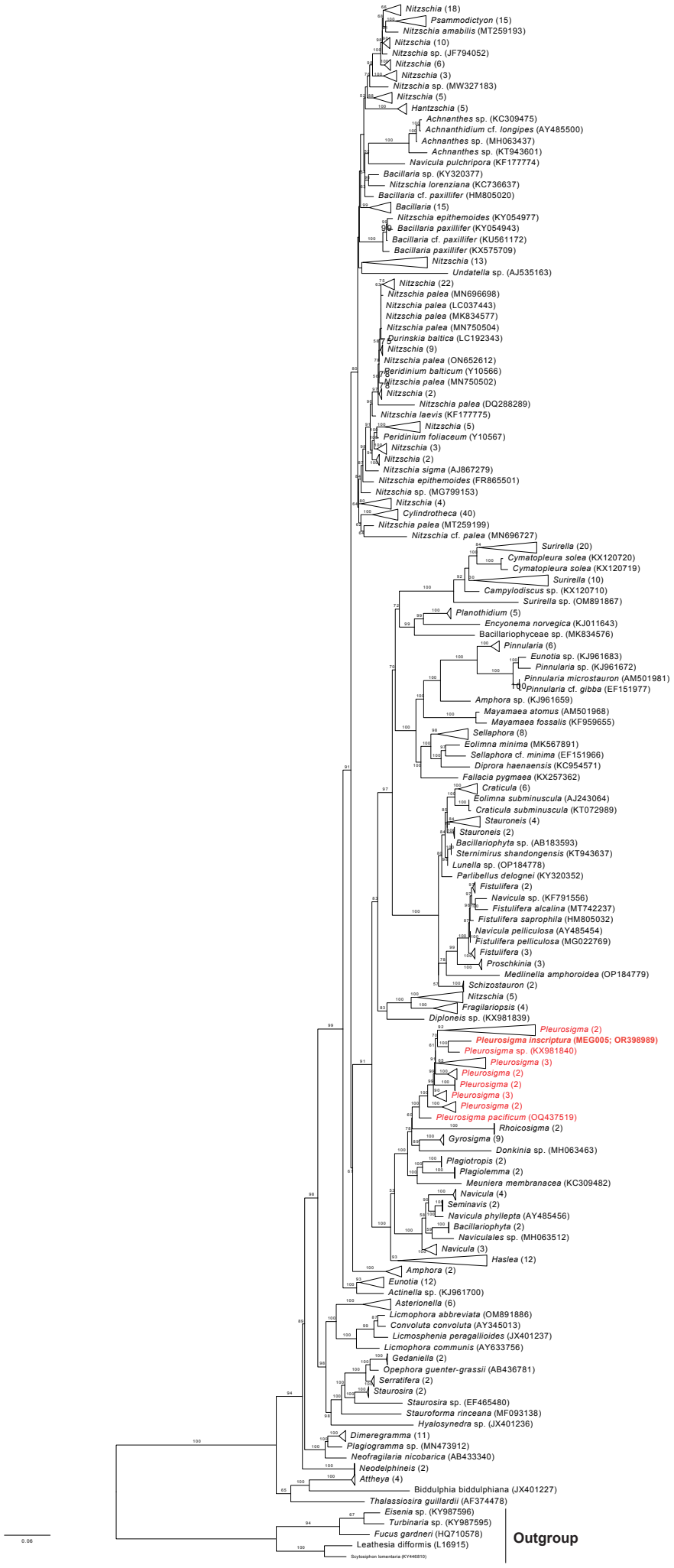
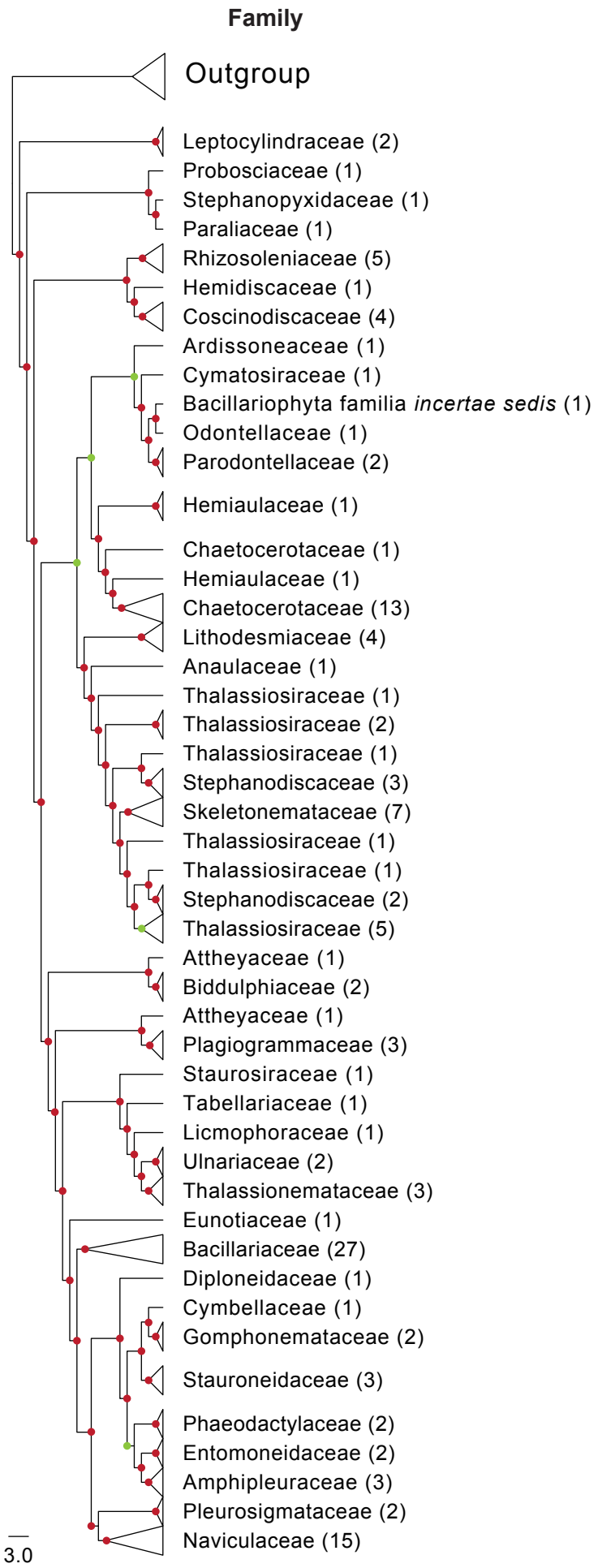
Surirella (16)
Cymatopleura (10)
Surirella (5)
Surirella (6)
Campylodiscus (2)
Surirella cf. linearis (KX120782)
Stenopterobia (2)
Surirella cf. tenuissima (KX120770)
Campylodiscus (5)
Surirella (2)
Campylodiscus thuretii (AB430613)
Surirella cf. fastuosa (KX120754)
Protokeelia bassonii (KX120678)
Rhopalodia (6)
Rhopalodia (2)
Epithemia (2)
Epithemia (9)
Epithemia (17)
Campylodiscus (2)
Campylodiscus (3)
Auricula cf. minuta (KX120683)
Hydrosilicon mitra (MH063470)
Entomoneis (3)
Amphiprora alata (AY485497)
Auricula complexa (KX120684)
Entomoneis (2)
Entomoneis (3)
Amphiprora paludosa (AY485468)
Entomoneis cf. alata (AJ535160)
Entomoneis ornata (KU561159)
Epithemia turgida (KU561141)
Entomoneis ornata (KU561166)
Amphiprora paludosa var. hyalina (KU561156)
Epithemia turgida (KU561138)
Entomoneis infula (MF000603)
Entomoneis adriatica (MF000606)
Entomoneis umbratica (MEG002; OR398973)
Entomoneis umbratica (MF000604)
Amphiprora (2)
Entomoneis (2)
Entomoneis punctulata (KU561123)
Entomoneis ornata (KU561167)
Entomoneis punctulata (KU561111)
Amphiprora paludosa var. hyalina (KU561162)
Entomoneis ornata (KU561144)
Entomoneis (7)
Epithemia sorex (KY054961)
Entomoneis punctulata (KU561214)
Amphiprora paludosa (KU561173)
Entomoneis punctulata (KY054958)
Entomoneis punctulata (KY054954)
Entomoneis (2)
Epithemia argus (KY054960)
Entomoneis punctulata (KY054957)
Entomoneis punctulata (KY054959)
Entomoneis paludosa (KX120690)
Amphiprora paludosa var. hyalina (FR865482)
Entomoneis punctulata (HM805031)
Entomoneis (4)
Halamphora (12)
Amphora (2)
Halamphora montana (KX120666)
Halamphora pecensa (MG027304)
Halamphora (2)
Halamphora maritima (MG027302)
Halamphora (5)
Amphora (5)
Amphora (2)
Halamphora holsatica (KY054963)
Amphora coffeiformis (KY054926)
Amphora coffeiformis (KY054929)
Amphora coffeaeformis (KC222325)
Amphora (2)
Halamphora subtropica (MG027277)
Amphora coffeiformis (KU561190)
Amphora montana (KU561121)
Amphora coffeiformis (KY054933)
Amphora (2)
Amphora (2)
Halamphora bistriata (MG027280)
Halamphora (2)
Amphora coffeiformis (KU561202)
Amphora (3)
Halamphora subtropica (MG027330)
Cymbella signata (JN033245)
Halamphora subtropica (KX109777)
Halamphora nipponensis (MG027325)
Halamphora crenulatoides (MG027266)
Amphora (10)
Halamphora adumbratoides (MG027270)
Amphora (2)
Halamphora (2)
Halamphora (2)
Amphora coffeiformis (KY766953)
Halamphora halophila (MG027335)
Halamphora isumiensis (MG027326)
