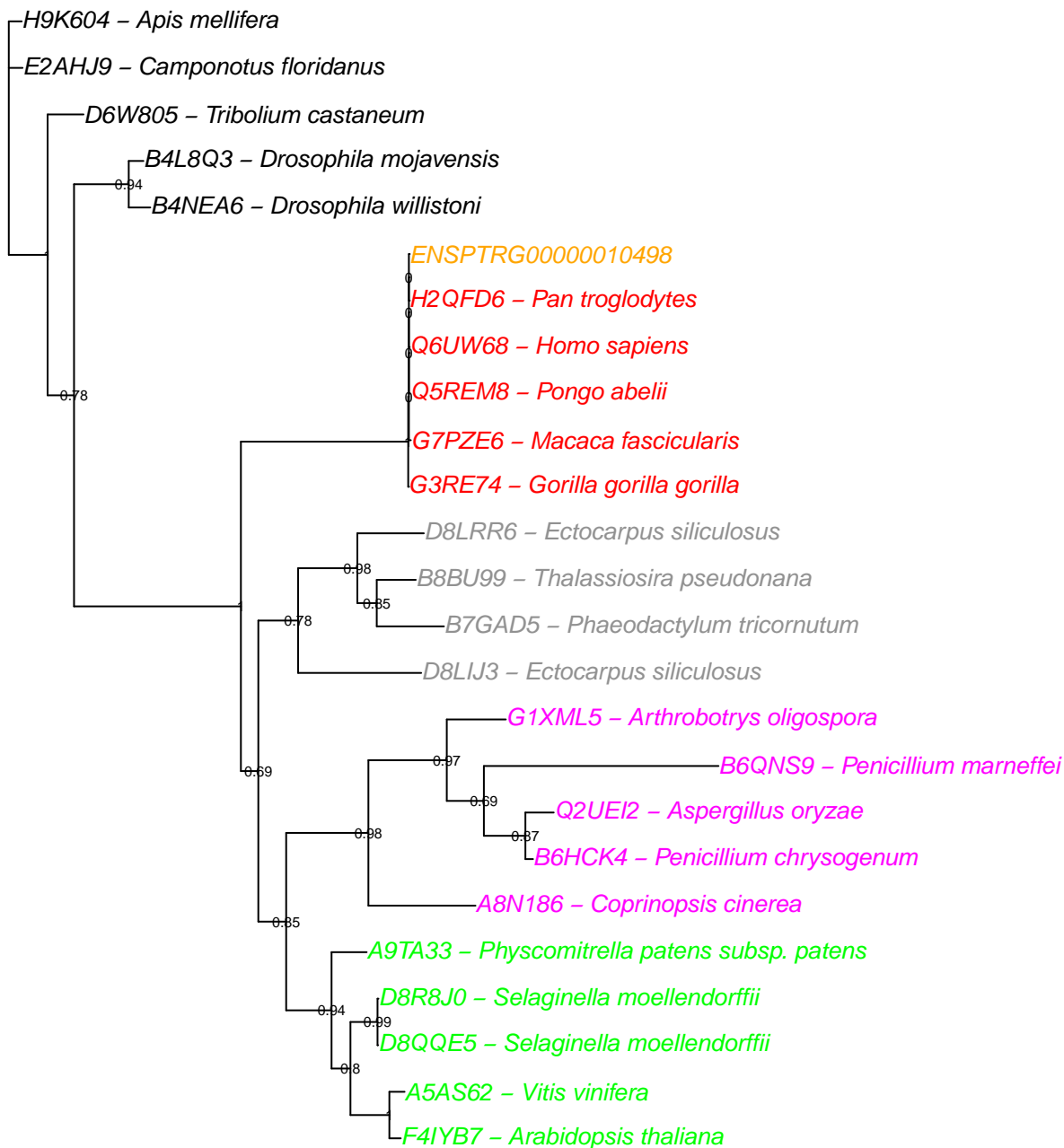


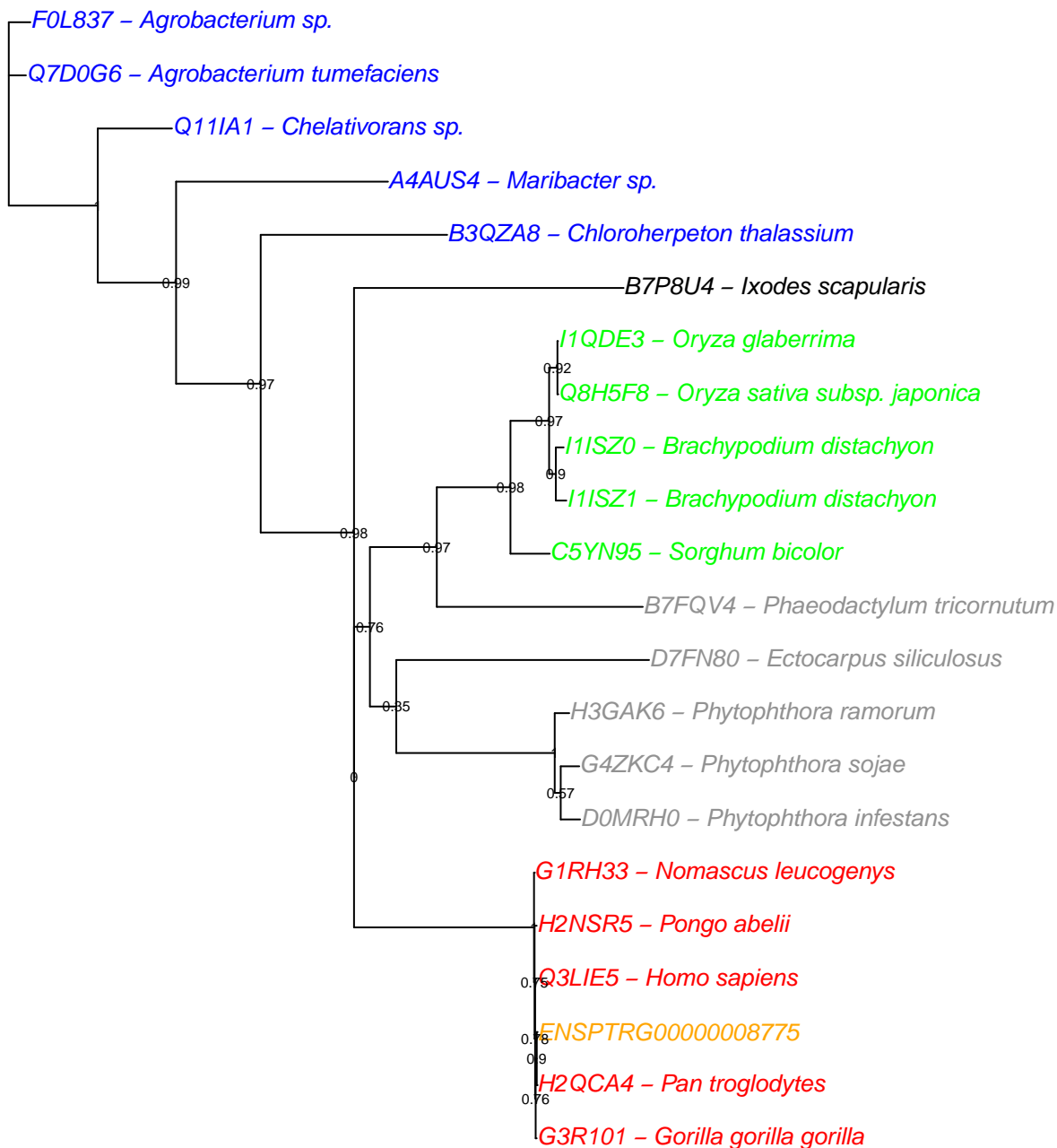


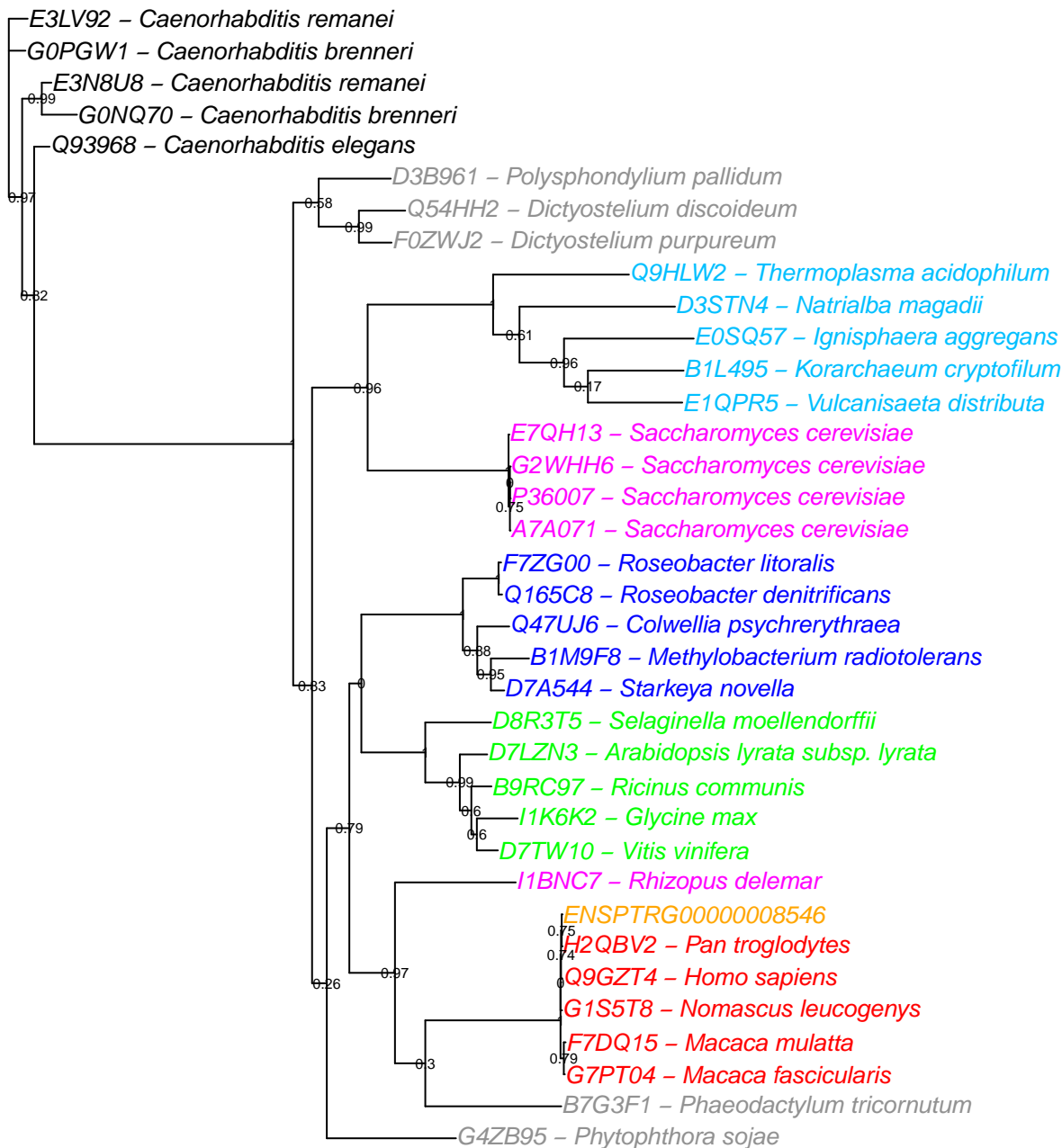


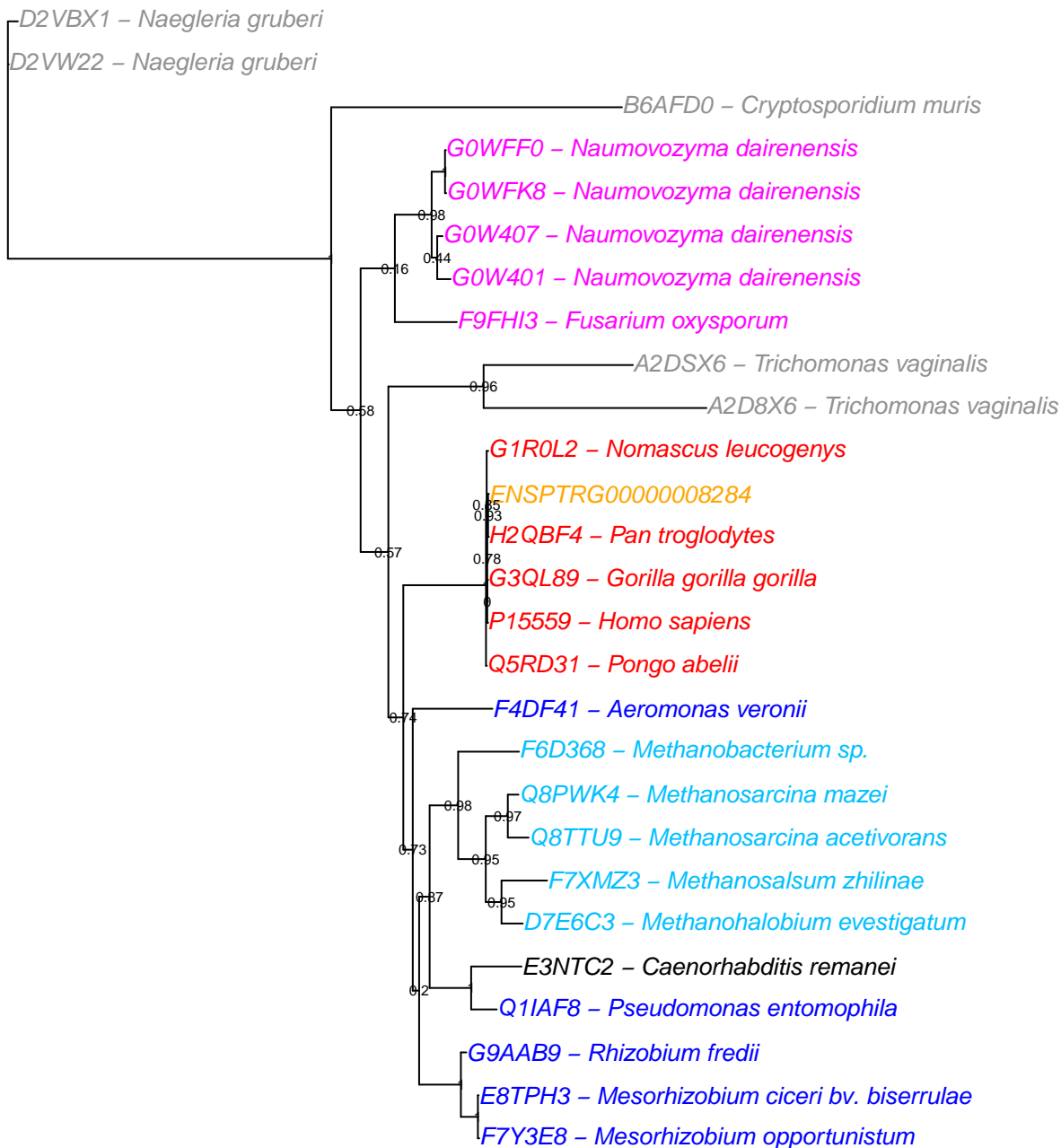












Q97YM4 – *Sulfolobus solfataricus*

D0KUP2 – *Sulfolobus solfataricus*

F4G0D4 – *Metallosphaera cuprina*

A4YDN3 – *Metallosphaera sedula*

D7G7X6 – *Ectocarpus siliculosus*

