

CORRECTION

Correction: A Higher Level Classification of All Living Organisms

Michael A. Ruggiero, Dennis P. Gordon, Thomas M. Orrell, Nicolas Bailly, Thierry Bourgoin, Richard C. Brusca, Thomas Cavalier-Smith, Michael D. Guiry, Paul M. Kirk

There are a number of errors in Tables 1 and 2. Please see the corrected Tables 1 and 2 here. The S1 Table Supporting Information file incorrectly spells "Pseudanabaenales" and is also corrected here.



OPEN ACCESS

Citation: Ruggiero MA, Gordon DP, Orrell TM, Bailly N, Bourgoin T, Brusca RC, et al. (2015) Correction: A Higher Level Classification of All Living Organisms. PLoS ONE 10(6): e0130114. doi:10.1371/journal.pone.0130114

Published: June 11, 2015

Copyright: © 2015 Ruggiero et al. This is an open access article distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Table 1. List of ranks used in the hierarchy with the number of taxa per rank

Rank	Number of Taxa
Superkingdom	2
Kingdom	7
Subkingdom	11
Infrakingdom	8
Superphylum	6
Phylum	96
Subphylum	60
Infraphylum	4
Superclass	12
Class	352
Subclass	145
Infraclass	23
Superorder	52
Order	1,468

Main ranks are in bold type; unnamed taxa are not counted.

doi:10.1371/journal.pone.0130114.t001

Table 2. Proposed hierarchical classification from superkingdom to order.

SUPERKINGDOM PROKARYOTA		
KINGDOM ARCHAEA [= ARCHAEBACTERIA]		
Phylum Crenarchaeota		
	Class "Aigarchaeota"	Order N.N. ("Ca. <i>Caldiarchaeum</i> ")
	Class "Korarchaeota"	Order N.N. ("Ca. <i>Korarchaeum</i> ")
	Class "Thaumarchaeota"	Order Cenarchaeales
		Class Thermoprotei [= Crenarchaeota]
		Order Acidilobales
		Order Desulfurococcales
		Order Fervidococcales
		Order Sulfolobales
		Order Thermoproteales
Phylum Euryarchaeota		
	Class Archaeoglobi	Order Archaeoglobales
	Class Halobacteria	Order Halobacteriales
	Class Methanobacteria	Order Methanobacteriales
	Class Methanococci	Order Methanococcales
	Class "Methanomicrobia"	Order Methanocellales
		Order Methanomicrobiales
		Order Methanosarcinales
	Class Methanopyri	Order Methanopyrales
	Class "Nanohaloarchaea"	Order N.N. (e.g., "Ca. <i>Nanosalarum</i> ")
	Class Thermococci	Order Thermococcales
	Class Thermoplasmata	Order Thermoplasmatales
KINGDOM BACTERIA [= EUBACTERIA]		
SUBKINGDOM NEGIBACTERIA		
Phylum Acidobacteria		
	Class N.N. (<i>Bryobacter</i>)	
	Class Acidobacteria	

(Continued)

Table 2. (Continued)

		Order Acidobacteriales
	Class Holophagae	
		Order Acanthopleuribacterales
		Order Holophagales
Phylum Aquificae		
	Class Aquificae	
		Order Aquificales
Phylum Armatimonadetes		
	Class Armatimonadia	
		Order Armatimonadales
	Class Chthonomonadetes	
		Order Chthonomonadales
	Class Fimbriimonadia	
		Order Fimbriimonadales
Phylum Bacteroidetes		
	Class Bacteroidia	
		Order Bacteroidales
	Class Cytophagia	
		Order Cytophagales
	Class Flavobacteria	
		Order Flavobacteriales
	Class Sphingobacteriia	
		Order Sphingobacteriales
Phylum Caldiserica		
	Class Caldiserica	
		Order Caldisericales
Phylum Chlamydiae		
	Class Chlamydiae	
		Order Chlamydiales
Phylum Chlorobi		
	Class Chlorobea	
		Order Chlorobiales
	Class Ignavibacteria	
		Order Ignavibacteriales
Phylum Chrysiogenetes		
	Class Chrysiogenetes	
		Order Chrysiogenales
Phylum Cyanobacteria [= Cyanophyta]		
	Class Cyanophyceae [= Phycobacteria]	
		Order Chroococcales
		Order Nostocales
		Order Oscillatoriales
		Order Pseudanabaenales

(Continued)

Table 2. (Continued)

		Order Synechococcales
		Class Gloeobacteria [= Gloeobacterophyceae]
		Order Gloeobacterales
Phylum Deferribacteres		
	Class Deferribacteres	
		Order Deferribacterales
Phylum Deinococcus-Thermus [= Hadobacteria]		
	Class Deinococci	
		Order Deinococcales
		Order Thermales
Phylum Dictyoglomi		
	Class Dictyoglomia	
		Order Dictyoglomales
Phylum Elusimicrobia		
	Class Elusimicrobia	
		Order Elusimicrobiales
Phylum Fibrobacteres		
	Class Fibrobacteria	
		Order Fibrobacterales
Phylum Fusobacteria		
	Class Fusobacteriia	
		Order Fusobacteriales
Phylum Gemmatimonadetes		
	Class Gemmatimonadetes	
		Order Gemmatimonadales
Phylum Lentisphaerae		
	Class Lentisphaeria	
		Order Lentisphaerales
		Order Victivallales
	Class Oligosphaeria	
		Order Oligosphaerales
Phylum Nitrospira		
	Class "Nitrospira"	
		Order "Nitrospirales"
Phylum Planctomycetes		
	Class Phycisphaerae	
		Order Phycisphaerales
	Class Planctomycea	
		Order Planctomycetales
Phylum Proteobacteria		

(Continued)

Table 2. (Continued)