Halamphora holsatica (KC222331)
Amphora terroris (KC222330)
Halamphora veneta (KC222328)
Halamphora (2)
Amphora cf. capitellata (AJ535158)
Halamphora (2)
Halamphora bicapitata (MG027278)
Amphora normanii (AM501958)
Halamphora coffeaeformis (KX120663)
Amphora margatefii var. lacustris (MG027315)
Amphora coffeaeformis (JQ081298)
Halamphora catenulatalsa (KT943646)
Amphora coffeaeformis (FR865481)
Halamphora (2)
Halamphora (4)
Halamphora (2)
Amphora eunotia (KC222326)
Halamphora tenucostata (MG027271)
Halamphora (2)
Amphora coffeaeformis (HM805019)
Halamphora (2)
Halamphora coffeaeformis (KX120664)
Amphora coffeaeformis (HQ912602)
Halamphora coffeaeformis (KX257363)
Halamphora (2)
Halamphora coffeaeformis (MH810167)
Halamphora (2)
Halamphora (2)
Halamphora semperpalorum (MG027317)
Halamphora pseudohyalina (MG027286)
Amphora (12)
Gomphonema (52)
Reimeria (3)
Placoneis (4)
Placoneis (2)
Geissleria decussis (KJ011647)
Cymbella (4)
Cymbopleura naviculiformis (AM501997)
Encyonema (11)
Gomphonema (4)
Dickieia ulvacea (AY485462)
Navicula brockmannii (AM502020)
Pauliella taeniata (KU561124)
Dickieia_ulvacea__KU561178_
Eucocconeis_laevis__KY054982_
Dickieia_ulvacea__KU561191
Cocconeis_stauroneiformis__KY054945_
Pauliella_taeniata__KU561197_
Pauliella_taeniata__KU561211
Cocconeis_stauroneiformis__KU561114_
Cocconeis (4)
Lemnicola (4)
Achnanthidium (4)
Achnanthidium minutissimum (KF959663)
Achnanthes minutissima (AJ866992)
Achnanthidium minutissimum (AM502032)
Achnanthidium (3)
Achnanthidium (2)
Achnanthidium (2)
Achnanthidium (14)
Paanmothidium (2)
Achnanthidium daonense (KJ658413)
Achnanthes childanos (KJ658412)
Rossithidium anastasiae (KJ658414)
Eucocconeis laevis (KT072990)
Achnanthidium (3)
Achnanthidium ovatum (MK578710)
Pauliella taeniata (KJ658406)
Pauliella toeniata (AY485526)
Cocconeis stauroneiformis (AB430614)
Planothidium suncheonmanense (KY650802)
Lyrella (2)
Frustulia (14)
Frustulia (3)
Amphipleura pellucida (KC309477)
Climaconeis (4)
Berkeleya hyalina (KJ577847)
Berkeleya (5)
Humidophila (4)
Daidesmis gallica (AJ867023)
Humidophila schmassmannii (MH826402)
Mastogloia fimbriata (MH040321)
Pinnularia (15)
Pinnularia (8)
Pinnularia cf. altiplanensis (JN418573)
Caloneis budensis (AM502003)
Caloneis (3)
Mayamaea (3)
Navicula pelliculosa (EU260468)
Navicula pelliculosa (AJ544657)
Navicula atomus var. permitis (AJ867024)
Mayamaea permitis (LC648455)
Mayamaea permitis (LC648454)
Mayamaea (4)
Mayamaea atomus (KF417670)
Mayamaea permitis (KT072962)
Mayamaea permitis (MK834580)
Mayamaea pseudoterrestris (LC648451)