E4SPX6 – *Streptococcus thermophilus*

Q03MS9 – *Streptococcus thermophilus*

0.97

C0MF69 – *Streptococcus equi* subsp. *zooepidemicus*

0.75

B4U0D4 – *Streptococcus equi* subsp. *zooepidemicus*

F8IM73 – *Streptococcus equi* subsp. *zooepidemicus*

ENSPTRG00000008273

G3QNI4 – *Gorilla gorilla gorilla*

H2QBE6 – *Pan troglodytes*

000219 – *Homo sapiens*

G1R027 – *Nomascus leucogenys*

G7Q1H5 – *Macaca fascicularis*

0.99

B2B6A1 – *Podospira anserina*

0.66

I1C447 – *Rhizopus delemar*

0.26

B8PCC4 – *Postia placenta*

B8PKM3 – *Postia placenta*

F9FZM0 – *Fusarium oxysporum*

0.86

D8LPB5 – *Ectocarpus siliculosus*

0.95

A8PV21 – *Brugia malayi*

H3FIF0 – *Pristionchus pacificus*

E3NLQ7 – *Caenorhabditis remanei*

G5ECD6 – *Caenorhabditis elegans*

H2VHT5 – *Caenorhabditis japonica*

0.83

B8BZ32 – *Thalassiosira pseudonana*

B5YNX7 – *Thalassiosira pseudonana*

B8C4Q2 – *Thalassiosira pseudonana*

0.43

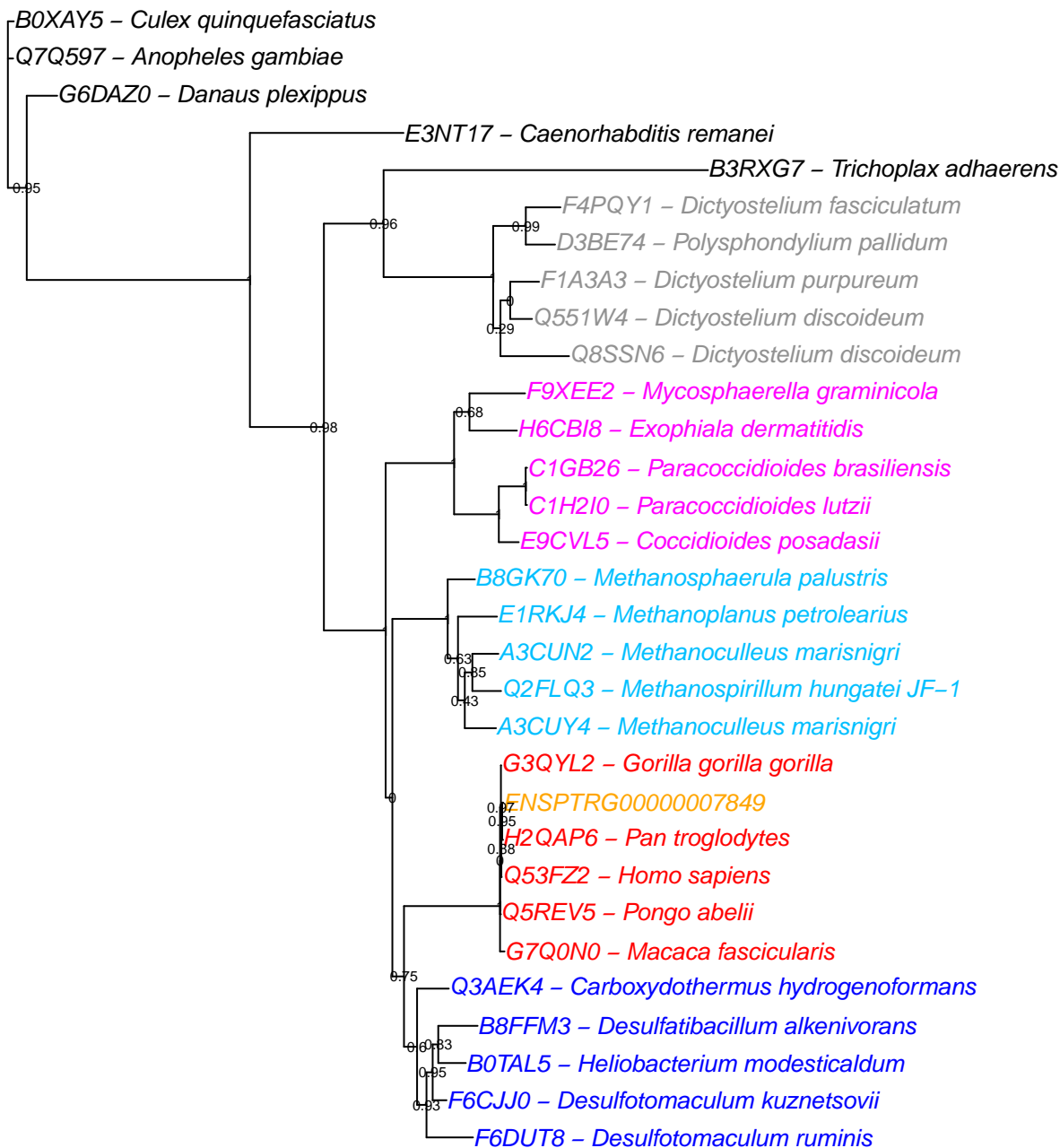
E4NTD4 – *Halogeometricum borinquense*

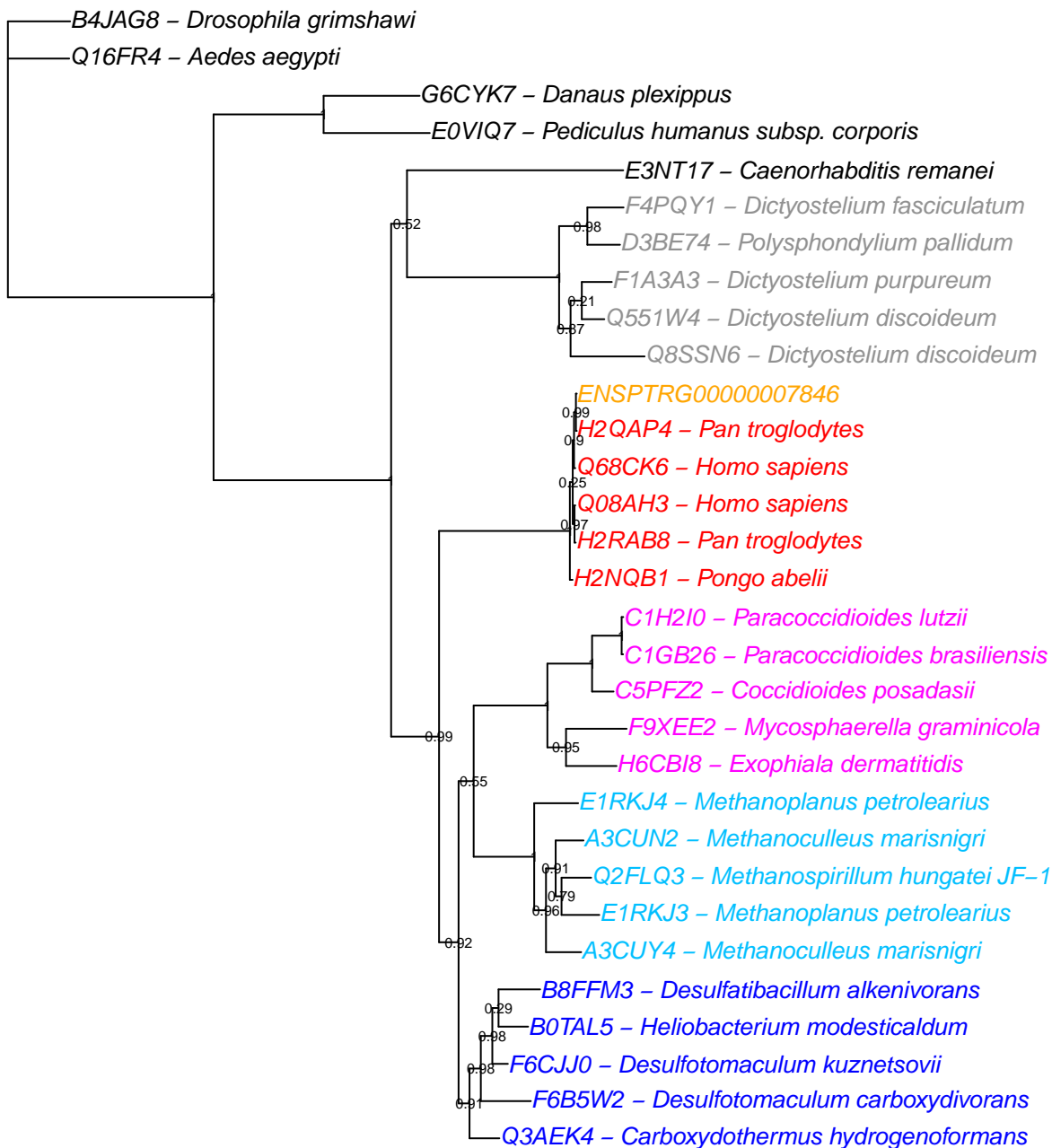
0.48

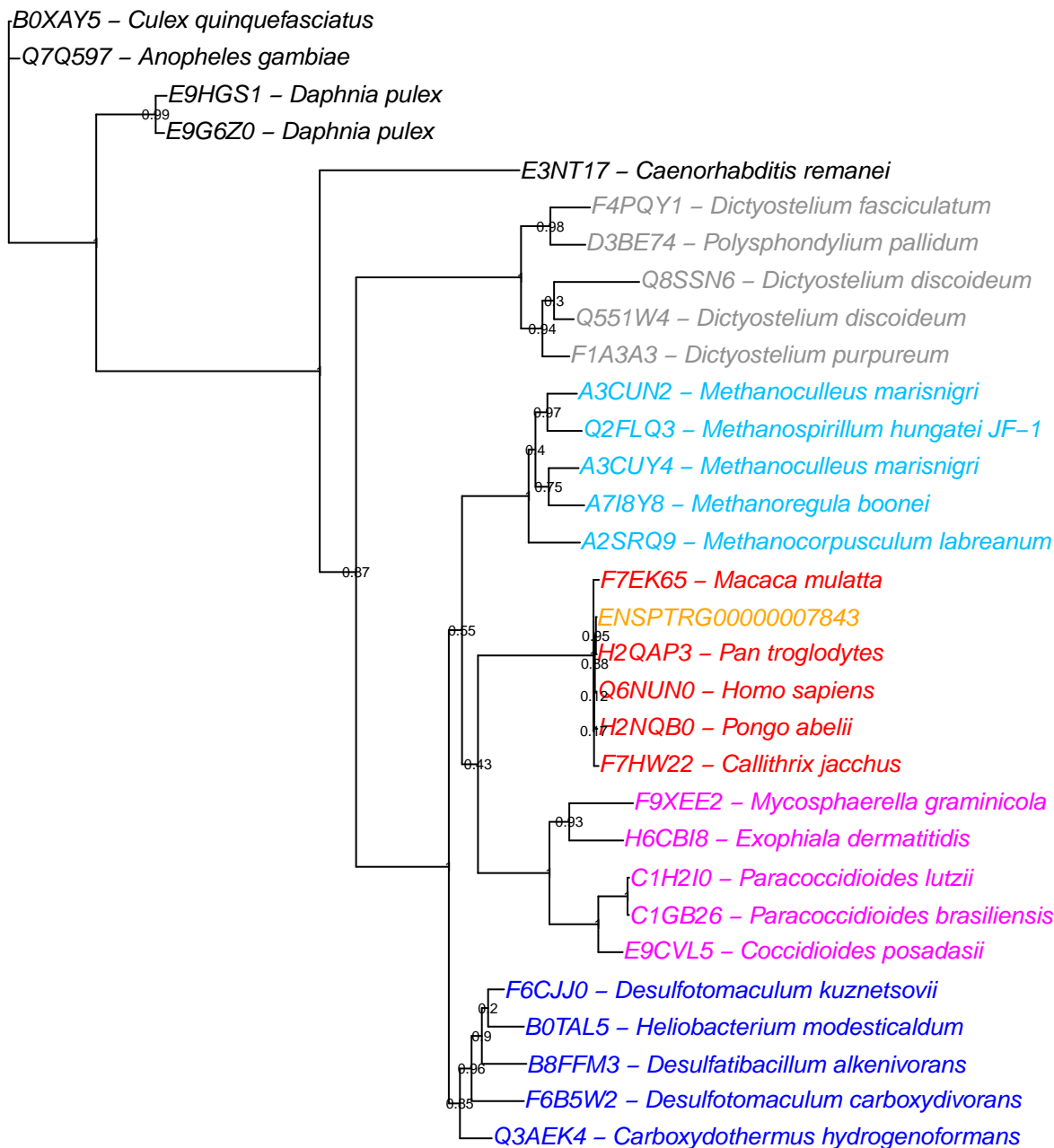
0.97

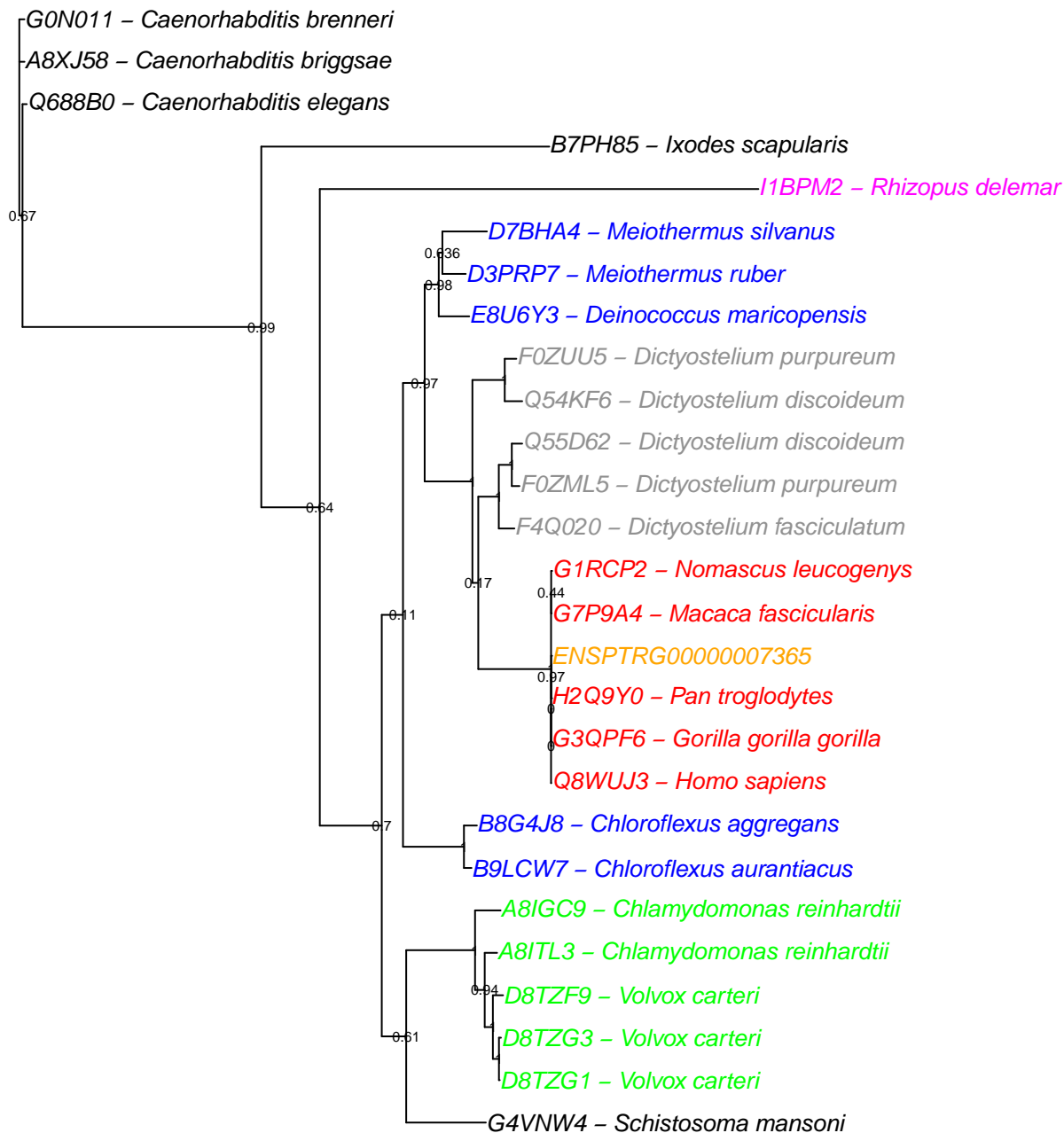