Class Alphaproteobacteria
Order N.N. (e.g., <i>Breoghania</i>)
Order Caulobacterales
Order Kiloniellales
Order Kordiimonadales
Order Magnetococcales
Order "Parvularculales"
Order Rhizobiales
Order Rhodobacterales
Order Rhodospirillales
Order Rickettsiales
Order Sneathiellales
Order Sphingomonadales
Class Betaproteobacteria
Order N.N. (<i>Chitinivorax</i>)
Order Burkholderiales
Order Hydrogenophilales
Order Methylophilales
Order Neisseriales
Order Nitrosomonadales
Order "Procabacteriales"
Order Rhodocyclales
Class Deltaproteobacteria
Order N.N. (e.g., <i>Deferrisoma</i>)
Order Bdellovibrionales
Order Desulfarculales
Order Desulfobacterales
Order Desulfovibrionales
Order Desulfurellales
Order Desulfuromonadales
Order Myxococcales
Order Syntrophobacterales
Class Epsilonproteobacteria
Order Campylobacterales
Order Nautiliales
Class Gammaproteobacteria
Order N.N. (e.g., <i>Alkalimonas</i>)
Order Acidithiobacillales
Order Aeromonadales
Order Alteromonadales
Order Cardiobacteriales
Order Chromatiales
Order "Enterobacteriales"
Order Legionellales
Order Methylococcales
Order Oceanospirillales
Order Orbales
Order Pasteurellales

(Continued)

Table 2. (Continued)

	Order Pseudomonadales
	Order "Salinisphaerales"
	Order Thiotrichales
	Order "Vibrionales"
	Order Xanthomonadales
Class Zetaproteobacteria	
	Order Mariprofundales
Phylum Spirochaetae	
Class "Spirochaetes"	
	Order Spirochaetales
Phylum Synergistetes	
Class Synergistia	
	Order Synergistales
Phylum Thermodesulfobacteria	
	Class Thermodesulfobacteria
	Order Thermodesulfobacteriales
Phylum Thermotogae	
Class Thermotogae	
	Order Thermotogales
Phylum Verrucomicrobia	
Class Opitutae	
	Order Opitales
	Order Puniceococcales
Class Verrucomicrobiae	
	Order Verrucomicrobiales
SUBKINGDOM POSIBACTERIA	
Phylum Actinobacteria	
Class Actinobacteria	
	Order Acidimicrobiales
	Order Actinomycetales
	Order Bifidobacteriales
	Order Coriobacteriales
	Order Euzebyales
	Order Gaiellales
	Order Nitriliruptorales
	Order Rubrobacteriales
	Order Solirubrobacteriales
	Order Thermoleophilales
Phylum Chloroflexi [= Chlorobacteria]	
Class Anaerolineae	
	Order Anaerolineales
Class Caldilineae	
	Order Caldilineales

(Continued)

Table 2. (Continued)

	Class	
	Chloroflexia	
		Order Chloroflexales
		Order Herpetosiphonales
	Class Dehalococcoidia	
		Order Dehalococcoidales
	Class Ktedonobacteria	
		Order Ktedonobacterales
		Order Thermogemmatissporales
	Class Thermomicrobia	
Phylum Firmicutes		Order Sphaerobacterales
		Order Thermomicrobiales
	Class	
	Bacilli	
		Order Bacillales
		Order Lactobacillales
	Class Clostridia	
		Order Clostridiales
		Order Halanaerobiales
		Order Natranaerobiales
		Order Thermoanaerobacterales
	Class Erysipelotrichia	
		Order Erysipelotrichales
	Class	
	Negativicutes	
		Order Selenomonadales
	Class Thermolithobacteria	
		Order Thermolithobacterales
Phylum Tenericutes		
	Class Mollicutes	
		Order Acholeplasmatales
		Order Anaeroplasmatales
		Order Entomoplasmatales
		Order Haloplasmatales
		Order Mycoplasmatales
SUPERKINGDOM EUKARYOTA		
KINGDOM PROTOZOA		
SUBKINGDOM EOZOA		
INFRAKINGDOM EUGLENOZOA		
Phylum Euglenozoa		
Subphylum N.N.		
Class		
Diplonemea		
Order Diplonemida		

(Continued)

Table 2. (Continued)

	Class Kinetoplastea	
		Order Bodonida
		Order Prokinetoplastida
		Order Trypanosomatida
	Subphylum Euglenoida	
	Class N. N.	
		Order Petalomonadida
		Order Ploeotiida
	Class Euglenophyceae	
		Order Euglenida
		Order Eutreptiida
	Class Peranemea	
		Order Heteronemida
		Order Peranemida
		Order Rhabdomonadida
	Subphylum Symbiontida	
	Class Postgaardea	
		Order Postgaardida
INFRAKINGDOM EXCAVATA		
	Phylum Loukzoa	
	Subphylum Eolouka	
	Class Jakobea	
		Order Jakobida
	Class Tsukubea	
		Order Tsukubamonadida
	Subphylum Neolouka	
	Class Malawimonadea	
		Order Malawimonadida
	Phylum Metamonada	
	Class Anaeromonadea	
		Order Oxymonadida
		Order Trimastigida
	Class Carpomonadea	
		Order Carpediemonadida
		Order Chilomastigida
		Order Dysnectida
	Class Eopharyngea	
		Order Diplomonadida
		Order Retortamonadida
	Class Trichomonadea	
		Order Cristamonadida
		Order Spirotrichonymphida
		Order Trichomonadida

(Continued)

Table 2. (Continued)

		Order Tritrichomonadida
	Class Trichonymphea	
		Order Lophomonadida
		Order Trichonymphida
	Phylum Percolozoa	
	Subphylum Pharyngomonada	
	Class Pharyngomonadea	
		Order Pharyngomonadida
	Subphylum Tetramitia	
	Class Heterolobosea	
		Order Acrasida
		Order Schizopyrenida
	Class Lyromonadea	
		Order Lyromonadida
	Class Percolatea	
		Order Percolomonadida
		Order Pseudociliatida
	SUBKINGDOM SARCOMASTIGOTA	
	Phylum Amoebozoa	
	Subphylum Conosa	
	Class Archamoebae	
		Order Mastigamoebida
		Order Pelobiontida
		Order Rhizomastigida
	Class Dictyostelea	
		Order Dictyostelida
	Class Myxogastrea [= Myxomycetes]	
	Subclass Exosporeae	
	Order Ceratiomyxida	
	Subclass Myxogastria	
	Superorder Collumelidia	
	Order Echinosteliida	
	Order Fuscisporida	
	Superorder Lucisporidia	
	Order Liceida	
	Order Trichiida	
	Class Protostelea	
		Order Protostelida
	Class Variosea	
		Order Artodiscida
		Order Holomastigida
		Order Phalansteriida
		Order Varipodida