Mayamaea terrestris (LC648452)
Mayamaea atomus var. atomus (AM501968)
Sellaphora (25)
Sellaphora minima (KF959656)
Eolimna minima (KF417668)
Diploneis (7)
Diploneis (5)
Craticula (4)
Navicula subminuscula (AJ867026)
Eolimna subminuscula (KT072989)
Eolimna subminuscula (AJ243064)
Stauroneis (6)
Stauroneis (4)
Stauroneis (2)
Fistulifera (3)
Navicula saprophila (AJ867025)
Fistulifera (2)
Fistulifera saprophila (MT397409)
Proschkinia (4)
Tursiocola (2)
Paribellus hamulifer (KU179137)
Paribellus delognei f. ellipticus (KY320352)
Poulinea (3)
Biremis panamae (KM078661)
Neidium (4)
Nitzschia (3)
Cymbella cistuliformis (KY054947)
Nitzschia ovalis (KY054984)
Nitzschia (2)
Amphora graeffeana (MG027282)
Nitzschia cf. pusilla (MN750479)
Nitzschia microcephala (KY054980)
Nitzschia (2)
Cymbella cistuliformis (KU561171)
Nitzschia microcephala (KY054978)
Nitzschia (2)
Nitzschia (12)
Cymbella (2)
Nitzschia (2)
Nitzschia (3)
Nitzschia (2)
Peridinium_foliaceum__KU561157_
Nitzschia_dubiformis__KU561139_
Nitzschia_dubiformis__KY054976
Nitzschia_capitellata__KU561195_
Bacillaria cf. paxillifer (KY054942)
Hantzschia (2)
Nitzschia adhaerens (MH734168)
Nitzschia dissipata (KY320393)
Nitzschia (2)
Gyrosigma (9)
Haslea (2)
Fragilaria (9)
Synedra acus (DQ250712)
Ulnaria acus (OM837382)
Fragilaria (10)
Fragilaria capucina (OM837388)
Striosous (4)
Synedra (2)
Stauroseira construens (KF417690)
Diatoma hyemalis (FM164376)
Attheya (4)
Tenuicylindrus (2)
Parala longispina (KJ577865)
Sargassum macrocarpum (AB011432)
Hizikia fusiformis (AB011428)
Myagropsis myagroides (AB011427)
Cystoseira hakodatensis (AB011426)
Coccophora langsdorfii (AB011426)
Pelvetia babingtonii (AB011424)
Outgroup
1.0

Pseudo-nitzschia (54)
Fragilariopsis (4)
Fragilariopsis cylindrus (LC189151)
Nitzschia (3)
Nitzschia (5)
Peridinium foliaceum (Y10567)
Nitzschia (6)
Nitzschia (9)
Nitzschia aequorea (KY320391)
Nitzschia (13)
Nitzschia (22)
Nitzschia (13)
Durinskia baltica (LC192343)
Nitzschia palea (MN750504)
Nitzschia palea (ON652612)
Nitzschia palea (MN750502)
Peridinium balticum (Y10566)
Nitzschia (2)
Nitzschia (3)
Nitzschia (4)
Nitzschia bizertensis (KF955285)
Nitzschia varelae (MN750490)
Nitzschia (2)
Nitzschia (4)
Nitzschia (9)
Psammodictyon (8)
Nitzschia amabilis (MT259193)
Nitzschia (4)
Nitzschia (7)
Nitzschia (3)
Nitzschia (3)
Nitzschia (2)
Nitzschia (2)
Peridinium foliaceum (KU561157)
Nitzschia dubiformis (KU561139)
Nitzschia dubiformis (KY054976)
Nitzschia capitellata (KU561195)
Bacillaria cf. paxillifer (KY054942)