0.94

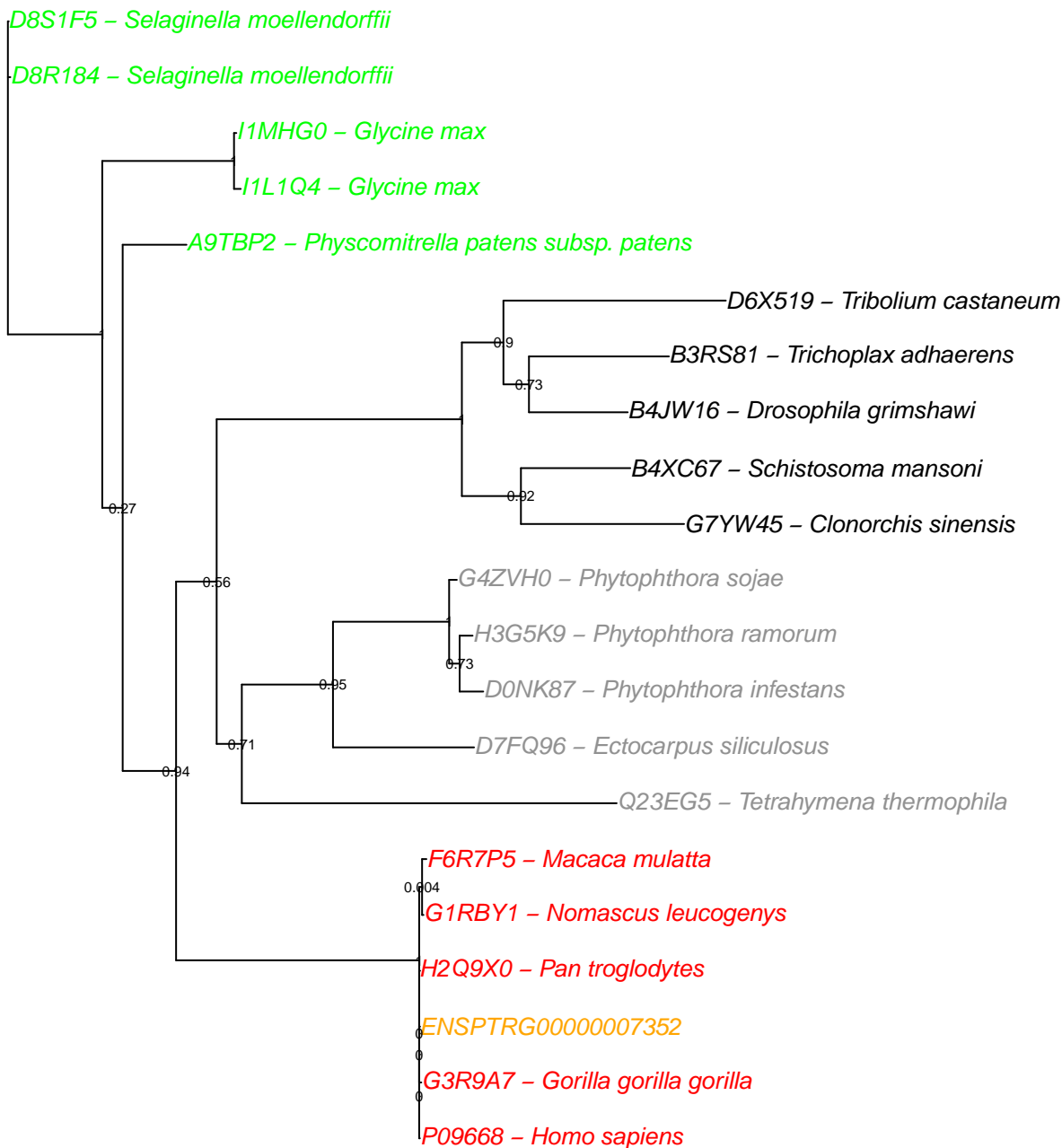


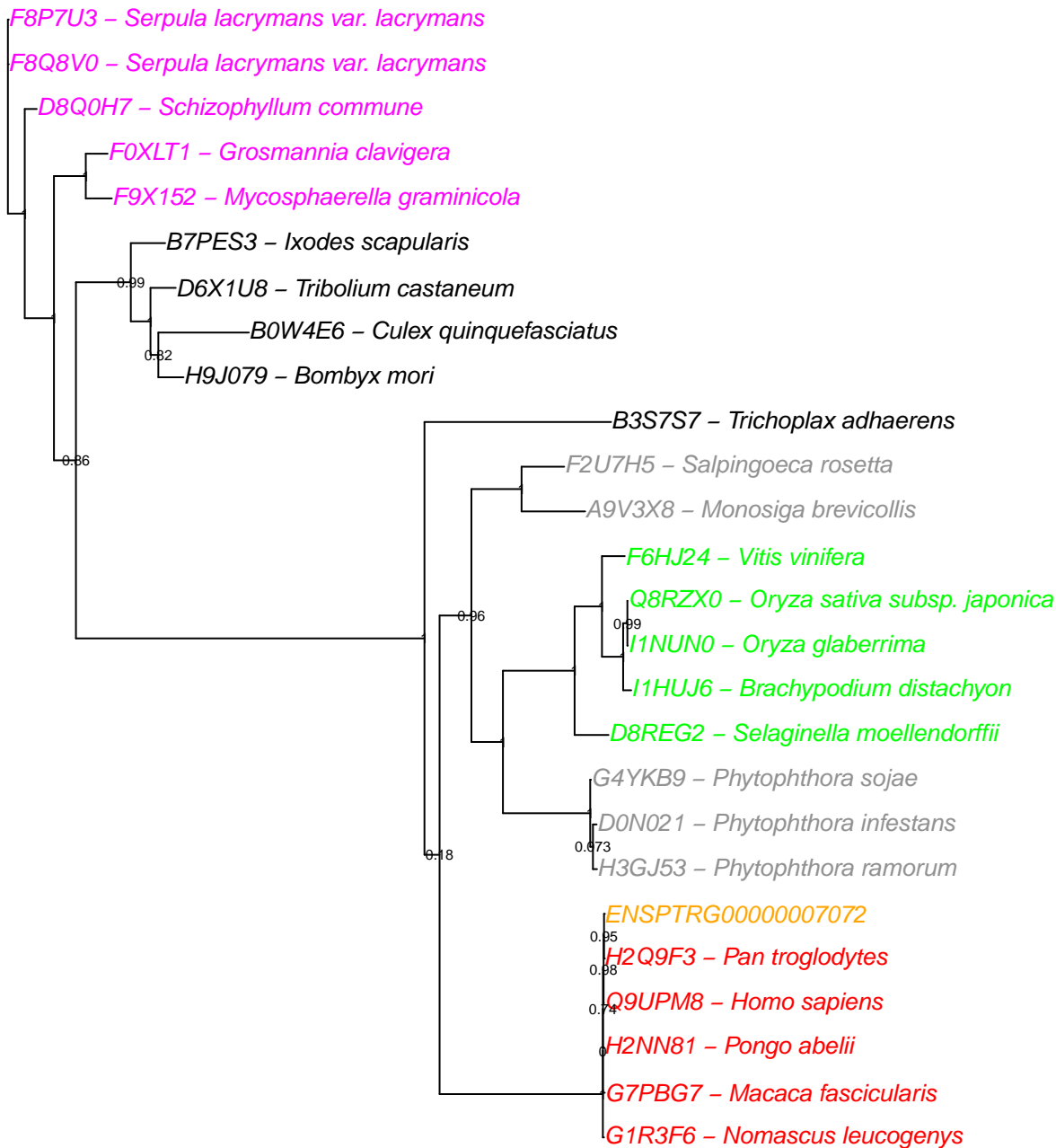


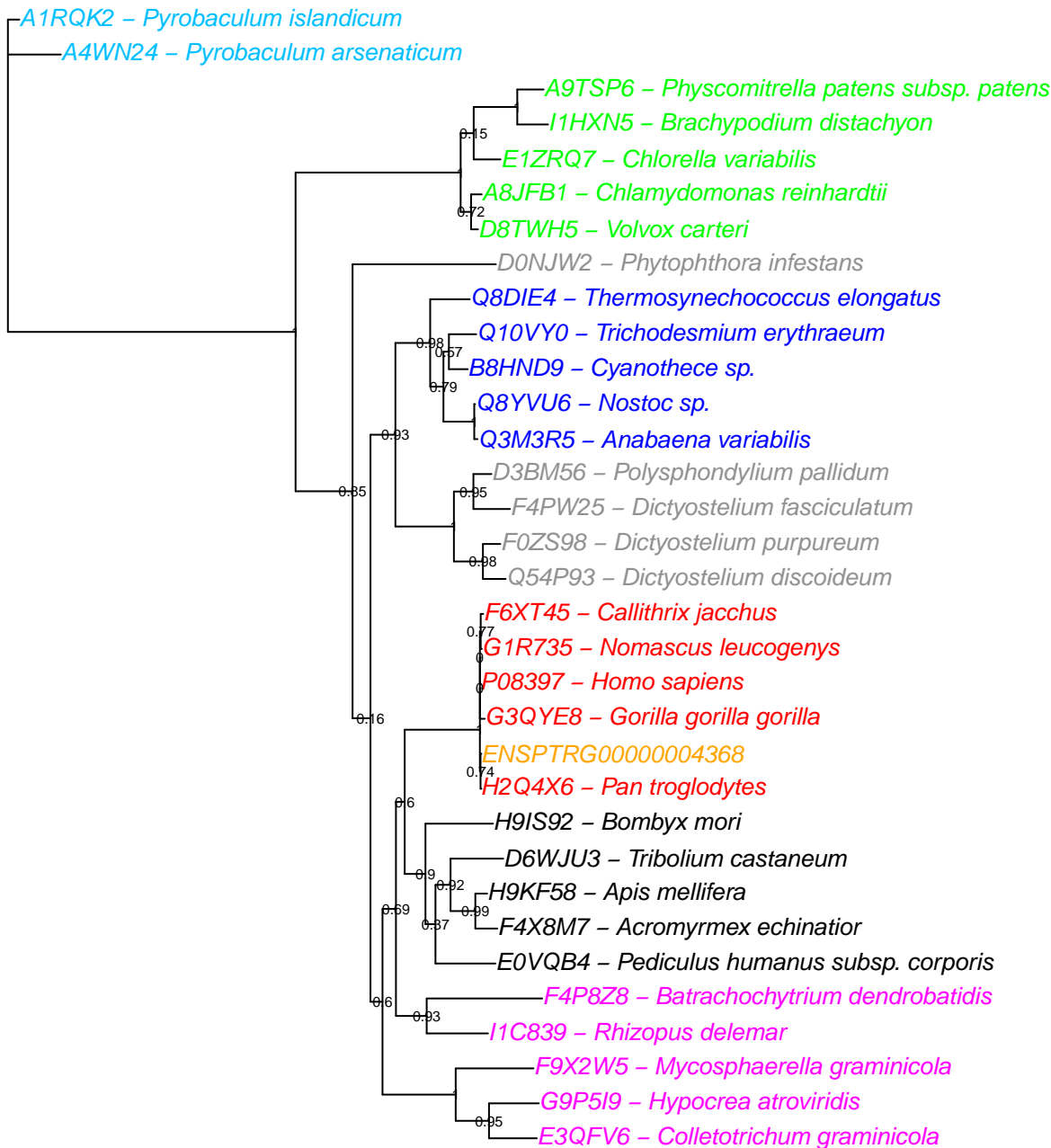


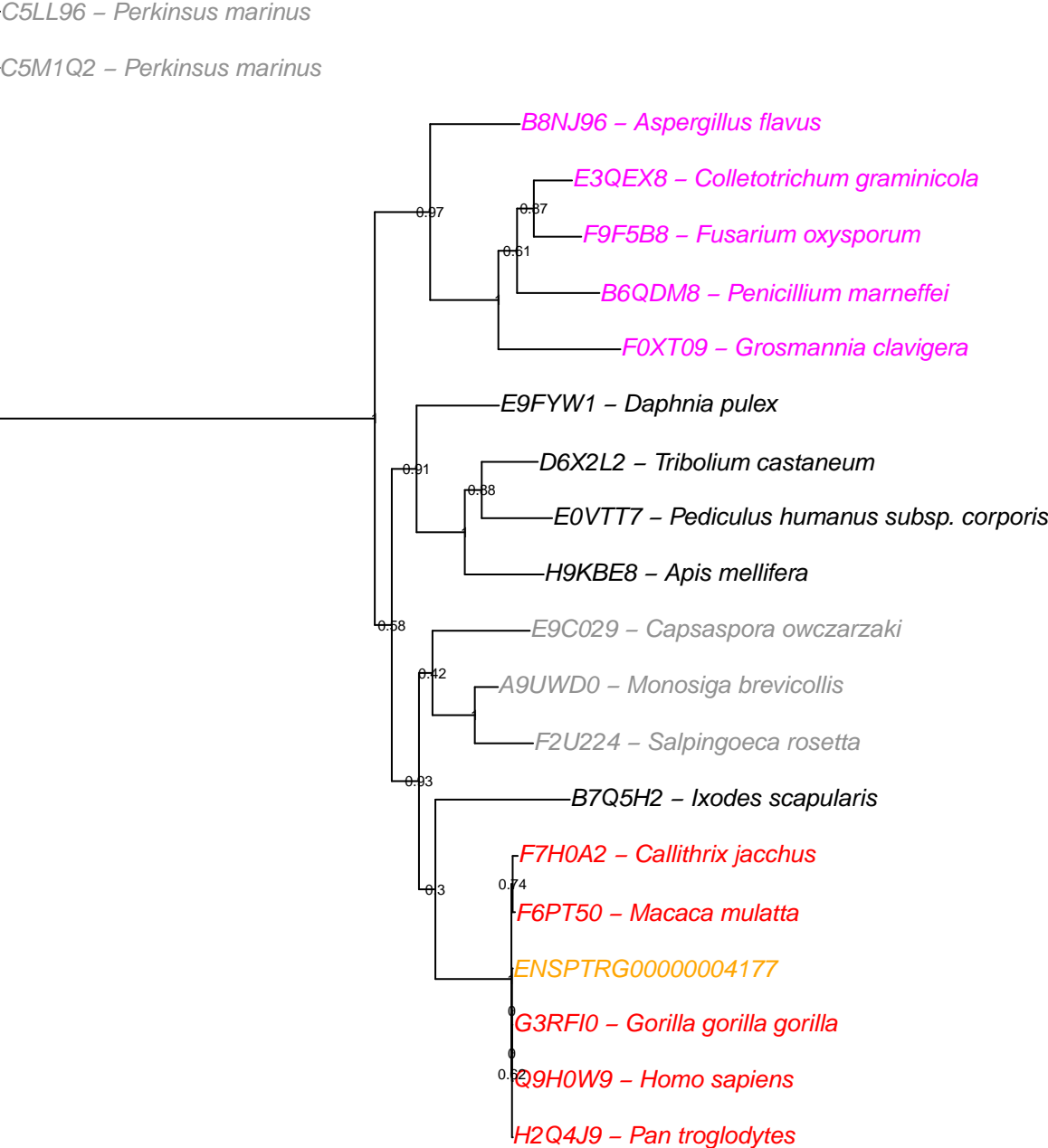




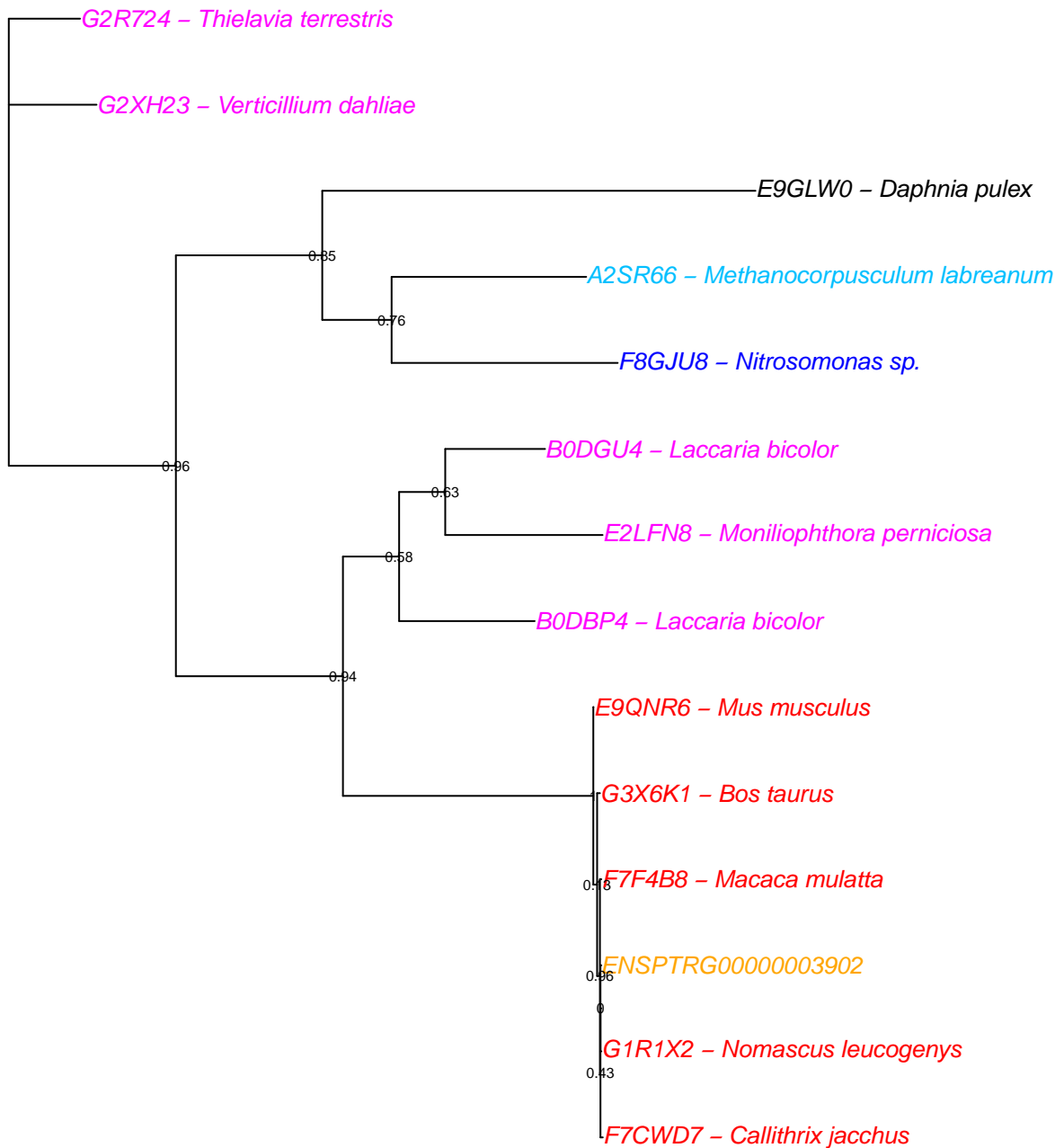


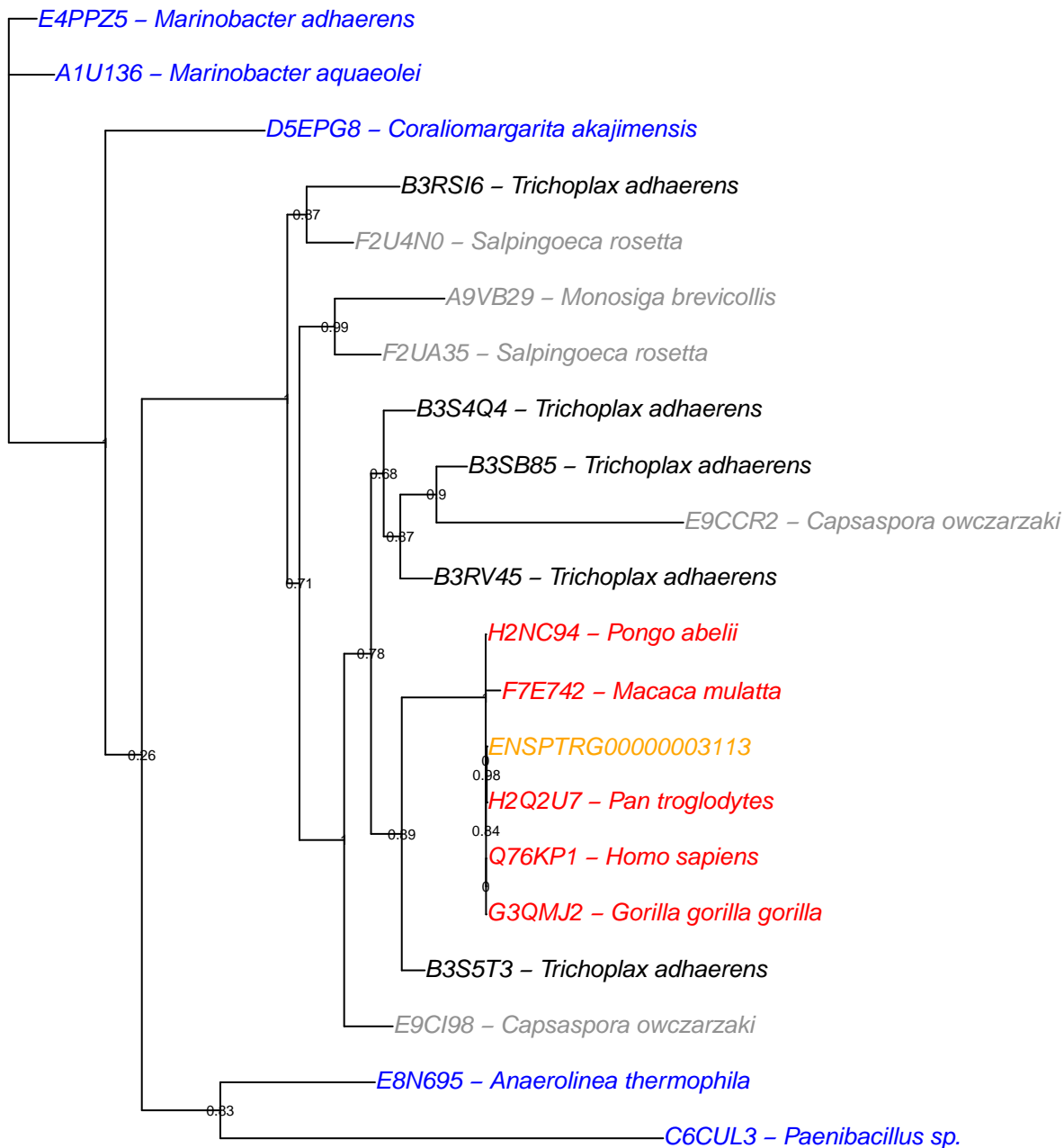












Q5V5P9 – *Haloarcula marismortui*

G0HVV2 – *Haloarcula hispanica*