(Continued)

Table 2. (Continued)

Subphylum Lobosa	
Class Discosea	
Subclass Flabellinia	
	Order Dactylopodida
	Order Himatismenida
	Order Pellitida
	Order Stygamoebida
	Order Trichosida
	Order Vanellida
	Subclass Longamoebia
	Order Dermamoebida
	Order Centramoebida
	Order Thecamoebida
Class Tubulinea [= Lobosea]	
	Order Arcellinida
	Order Echinamoebida
	Order Euamoebida
	Order Leptomyxida
	Order Nolandida
Phylum Choanozoa [with Microsporidia, Animalia, and Fungi constitutes "Supergroup Opisthokonta"]	
Subphylum Choanofila	
Class Choanoflagellata	
	Order Acanthoecida
	Order Craspedida
Class Corallochytrea	
	Order Corallochytrida
Class Filasterea	
	Order Ministeriida
Class Ichthyosporea	
	Order Dermocystida
	Order Eccrinida
Subphylum Paramycia	
Class Aphelidea	
	Order Aphelidida
Class Cristidiscoidea	
	Order Fonticulida
	Order Nucleariida
Class Rozellidea	
	Order Rozellida
Phylum Microsporidia [with Choanozoa, Animalia, and Fungi constitutes "Supergroup Opisthokonta"]	
Class Disporea	
	Order N.N. (e.g., <i>Nosema</i>)
Class Metchnikovellea	
	Order Metchnikovellida

(Continued)

Table 2. (Continued)

		Class Minisporea [= Microsporea]
		Order Minisporida [= Minisporea]
	Class	
	Pleistophorea	
		Order Pleistophorida
	Phylum Sulcozoa	
	Subphylum Apusozoa	
	Class Breviatea	
		Order Breviatida
	Class Thecomonadea	
		Order Apusomonadida
	Subphylum Varisulca	
	Class Diphyllatea	
		Order Diphylleida
	Class	
	Glissodiscea	
		Order Mantamonadida
		Order Planomonadida
	Class	
	Hilomonadea	
		Order Rigifilida
KINGDOM CHROMISTA		
SUBKINGDOM		
HACROBIA		
	Phylum	
	N.N.	
	Class Endohelea	
		Order Heliomonadida
		Order Microhelida
	Class	
	Picomonadea	
		Order Picomonadida
	Class Telonemea	
		Order Telonemida
	Phylum Cryptista	
	Subphylum	
	Palpitia	
	Class Palpatea	
		Order Palpitida
	Subphylum Rollomonadia	
	Class Cryptophyceae	
		Order Cryptomonadales
		Order Pyrenomonadales
		Order Tetragonidiales
	Class Goniomonadea	
		Order Goniomonadida
	Class	
	Leucocryptea	
		Order Kathablepharida

(Continued)

Table 2. (Continued)

Phylum Haptophyta	
	Class Coccolithophyceae [= Prymnesiophyceae]
	Order Coccolithales
	Order Coccosphaerales
	Order Isochrysidales
	Order Phaeocystales
	Order Prymnesiales
	Order Syracosphaerales
	Order Zygodiscales
	Class Pavlovophyceae
	Order Pavlovaes
Phylum Heliozoa	
	Class Centrohelea
	Order Acanthocystida
	Order Pterocystida
SUBKINGDOM HAROSA [= "Supergroup SAR"]	
INFRAKINGDOM HALVARIA	
Superphylum Alveolata	
Phylum Ciliophora	
Subphylum Intramacronucleata	
	Class Armophorea
	Order Armophorida
	Order Clevelandellida
	Class Colpodea
	Order Bryometopida
	Order Bryophryida
	Order Bursariomorphida
	Order Colpodida
	Order Cyrtolophosidida
	Order Sorogenida
	Class Litostomatea
	Subclass Haptoria
	Order Cyclotrichiida
	Order Haptorida
	Order Pleurostomatida
	Subclass Trichostomatia
	Order Entodiniomorphida
	Order Macropodiniida
	Order Vestibuliferida
	Class Spirotrichea
	Subclass Choreotrichia

(Continued)

Table 2. (Continued)

	Order Tintinnida
	Subclass Hypotrichia
	Order Euplotida
	Order Kinetochida
	Subclass Licnophoria
	Order Licnophorida
	Subclass Oligotrichia
	Order Strombidiida
	Subclass Protocruziida
	Order Phacodiniida
	Order Protocruziida
	Subclass Stichotrichia
	Order Sporadotrichida
	Order Stichotrichida
	Order Urostylida
Class Nassophorea	
	Order Colpodidiida
	Order Microthoracida
	Order Nassulida
	Order Synhymeniida
Class Oligohymenophorea	
	Subclass Apostomatia
	Order Apostomatida
	Order Astomatophorida
	Order Pilisuctorida
Subclass Astomatia	
	Order Astomatida
Subclass Hymenostomatia	
	Order Ophyroglenida
	Order Tetrahymenida
Subclass Peniculia	
	Order Peniculida
	Order Urocentrida
Subclass Peritrichia	
	Order Mobilida
	Order Sessilida
	Subclass Scuticociliatia
	Order Philasterida
	Order Pleuronematida
	Order Thigmotrichida
Class Phyllopharyngea	
	Subclass Chonotrichia
	Order Cryptogemmida
	Order Exogemmida

(Continued)

Table 2. (Continued)