Hantzschia (7)
Bacillaria (8)
Navicula pulchripora (KF177774)
Achnanthidium coarctatum (HQ912594)
Nitzschia lorenziana (KC736637)
Nitzschia epithemoides (FR865501)
Tryblionella (3)
Tryblionella apiculata (KY320397)
Nitzschia apiculata (M67334)
Tryblionella hungarica (MN750509)
Tryblionella gaoana (KY943638)
Nitzschia ligowskii (KY320392)
Nitzschia biundulata (MK330221)
Amphora laevis var. laevissima (KJ961657)
Staurotropis (4)
Cylindrotheca (41)
Cylindrotheca closterium (AY485471)
Nitzschia closterium (HQ121419)
Cylindrotheca closterium (KC899347)
Cylindrotheca fusiformis (FR865491)
Cylindrotheca fusiformis (AY485457)
Nitzschia closterium (AY485455)
Cylindrotheca (2)
Nitzschia palea (MT259199)
Nitzschia epithemoides (KY054977)
Bacillaria paxillifer (KY054943)
Bacillaria cf. paxillifer (KU561172)
Nitzschia (3)
Cylindrotheca closterium (KU561204)
Planothidium (26)
Lemnicola (2)
Encyonema (10)
Cymbopleura naviculiformis (AM501997)
Achnanthidium (8)
Amphipleura pellucida (KC309477)
Sellaphora (24)
Pinnularia (8)
Stauroneis (6)
Craticula (3)
Eolimna (2)
Parlibellus delognei f. ellipticus (KY320352)
Fistulifera (7)
Medlinella amphoroidea (OP184779)
Tursiocola (12)
Amphora (6)
Phaeodactylum (2)
Navicula (7)
Haslea cf. howeana (MH017641)
Navicula ramosissima (KY320362)
Navicula (5)
Navicula arenaria (KJ961668)
Navicula (2)
Haslea (4)
Navicula (2)
Navicula salinicola (KY320366)
Navicula (3)
Navicula (2)
Haslea howeana (KX981844)
Navicula incertata (KY320359)
Navicula avium (MEG004; OR398987)
Navicula avium (OL378198)
Navicula avium (KY937692)
Minutocellus polymorphus (MW494577)
Navicula hippodontofallax (KT943636)
Navicula (10)
Seminavis (2)
Navicula (6)
Navicula phyllepta (AY485456)
Navicula (4)
Navicula phyllepta (KC178569)
Navicula (24)
Navicula (2)
Hippodonta capitata (AM501966)
Navicula (10)
Plagiolemma (2)
Meuniera membranacea (KC309482)
Pleurosigma (2)
Haslea (11)
Eunotia (10)
Pseudostriatella (2)
Fragilaria (3)
Grammonema striatula (KF701591)
Fragilaria striatula (AY485474)
Grammonema cf. islandica (AJ535190)
Grammonema striatula (X77704)
Fragilaria barbararum (AJ971376)
Fragilaria cf. striatula (AJ971377)
Synedra hyperborea (ON798419)
Synedra hyperborea (HQ912621)
Synedra hyperborea (OM837358)
Synedra hyperborea (OM837359)
Synedra hyperborea (AY485464)
Synedra minuscula (EF423415)
Synedropsis cf. recta (HQ912616)
Fragilaria (6)
Synedra (2)
Thalassionema nitzschioides (X77702)
Thalassionema frauenfeldii (JX401233)
Synedra toxoneides (EF423421)
Divergita cf. al-ghamdii (MG684351)