B0R3B8 – *Halobacterium salinarum*

E4NVP0 – *Halogeometricum borinquense*

E4NUK2 – *Halogeometricum borinquense*

Q16TR5 – *Aedes aegypti*

B0WRT2 – *Culex quinquefasciatus*

B4PNP6 – *Drosophila yakuba*

Q176V3 – *Aedes aegypti*

B3RQX0 – *Trichoplax adhaerens*

ENSPTRG00000002762

H2Q2A1 – *Pan troglodytes*

Q6V0L0 – *Homo sapiens*

G1RQC5 – *Nomascus leucogenys*

G3R150 – *Gorilla gorilla gorilla*

G3S1C6 – *Gorilla gorilla gorilla*

B1XRG0 – *Synechococcus* sp.

B7KKX3 – *Cyanothece* sp.

B0JVW2 – *Microcystis aeruginosa*

B8HX90 – *Cyanothece* sp.

B0C8G2 – *Acaryochloris marina*

D8SD80 – *Selaginella moellendorffii*

D8RF12 – *Selaginella moellendorffii*

D8T859 – *Selaginella moellendorffii*

D8T288 – *Selaginella moellendorffii*

D8S9C9 – *Selaginella moellendorffii*

B8C6Z4 – *Thalassiosira pseudonana*

A8N2H1 – *Coprinopsis cinerea*

B0CQX8 – *Laccaria bicolor*

Q6BSU3 – *Debaryomyces hansenii*

B9WKFO – *Candida dubliniensis*

C4YTYO – *Candida albicans*

D3BGE3 – *Polysphondylium pallidum*

F4QE60 – *Dictyostelium fasciculatum*

F0ZFU9 – *Dictyostelium purpureum*

Q55EK2 – *Dictyostelium discoideum*