	Subclass Cyrtophoria
	Order Chlamyodontida
	Order Dysteriida
	Subclass Rhynchodia
	Order Hypocomatida
	Order Rhynchodida
	Subclass Suctoria
	Order Endogenida
	Order Evaginogenida
	Order Exogenida
	Class Plagiopylea
	Order Odontostomatida
	Order Plagiopylida
	Class Prostomatea
	Order Prorodontida
	Order Prostomatida
	Subphylum Postciliodesmatophora
	Class Heterotrichea
	Order Heterotrichida
	Class Karyorelictea
	Order Loxodida
	Order Protoheterotrichida
	Order Protostomatida
	Phylum Miozoa
	Subphylum Myxozoa
	Infraphylum Apicomplexa
	Superclass Apicomonada
	Class Apicomonadea
	Order Chromerida
	Order Colpodellida
	Order Voromonadida
	Superclass Sporozoa
	Class N. N.
	Order Blastogregarinida
	Class Coccidiomorphea
	Subclass Coccidia
	Order Adeleida
	Order Eimeriida
	Order Ixorheida
	Subclass Coelotrophia
	Order Coelotrophiida [= Protococcidiida]

(Continued)

Table 2. (Continued)

Subclass Hematozoa	
	Superorder Aconoidia
	Order Nephromycida
	Order Piroplasmida
	Superorder Haemosporidia
	Order Haemosporida
Class Gregarinomorpha	
	Subclass Cryptogregarina
	Order Cryptogregarida (<i>Cryptosporidium</i>)
	Subclass Histogregarina
	Order Histogregarida
	Subclass Orthogregarina
	Order Arthrogregarida
	Order Vermigregarida
Class Paragregaria	
	Order Archigregarinida
	Order Stenophorida
	Order Velocida
Infraphylum Dinozoa	
Superclass Dinoflagellata	
Class Dinophyceae	
Subclass N.N.	
	Order Actiniscales
	Order Blastodinales
	Order Coccidinales
	Order Dinamoebales
	Order Lophodinales
	Order Pyrocystales
	Order Thoracosphaerales
	Subclass Dinophysoidia
	Order Dinophysidales
	Order Nannoceratopsales
	Subclass Gonyaulacoidia
	Order Gonyaulacales
	Order Gymnodinales
	Subclass Peridinoidia
	Order Peridiniales
	Order Prorocentrales
Subclass Suessioidia	
	Order Suessiales
Class Ellobiopsea	
	Order Ellobiopsida
Class Noctiluca	

(Continued)

Table 2. (Continued)

	Order Noctilucida
Class Oxyrrhea	
	Order Acrocoelida
	Order Oxyrrhida
Class Syndinea	
	Order Rastrimonadida
	Order Syndinida
Superclass Perkinsozoa	
Class	
Myzomonadea	
	Order Algovorida
Class Perkinsea	
	Order Perkinsida
	Order Phagodinida
Class Squirmidea	
	Order Squirmida
Subphylum Protalveolata	
Class	
Colponemea	
	Order Colponemida
Superphylum Heterokonta [= "Supergroup Stramenopiles"]	
Phylum Bigyra	
Class Bikosea	
	Order Anoecida
	Order Bicoecida
	Order Borokida
	Order Pseudodendromonadida
	Order Rictida
Class	
Blastocystea	
	Order Blastocystida
Class	
Nanomonadea	
	Order Uniciliatida
Class Opalineae	
	Order Opalinida
	Order Proteromonadida
Class	
Labyrinthulea	
	Order Labyrinthulida
	Order Thraustochytriida
	Class Placididea [= Placidiophyceae]
	Order Placidiida
Phylum Ochrophyta [= Heterokontophyta p.p.]	
	Class Bacillariophyceae [= Diatomeae]
	Subclass Bacillariophycidae
	Order Achnanthales
	Order Bacillariales
	Order Cymbellales

(Continued)

Table 2. (Continued)

	Order Dictyoneidales
	Order Eunotiales
	Order Lyrellales
	Order Mastogloiales
	Order Naviculales
	Order Rhopalodiales
	Order Surirellales
	Order Thalassiophysales
	Subclass Coscinodiscophycidae
	Order Anaulales
	Order Arachnoidiscales
	Order Asterolamprales
	Order Aulacoseirales
	Order Biddulphiales
	Order Chaetocerotales
	Order Chrysanthemodiscales
	Order Corethrales
	Order Coscinodiscales
	Order Cymatosirales
	Order Ethmodiscales
	Order Hemiaulales
	Order Leptocylindrales
	Order Lithodesmiales
	Order Melosirales
	Order Orthoseirales
	Order Paraliales
	Order Rhizosoleniales
	Order Stictocyclales
	Order Stictodiscales
	Order Thalassiosirales
	Order Triceratiales
	Subclass Fragilariophycidae
	Order Ardissonaeales
	Order Climacospheniales
	Order Cyclophorales
	Order Fragilariales
	Order Licmophorales
	Order Protoraphidales
	Order Rhabdonematales
	Order Rhapsoneidales
	Order Striatellales
	Order Tabellariales
	Order Thalassionematales
	Order Toxariales
Class	
Bolidophyceae	
	Order Parmales [= Bolidomonadales]

(Continued)

Table 2. (Continued)

Class	
Chrysomerophyceae	
	Order Chrysomeridales
Class Chrysophyceae	
	Order Chloramoebales
	Order Chromulinales
	Order Chrysosphaerales
	Order Heterogloales
	Order Hibberdiales
	Order Hydrurales
	Order Ochromonadales
	Order Paraphysomonadida
	Order Synurales
	Order Thallochrysidales
Class Eustigmatophyceae	
	Order Eustigmatales
Class Dictyochophyceae [= Hypogyrstea]	
	Order Dictyochaetales
	Order Olisthodiscales
	Order Pedinellales
	Order Pelagomonadales
	Order Sarcinochrysidales
Class	
Phaeophyceae	
	Subclass Dictyophycidae
	Order Dictyotales
	Order Onslowiales
	Order Sphacelariales
	Order Syringodermatales
	Subclass Discosporangiophycidae
	Order Discosporangiales
	Subclass Fucophycidae
	Order Ascoseirales
	Order Asterocladales
	Order Desmarestiales
	Order Ectocarpales
	Order Fucales
	Order Laminariales
	Order Nemodermatales
	Order Phaeosiphoniellales
	Order Ralfsiales
	Order Scytothamniales
	Order Sporochneales
	Order Tilopteridales [= Cutleriales]
	Subclass Ishigeophycidae
	Order Ishigeales
Class Phaeothamniophyceae [= Aurophyceae]	
	Order Aurearenales