Stricosus alfageehii (MG684370)
Tabularia (2)
Tabularia laevis (AB430610)
Catacombas gaillonii (EF423402)
Hyalosynedra prasadii (MG684367)
Cyclophora (3)
Protoraphis (2)
Astrosyne radiata (JN975238)
Licmophora (10)
Serratifera brevis (KU851869)
Fragilariforma virescens (HQ912628)
Rhabdonema (2)
Hyalosira tropicalis (AB430612)
Placosira araneosa (MW327191)
Bellerochea (2)
Orizaformis holarctica (KT119333)
Plagiogramma atomus (AB433338)
Perideraion (2)
Rhaphoneis (3)
Attheya (5)
Biddulphia (2)
Biddulphia (2)
Ditylum (11)
Lithodesmium undulatum (Y10569)
Stephanodiscus (3)
Conticribra weissflogiopsis (KT347147)
Thalassiosira guillardii (AF374478)
Thalassiosira gessneri (DQ514864)
Sargassum macrocarpum (AB011432)
Hizikia fusiformis (AB011428)
Myagropsis myagroides (AB011427)
Cystoseira hakodatensis (AB011425)
Coccophora langsdorfii (AB011426)
Pelvetia babingtonii (AB011424)
Outgroup
1.0

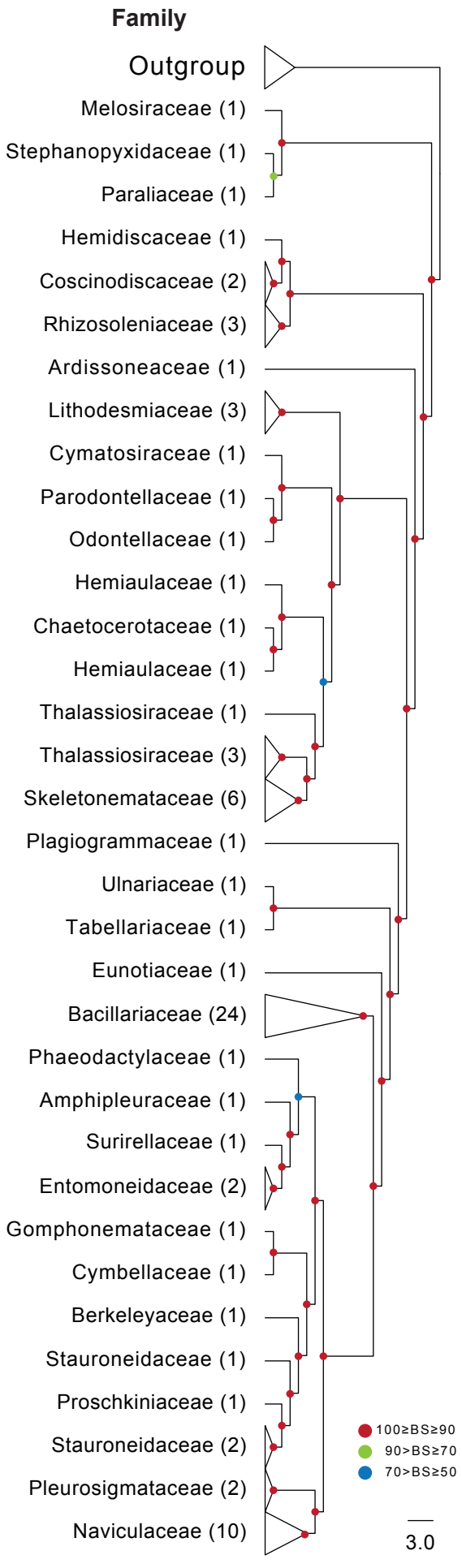

Nitzschia (18)
Psammodictyon (15)
Nitzschia amabilis (MT259193)
Nitzschia (10)
Nitzschia sp. (JF794052)
Nitzschia (6)
Nitzschia (3)
Nitzschia sp. (MW327183)
Nitzschia (5)
Hantzschia (5)
Achnanthes sp. (KC309475)
Achnanthidium cf. longipes (AY485500)
Achnanthes sp. (MH063437)
Achnanthes sp. (KT943601)
Navicula pulchripora (KF177774)
Bacillaria sp. (KY320377)
Nitzschia lorenziana (KC736637)
Bacillaria cf. paxillifer (HM805020)
Bacillaria (15)
Nitzschia epithemoides (KY054977)
Bacillaria paxillifer (KY054943)
Bacillaria cf. paxillifer (KU561172)
Bacillaria paxillifer (KX575709)
Nitzschia (13)
Undatella sp. (AJ535163)
Nitzschia (22)
Nitzschia palea (MN696698)
Nitzschia palea (LC037443)
Nitzschia palea (MK834577)
Nitzschia palea (MN750504)
Durinskia baltica (LC192343)
Nitzschia (9)
Nitzschia palea (ON652612)
Peridinium balticum (Y10566)
Nitzschia palea (MN750502)
Nitzschia (2)
Nitzschia palea (DQ288289)
Nitzschia laevis (KF177775)
Nitzschia (5)
Peridinium foliaceum (Y10567)
Nitzschia (3)
Nitzschia (2)
Nitzschia sigma (AJ867279)
Nitzschia epithemoides (FR865501)
Nitzschia sp. (MG799153)
Nitzschia (4)
Cylindrotheca (40)
Nitzschia palea (MT259199)
Nitzschia cf. palea (MN696727)
Surirella (20)
Cymatopleura solea (KX120720)
Cymatopleura solea (KX120719)
Surirella (10)
Campylodiscus sp. (KX120710)
Surirella sp. (OM891867)
Planothidium (5)
Encyonema norvegica (KJ011643)
Bacillariophyceae sp. (MK834576)
Pinnularia (6)
Eunotia sp. (KJ961683)
Pinnularia sp. (KJ961672)
Pinnularia microstauron (AM501981)
Pinnularia cf. gibba (EF151977)
Amphora sp. (KJ961659)
Mayamaea atomus (AM501968)
Mayamaea fossalis (KF959655)
Sellaphora (8)
Eolimna minima (MK567891)
Sellaphora cf. minima (EF151966)
Diprora haenaensis (KC954571)
Fallacia pygmaea (KX257362)
Craticula (6)
Eolimna subminuscula (AJ243064)
Craticula subminuscula (KT072989)
Stauroneis (4)
Stauroneis (2)
Bacillariophyta sp. (AB183593)
Sternimirus shandongensis (KT943637)
Lunella sp. (OP184778)
Parlibellus delognei (KY320352)
Fistulifera (2)
Navicula sp. (KF791556)
Fistulifera alcalina (MT742237)
Fistulifera saprophila (HM805032)
Navicula pelliculosa (AY485454)
Fistulifera pelliculosa (MG022769)
Fistulifera (3)
Proschkinia (3)
Medlinella amphoroidea (OP184779)
Schizostauron (2)
Nitzschia (5)
Fragilariopsis (4)
Diploneis sp. (KX981839)
Pleurosigma (2)
Pleurosigma inscriptura (MEG005; OR398989)
Pleurosigma sp. (KX981840)
Pleurosigma (3)
Pleurosigma (2)
Pleurosigma (2)
Pleurosigma (3)
Pleurosigma (2)
Pleurosigma pacificum (OQ437519)
Rhoicosigma (2)
Gyrosigma (9)
Donkinia sp. (MH063463)
Plagiotropis (2)
Plagiolemma (2)
Meuniera membranacea (KC309482)
Navicula (4)
Seminavis (2)
Navicula phyllepta (AY485456)
Bacillariophyta (2)
Naviculales sp. (MH063512)
Navicula (3)
Haslea (12)
Amphora (2)
Eunotia (12)
Actinella sp. (KJ961700)
Asterionella (6)
Licmophora abbreviata (OM891886)
Convoluta convoluta (AY345013)
Licmosphenia peragallioides (JX401237)
Licmophora communis (AY633756)
Gedaniella (2)
Opephora guenter-grassii (AB436781)
Serratifera (2)
Staurosira (2)
Staurosira sp. (EF465480)
Stauroforma rinceana (MF093138)
Hyalosynedra sp. (JX401236)
Dimeregramma (11)
Plagiogramma sp. (MN473912)
Neofragilaria nicobarica (AB433340)
Neodelphineis (2)
Attheya (4)
Biddulphia biddulphiana (JX401227)
Thalassiosira guillardii (AF374478)
Elsenia sp. (KY987596)
Turbinaria sp. (KY987595)
Fucus gardneri (HQ710578)
Leathesia difformis (L16915)
Scytosiphon lomentaria (KY446810)
Outgroup
0.06

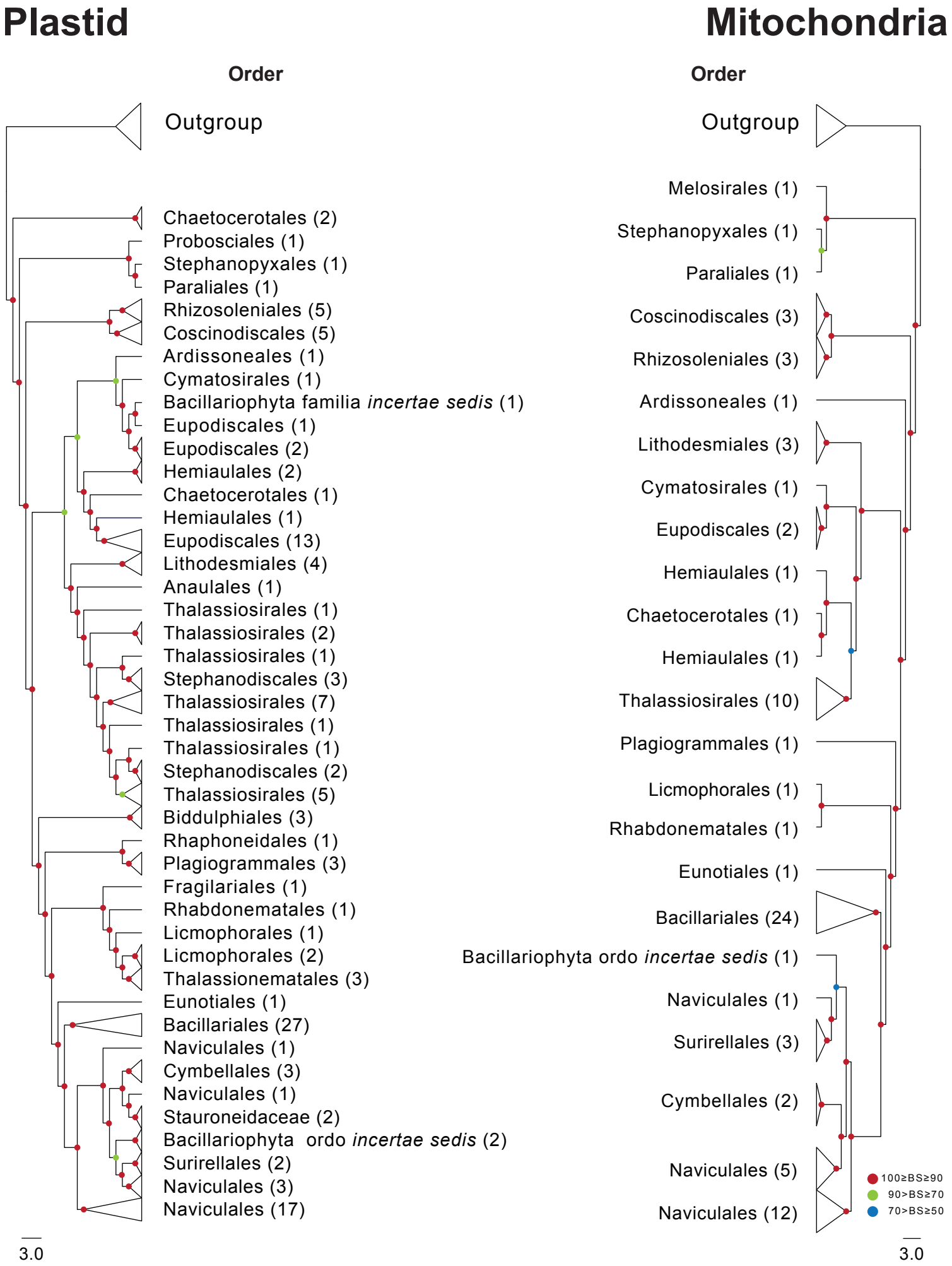
Fistulifera (39), Navicula (1)
Proschkinia (2)
Craticula (7), Eolimna (1)
Stauroneis gracilior (AM501988)
Stauroneis (5)
Prestauroneis integra (AM502025)
Parlibellus delognei f. ellipticus (KY320352)
Sternimirus shandongensis (KT943637)
Astartiella marksii (MT982905)
Poulinea lepidochelicola (OP184796)
Medlinella amphoroidea (OP184779)
Tursiocola (3)
Sellaphora (32)
Eolimna (2), Sellaphora (1)
Diprora haenaensis (KC954571)
Sellaphora (3)
Fallacia (3)
Mayamaea (6), Navicula (1)
Caloneis lewisii (HQ912580)
Epithemia (21)
Surirella ovalis var. apiculata (KX120727)
Campylodiscus clypeus (HQ912412)