(Continued)

Table 2. (Continued)

	Order Phaeothamniales
	Class Picophagophyceae [= Picophagea]
	Order Picophagales
	Order Synchronomales
Class Pinguiphyceae	
	Order Pinguiochrysidales
Class Raphidophyceae	
	Order Actinophryida
	Order Commatiida
	Order Raphidomonadales
Class	
Schizocladiphyceae	
	Order Schizocladiales
Class Xanthophyceae	
	Order Mischococcales
	Order Pleurochloridellales
	Order Tribonematales
	Order Vaucheriales
Phylum Pseudofungi [= Oomycota]	
Class Bigyromonadea	
	Order Developayellida
Class	
Hyphochytrea	
	Order Hyphochytriida
	Order Pirsoniida
Class Oomycetes	
Subclass	
Eogamia	
	Order Anisopidiiales
	Order Haptoglossales
	Order Lagenismatales
	Order Olpidiopsidales
	Order Rozellopsidales
	Subclass Peronosporidae
	Order Peronosporales
	Order Pythiales
	Order Rhipidiales
	Subclass Saprolegniidae
	Order Albuginales
	Order Leptomitales
	Order Salligenidiales
	Order Saprolegniales
INFRAKINGDOM	
RHIZARIA	
Phylum Cercozoa	
Subphylum Endomyxa	
Class	
Ascetosporea	
	Order Claustrosporida

(Continued)

Table 2. (Continued)

	Order Haplosporida
	Order Paradinida
	Order Paramyxida
Class Gromiidea	
	Order Gromiida
	Order Reticulosida
Class Phytomyxea	
	Order Phagomyxida
	Order Plasmodiophorida
Class Vampyrellidea	
	Order Vampyrellida
Subphylum Monadofilosa	
Class Imbricatea	
Subclass Placonuda	
	Order Discocelida
	Order Discomonadida
	Order Euglyphida
	Order Marimonadida
	Order Variglissida
Subclass Placoperla	
	Order Perlofilida
	Order Rotosphaerida
	Order Spongomonadida
	Order Thaumatomonadida
	Order Zoelucasida
Class Metromonadea	
	Order Metopiida
	Order Metromonadida
Class Sarcomonadea	
	Order Cercomonadida
	Order Glissomonadida
	Order Pansomonadida
	Order Pseudosporida
	Order Sainouroida
Class Thecofilosea	
Subclass Eothecia	
	Order Cryomonadida
	Order Ebriida
	Order Matazida
	Order Ventricleftida
	Subclass Phaeodaria
	Order Eodarida
	Order Opaloconchida

(Continued)

Table 2. (Continued)

	Subclass Tectosia	
		Order Tectofilosida
Subphylum Reticulofilosa		
	Class Chlorarachnea	
		Order Chlorarachnida
	Class Granofilosea	
		Order Cryptofilida
		Order Desmothoracida
		Order Leucodictyida
		Order Limnofilida
	Class Skiomonadea	
		Order Tremulida
Phylum Retaria		
Subphylum Foraminifera		
	Class Monothalamea	
		Order Allogromiida
		Order Astrorhizida
		Order Psamminida
		Order Stannomida
	Class Globothalamea	
		Order Carterinida
		Order Globeriginida
		Order Lagenida
		Order Lituolida
		Order Lofusiida
		Order Robertinida
		Order Rotaliida
		Order Testulariida
		Order Trochamminida
	Class Tubothalamea	
		Order Miliolida
		Order Spirillinida
Subphylum Radiozoa		
	Superclass Polycystinia	
	Class Polycystinea	
		Order Collodarida
		Order Nassellaria
		Order Spumellaria
	Superclass Spasmaria	
	Class Acantharea	
		Order Arthracanthida
		Order Chaunacanthida
		Order Holacanthida

(Continued)

Table 2. (Continued)

		Class Sticholonchea	Order Symphyacanthida
			Order Taxopodida
KINGDOM FUNGI	SUBKINGDOM DIKARYA [= NEOMYCOTA]	Phylum Ascomycota	
		Subphylum Pezizomycotina	
		Class Archaeorhizomycetes	
			Order Archaeorhizomycetales
			Order Lahmiales
			Order Triblidiales
		Class Arthoniomycetes	
			Order Arthoniales
		Class Dothideomycetes	
		Subclass N.N.	
			Order Acrospemales
			Order Botryosphaerales
			Order Hysteriales
			Order Jahnulales
			Order Korallionastetales
			Order Patellariales
			Order Trypetheliales
			Subclass Dothideomycetidae
			Order Capnodiales
			Order Dothideales
			Order Microthyriales
			Order Myriangiales
			Subclass Meliolomycetidae
			Order Meliolales
			Subclass Pleosporomycetidae
			Order Mytilinidiales
			Order Pleosporales
		Class Eurotiomycetes	
			Subclass Chaetothyriomycetidae
			Order Chaetothyriales
			Order Pyrenulales
			Order Verrucariales
			Subclass Eurotiomycetidae
			Order Arachnomycetales
			Order Ascosphaerales
			Order Coryneliales
			Order Eurotiales
			Order Onygenales

(Continued)

Table 2. (Continued)