Amphiprora paludosa var. hyalina (KU561156)
Epithemia turgida (KU561138)
Entomoneis ornata (KU561159)
Epithemia turgida (KU561141)
Entomoneis (2)
Protokeelia bassonii (KX120678)
Amphora (5), Halamphora (5)
Amphora (5)
Diploneis cf. smithii (MH063459)
Encyonema (3)
Placoneis (2)
Gomphonema micropus (AM501964)
Navicula brockmannii (AM502020)
Cocconeis stauroneiformis (AB430614)
Planothidium frequentissimum (KT072986)
Achnanthes chlidanos (KJ658412)
Lemnicola hungarica (HQ912626)
Achnanthidium reimeri (KJ658405)
Rossithidium anastasiae (KJ658414)
Achnanthidium minutissimum (KF959663)
Frustulia (7)
Climaconeis (2)
Berkeleya rutilans (HQ912637)
Phaeodactylum (56), Nitzschia (2)
Pseudo-nitzschia (26), Fragilariopsis (13)
Nitzschia (24), Cymbella (4)
Nitzschia (12), Conticribra (1)
Navicula (58), Haslea (3)
Hippodonta capitata (AM501966)
Haslea (7)
Gyrosigma (6)
Pleurosigma (2)
Plagiolemma distortum (MG587953)
Nitzschia (41), Durinskia (1)
Peridinium balticum (Y10566)
Nitzschia (2)
Nitzschia (36), Peridinium (1)
Nitzschia (3)
Nitzschia (4)
Nitzschia (3)
Nitzschia varelae (MN750490)
Nitzschia bergii (KY320379)
Nitzschia reversa var. latus (MEG012; OR418055)
Nitzschia sigma (AJ867279)
Nitzschia cf. fonticola (HM805036)
Nitzschia cf. fonticola (HM805035)
Nitzschia anomalus (MEG011; OR418054)
Nitzschia (2)
Amphora (2)
Nitzschia (5)
Nitzschia dissipatoides (MEG028; OR418056)
Nitzschia pellucida (KY320389)
Nitzschia bilobata (MT259191)
Nitzschia (2)
Psammodictyon (8), Nitzschia (1)
Nitzschia (5)
Nitzschia (8)
Nitzschia (3)
Nitzschia (2)
Nitzschia (4), Peridinium (1)
Nitzschia capitellata (KU561195)
Bacillaria cf. paxillifer (KY054942)
Hantzschia (3)
Nitzschia (5)
Bacillaria (8)
Achnanthidium (1), Achnanthes (2)
Bacillaria cf. paxillifer (HM805020)
Nitzschia lorenziana (KC736637)
Navicula pulchripora (KF177774)
Tryblionella (8), Nitzschia (3)
Nitzschia epithemoides (FR865501)
Cylindrotheca (42), Nitzschia (2)
Nitzschia palea (MT259199)
Bacillaria (3)
Nitzschia epithemoides (KY054977)
Nitzschia (13)
Cylindrotheca closterium (KU561204)
Eunotia (15)
Pseudostriatella (2)
Fragilaria (21)
Synedra (4), Ulnaria (4)
Fragilaria (4), Grammonema (2)
Synedra (2), Fragilaria (1)
Thalassionema (5), Synedra (3)
Tabularia (4), Catacombas (1)
Fragilaria famelica (HQ912588)
Hyalosynedra cf. laevigata (EF423408)
Pteroncola inane (AB430607)
Gedaniella (15), Nanofrustulum (1)
Staurosira elliptica (EF423414)
Serratifera sourniae (MF093066)
Pseudostaurosira (4)
Nanofrustulum (3)
Gedaniella boltonii (MF093083)
Opephora guenter-grassii (AB436781)
Serratifera (2)
Serratifera corallina (MF093137)
Staurosira (3), Staurosirella (1)
Licmophora (16), Convoluta (1)
Cyclophora (2)
Asterionella (5)
Tabellaria (2)
Diatoma (2)
Diatoma (7), Staurosira (1)
Grammatophora (7)
Hyalosira tropicalis (AB430612)
Placosira araneosa (MW327191)
Rhabdonema adriaticum (JX401243)
Rhabdonema minutum (AB430603)
Fragilariforma virescens (HQ912628)
Rhaphoneis (2)
Plagiogramma (5)
Orizaformis holarctica (KT119333)
Bellerochea malleus (DQ514845)
Talaroneis posidoniae (AY216905)
Plagiogramma (3), Dimeregramma (3)
Neofragilaria nicobarica (AB433340)
Plagiogramma atomus (AB433338)
Asteroplanus (2), Asterionellopsis (3)
Perideraion elongatum (KJ577868)
Plagiogrammopsis castigatus (MF001991)
Brockmanniella brockmannii (HQ912565)
Ceratanaulus creticus (MN917240)
Biddulphia alternans (JX401229)
Attheya (2)
Biddulphia tridens (JX401228)
Sargassum macrocarpum (AB011432)
Hizikia fusiformis (AB011428)
Myagropsis myagroides (AB011427)
Cystoseira hakodatensis (AB011425)
Coccophora langsdorfii (AB011426)
Pelvetia babingtonii (AB011424)
Outgroup
0.07

Plastid



Mitochondria




Plastid
Mitochondria
Order
Order
Outgroup
Chaetocerotales (2)
Probosciales (1)
Stephanopyxales (1)
Paraliales (1)
Rhizosoleniales (5)
Coscinodiscales (5)
Ardissoneales (1)
Cymatosirales (1)
Bacillariophyta familia *incertae sedis* (1)
Eupodiscales (1)
Eupodiscales (2)
Hemiaulales (2)
Chaetocerotales (1)
Hemiaulales (1)
Eupodiscales (13)
Lithodesmiales (4)
Anaulales (1)
Thalassiosirales (1)
Thalassiosirales (2)
Thalassiosirales (1)
Stephanodiscales (3)
Thalassiosirales (7)
Thalassiosirales (1)
Thalassiosirales (1)
Stephanodiscales (2)
Thalassiosirales (5)
Biddulphiales (3)
Rhaphoneidales (1)
Plagiogrammales (3)
Fragilariales (1)
Rhabdonematales (1)
Licmophorales (1)
Licmophorales (2)
Thalassionematales (3)
Eunotiales (1)
Bacillariales (27)
Naviculales (1)
Cymbellales (3)
Naviculales (1)
Stauroneidaceae (2)
Bacillariophyta ordo *incertae sedis* (2)
Surirellales (2)
Naviculales (3)
Naviculales (17)
3.0
Outgroup
Melosirales (1)
Stephanopyxales (1)
Paraliales (1)
Coscinodiscales (3)
Rhizosoleniales (3)
Ardissoneales (1)
Lithodesmiales (3)
Cymatosirales (1)
Eupodiscales (2)
Hemiaulales (1)
Chaetocerotales (1)
Hemiaulales (1)
Thalassiosirales (10)
Plagiogrammales (1)
Licmophorales (1)
Rhabdonematales (1)
Eunotiales (1)
Bacillariales (24)
Bacillariophyta ordo *incertae sedis* (1)
Naviculales (1)
Surirellales (3)
Cymbellales (2)
Naviculales (5)
Naviculales (12)
100≥BS≥90
90>BS≥70
70>BS≥50
3.0