	Subclass Mycocaliciomycetidae
	Order Mycocaliciales
Class	
Laboulbeniomycetes	
	Order Laboulbeniales
	Order Pyxidiophorales
Class Lecanoromycetes	
Subclass	
N.N.	
	Order Candelariales
	Order Umbilicariales
	Subclass Acarosporomycetidae
	Order Acarosporales
	Subclass Lecanoromycetidae
	Order Lecanorales
	Order Lecideales
	Order Peltigerales
	Order Rhizocarpales
	Order Teloschistales
	Subclass Ostropomycetidae
	Order Agyriales
	Order Baeomycetales
	Order Ostropales
	Order Pertusariales
Class	
Leotiomyces	
	Order Cyttariales
	Order Erysiphales
	Order Geoglossales
	Order Helotiales
	Order Leotiales
	Order Mediolariales
	Order Rhytismatales
	Order Thelebolales
Class Lichinomycetes	
	Order Eremithallales
	Order Lichinales
Class Orbiliomycetes	
	Order Orbiliales
Class	
Pezizomycetes	
	Order Pezizales
Class Sordariomycetes	
Subclass	
N.N.	
	Order Phyllachorales
	Order Trichosphaeriales
	Subclass Hypocreomycetidae
	Order Coronophorales

(Continued)

Table 2. (Continued)

	Order Hypocreales
	Order Melanosporales
	Order Microascales
	Subclass Sordariomycetidae
	Order Boliniales
	Order Calosphaeriales
	Order Chaetosphaeriales
	Order Coniochaetales
	Order Diaporthales
	Order Ophiostomatales
	Order Sordariales
	Subclass Spathulosporomycetidae
	Order Lulworthiales
	Subclass Xylariomycetidae
	Order Xylariales
Subphylum Saccharomycotina	
Class Saccharomycetes	Order Saccharomycetales
Subphylum Taphrinomycotina	
Class Neoelectomycetes	Order Neoelectales
	Class Pneumocystidomycetes
	Order Pneumocystidales
	Class Schizosaccharomycetes
	Order Schizosaccharomycetales
Class Taphrinomycetes	Order Taphrinales
Phylum Basidiomycota	
Class Entorrhizomycetes	Order Entorrhizales
	Order Wallemiales
Subphylum Agaricomycotina	
Class Agaricomycetes	Subclass N.N.
	Order Auriculariales
	Order Cantharellales
	Order Corticiales
	Order Gloeophyllales
	Order Hymenochaetales
	Order Polyporales
	Order Russulales
	Order Sebaciniales
	Order Thelephorales
	Order Trechisporales
	Subclass Agaricomycetidae
	Order Agaricales
	Order Atheliales
	Order Boletales

(Continued)

Table 2. (Continued)

	Subclass Phallomycetidae
	Order Geastrales
	Order Gomphales
	Order Hysterangiales
	Order Phallales
Class	
Dacrymycetes	Order Dacrymycetales
Class Tremellomycetes	
	Order Cystofilobasidiales
	Order Filobasidiales
	Order Tremellales
Subphylum Pucciniomycotina	
Class	
Agaricostilbomycetes	Order Agaricostilbales
	Order Spiculogloeales
Class Atractiellomycetes	
	Order Atractiellales
Class Classiculomycetes	
	Order Classiculales
	Class Cryptomycocolacomycetes
	Order Cryptomycocolacales
Class	
Cystobasidiomycetes	Order Cystobasidiales
	Order Erythrobasidiales
	Order Naohideales
Class Microbotryomycetes	
	Order Hetrogastridiales
	Order Leucosporidiales
	Order Microbotryales
	Order Sporidiobolales
Class	
Mixiomycetes	Order Mixiales
Class Pucciniomycetes	
	Order Helicobasidiales
	Order Pachnocybales
	Order Platygloeales
	Order Pucciniales
	Order Septobasidiales
Subphylum Ustilaginomycotina	
Class N.	
N.	Order Malasseziales
Class Exobasidiomycetes	
	Order Ceraceosorales
	Order Doassansiales

(Continued)

Table 2. (Continued)

	Order Entylomatales
	Order Exobasidiales
	Order Georgefischeriales
	Order Microstromatales
	Order Tilletiales
	Class Ustilaginomycetes
	Order Urocystidales
	Order Ustilaginales
SUBKINGDOM EOMYCOTA	
Phylum Chytridiomycota	
	Class Blastocladiomycetes [= Allomycetes]
	Order Blastocladales
	Class Chytridiomycetes
	Order Chytridiales
	Order Lobulomycetales
	Order Neocallimastigales
	Order Olpidiales
	Order Rhizophlyctidales
	Order Rhizophydiales
	Order Spizellomycetales
	Class Monoblepharidomycetes
	Order Monoblepharidales
Phylum Glomeromycota	
	Class Glomeromycetes [= Glomomycetes]
	Order Archaeosporales
	Order Diversisporales
	Order Glomerales
	Order Paraglomerales
Phylum Zygomycota	
Subphylum N.N.	
	Class N. N.
	Order Basidiobolales
Subphylum Entomophthoromycotina	
	Class N. N.
	Order Entomophthorales
Subphylum Kickxellomycotina	
	Class N. N.
	Order Asellariales
	Order Dimargaritales
	Order Harpellales
	Order Kickxellales
Subphylum Mortierellomycotina	
	Class N. N.

(Continued)

Table 2. (Continued)

		Order Mortierellales
	Subphylum Mucoromycotina	
	Class N. N.	
		Order Endogonales
		Order Mucorales
	Subphylum Zoopagomycotina	
	Class N. N.	
		Order Zoopagales
KINGDOM PLANTAE		
SUBKINGDOM BILIPHYTA		
	Phylum Glaucophyta	
	Class Glaucophyceae	
		Order Glaucocystales
	Phylum Rhodophyta	
	Subphylum Cyanidiophytina	
	Class Cyanidiophyceae	
		Order Cyanidiales
	Subphylum Eurhodophytina	
	Class Bangiophyceae	
		Order Bangiales
		Order Goniotrichales
	Class Florideophyceae	
	Subclass N.N.	
		Order Rhodachlyales
		Subclass Ahnfeltiophycidae
		Order Ahnfeltiales
		Order Pihelliales
		Subclass Corallinophycidae
		Order Corallinales
		Order Rhodogorgonales
		Order Sporolithales
		Subclass Hildenbrandiophyceae
		Order Hildenbrandiales
		Subclass Nemaliophycidae
		Order Acrochaetiales
		Order Balbianiales
		Order Balliales
		Order Batrachospermales
		Order Colaconematales
		Order Entwisleiales
		Order Nematiales

(Continued)

Table 2. (Continued)

	Order Palmariales
	Order Thoreales
	Subclass Rhodymeniophycidae
	Order Acrosymphytales
	Order Bonnemaisoniales
	Order Ceramiales
	Order Gelidiales
	Order Gigartinales
	Order Gracilariales
	Order Halymeniales
	Order Nemastomatales
	Order Peyssonneliales
	Order Plocamiales
	Order Rhodymeniales
	Order Sebdeniales
Subphylum Metarhodophytina	
	Class Compsopogonophyceae
	Order Compsopogonales
	Order Erythropeltidales
	Order Rhodochaetales
Subphylum Rhodellophytina	
	Class Porphyridiophyceae
	Order Porphyridiales
	Class Rhodellophyceae
	Order Dixonellales
	Order Glaucosphaerales
	Order Rhodellales
	Class
	Stylonematophyceae
	Order Rufusiales
	Order Stylonematales
SUBKINGDOM VIRIDIPLANTAE	
INFRAKINGDOM	
CHLOROPHYTA	
Phylum	
Chlorophyta	
Subphylum Chlorophytina	
	Class Chlorodendrophyceae
	Order Chlorodendrales
	Class Chlorophyceae
	Order N.N. (e.g., Chlorangiopsidaceae)
	Order Chaetopeltidales
	Order Chaetophorales
	Order Chlamydomonadales [= Volvocales]
	Order Oedogoniales
	Order Sphaeropleales
	Class Pedinophyceae
	Order Marsupiomonadales
	Order Pedinomonadales

(Continued)

Table 2. (Continued)

	Order Scourfieldiales
Class Trebouxiphyceae	
	Order Chlorellales
	Order Microthamniales
	Order Phyllosiphonales
	Order Prasiolales
	Order Trebouxiales
Class Ulvophyceae	
	Order Bryopsidales
	Order Cladophorales
	Order Dasycladales
	Order Oltmansiellopsidales
	Order Scotinosphaerales
	Order Trentepohliales
	Order Ulotrichales
	Order Ulvales
Subphylum Prasinophytina	
Class Mamiellophyceae	
	Order Dolichomastigales
	Order Mamiellales
	Order Monomastigales
Class Nephrophyceae [= Nephroselmidophyceae]	
	Order Nephroselmidales
Class Pyramimonadophyceae	
	Order Palmophyllales
	Order Prasinococcales
	Order Pseudoscourfieldiales
	Order Pyramimonadales
INFRAKINGDOM STREPTOPHYTA	
Superphylum Charophyta	
Phylum Charophyta	
Class Charophyceae	
	Order Charales
Class Chlorokybophyceae	
	Order Chlorokybales
Class Coleochaetophyceae	
	Order Chaetosphaeridiales
	Order Coleochaetales
Class Conjugatophyceae [= Zygnematophyceae]	
	Order Desmidiaceae
	Order Zygnematales
Class Klebsormidiophyceae	
	Order Klebsormidiales

(Continued)

Table 2. (Continued)

Superphylum Embryophyta	Class Mesostigmatophyceae	
	Order Mesostigmatales	
	Phylum Anthocerotophyta	
	Class Anthocerotopsida	
	Subclass Anthocerotidae	
	Order Anthocerotales	
	Subclass Dendrocerotidae	
	Order Dendrocerotales	
	Order Phymatocerales	
	Subclass Notothylatidae	
	Order Notothyladales	
Phylum Bryophyta	Class Leiosporocerotopsida	
	Order Leiosporocerotales	
	Class Andreaebryopsida	
	Order Andreaebryales	
	Class Andreaeopsida	
	Order Andreaeales	
	Class Bryopsida	
	Subclass Bryidae	
	Order Bartramiales	
	Order Bryales	
	Order Hedwigiales	
	Order Hookeriales	
	Order Hypnales	
	Order Hypnodendrales	
	Order Orthotrichales	
	Order Ptychomniales	
	Order Rhizogoniales	
	Order Splachnales	
	Subclass Buxbaumiidae	
	Order Buxbaumiales	
	Subclass Dicranidae	
	Order Archidiales	
	Order Bryoxiphiales	
	Order Dicranales	
	Order Grimmiales	
	Order Pottiales	
	Order Scouleriales	
	Subclass Diphysciidae	
	Order Diphysciales	
	Subclass Funariidae	
	Order Encalyptales	

(Continued)

Table 2. (Continued)

	Order Funariales
	Order Gigaspermales
Subclass Timmidae	
	Order Timmiales
Class Oedipodiopsida	
	Order Oedipodiales
Class Polytrichopsida	
	Order Polytrichales
Class Sphagnopsida	
	Order Ambuchananiales
	Order Sphagnales
Class Takakiopsida	
	Order Takakiales
Class Tetraphidopsida	
	Order Tetraphidales
Phylum Marchantiophyta	
Class Haplomitriopsida	
	Order Calobryales
	Order Treubiales
Class Jungermannopsida	
	Subclass Jungermanniidae
	Order Jungermanniales
	Order Porellales
	Order Ptilidiales
	Subclass Metzgeriidae
	Order Metzgeriales
	Order Pleuroziales
Subclass Pelliidae	
	Order Fossombroniales
	Order Pallaviciniales
	Order Pelliiales
Class Marchantiopsida	
	Order Blasiales
	Order Lunulariales
	Order Marchantiales
	Order Neohodgsoniales
	Order Sphaerocarpaceles
Phylum Tracheophyta	
Subphylum Lycopodiophytina	
Class Lycopodiopsida	
	Order Isoetales
	Order Lycopodiales
	Order Selaginellales
Subphylum Polypodiophytina	
Class Polypodiopsida	

(Continued)

Table 2. (Continued)

	Subclass Equisetidae
	Order Equisetales
	Subclass Marattiidae
	Order Marattiales
	Subclass Ophioglossidae [= Psilotidae]
	Order Ophioglossales
	Order Psilotales
	Subclass Polypodiidae
	Order Cyatheaes
	Order Gleicheniales
	Order Hymenophyllales
	Order Osmundales
	Order Polypodiales
	Order Salviniales
	Order Schizaeales
Subphylum Spermatophytina	
Superclass	
“Angiospermae”	
Class	
Magnoliopsida	
	Superorder N.N.
	Order N.N. (e.g., Icacinaceae)
	Superorder Amborellanae
	Order Amborellales
	Superorder Asteranae
	Order Apiales
	Order Aquifoliales
	Order Asterales
	Order Boraginales
	Order Bruniales
	Order Cornales
	Order Dipsacales
	Order Ericales
	Order Escalloniales
	Order Garryales
	Order Gentianales
	Order Lamiales
	Order Paracryphiales
	Order Solanales
	Superorder Austrobaileyanae
	Order Austrobaileyales
	Superorder Berberidopsidanae
	Order Berberidopsidales
	Superorder Buxanae
	Order Buxales
	Superorder Caryophyllanae
	Order Caryophyllales
	Superorder Ceratophyllanae

(Continued)

Table 2. (Continued)

Order Ceratophyllales
Superorder Dillenianae
Order Dilleniales
Superorder Lilianae [= Monocotyledones]
Order Acorales
Order Alismatales
Order Arecales
Order Asparagales
Order Commelinales
Order Dasypogonales
Order Dioscoreales
Order Liliales
Order Pandanales
Order Petrosaviales
Order Poales
Order Zingiberales
Superorder Magnolianae
Order Canellales
Order Chloranthales
Order Laurales
Order Magnoliales
Order Piperales
Superorder Myrothamnanae
Order Gunnerales
Superorder Nymphaeanae
Order Nymphaeales
Superorder Proteanae
Order Proteales
Superorder Ranunculanae
Order Ranunculales
Superorder Rosanae
Order Brassicales
Order Celastrales
Order Crossosomatales
Order Cucurbitales
Order Fabales
Order Fagales
Order Geraniales
Order Huerteales
Order Malpighiales
Order Malvales
Order Myrtales
Order Oxalidales
Order Picramniales
Order Rosales
Order Sapindales
Order Vitales
Order Zygophyllales

(Continued)

Table 2. (Continued)

	Superorder Santalanae
	Order Santalales
	Superorder Saxifraganae
	Order Saxifragales
	Superorder Trochodendrae
	Order Trochodendrales
	Superclass "Gymnospermae"
	Class
	Cycadopsida
	Subclass
	Cycadidae
	Order Cycadales
	Class
	Ginkgoopsida
	Subclass Ginkgooidae
	Order Ginkgoales
	Class Gnetopsida
	Subclass
	Gnetidae
	Order Gnetales
	Class Pinopsida
	Subclass Pinidae
	Order Pinales
KINGDOM ANIMALIA	
SUBKINGDOM	
N.N.	
	Phylum Cnidaria
	Subphylum Anthozoa
	Class Anthozoa
	Subclass Hexacorallia
	Order Actiniaria
	Order Antipatharia
	Order Ceriantharia
	Order Corallimorpharia
	Order Scleractinia
	Order Zoantharia [= Zoanthidea]
	Subclass Octocorallia
	Order Alcyonacea
	Order Helioporacea
	Order Pennatulacea
	Subphylum Medusozoa
	Class Cubozoa
	Order Carybdeida
	Order Chirodropida
	Class Hydrozoa
	Subclass Hydroidolina
	Order Anthoathecata
	Order Gonoproxima
	Order Leptothecata

(Continued)

Table 2. (Continued)

		Order Siphonophorae
	Subclass Trachylina	
		Order Actinulida
		Order Limnomedusae
		Order Narcomedusae
		Order Trachymedusae
	Class Polypodiozoa	
		Order Polypodiidea
	Class Scyphozoa	
		Order Coronatae
		Order Rhizostomeae
		Order Semaestomeae
	Class Staurozoa	
		Order Stauromedusae
	Subphylum Myxozoa	
	Class Malacosporea	
		Order Malacovalvulida
	Class Myxosporea	
		Order Bivalvulida
		Order Multivalvulida
	Phylum Ctenophora	
	Class Nuda	
		Order Beroida
	Class Tentaculata	
		Order Cambojiida
		Order Cestida
		Order Cryptobiferida
		Order Cydippida
		Order Ganeshida
		Order Lobata
		Order Platyctenida
		Order Thalassocalycida
	Phylum Placozoa	
	Class Placozoa (Trichoplax)	
	Phylum Porifera	
	Class Calcarea	
		Order Baerida
		Order Clathrinida
		Order Leucosolenida
		Order Lithonida
		Order Murrayonida

(Continued)

Table 2. (Continued)

Class Demospongiae	
	Order Agelasida
	Order Astrophorida
	Order Chondrosida
	Order Dendroceratida
	Order Dictyoceratida
	Order Hadromerida
	Order Halichondrida
	Order Haplosclerida
	Order Lithistida
	Order Poecilosclerida
	Order Spirophorida
	Order Verongida
Class Hexactinellida	
	Order Amphidiscosida
	Order Aulocalycoida
	Order Fieldingida
	Order Hexactinosida
	Order Lychniscosida
	Order Lyssacosida
Class Homoscleromorpha	
	Order Homosclerophorida
SUBKINGDOM BILATERIA	
INFRAKINGDOM PROTOSTOMIA	
Superphylum N. N.	
Phylum Chaetognatha	
Class Sagittoidea	
	Order Aphragmophora
	Order Phragmophora
Phylum Orthonectida	
	Order Plasmodigenea
Phylum Rhombzoa	
	Order Dicyemida
	Order Heterocyemida
Superphylum Ecdysozoa	
Phylum Arthropoda	
Subphylum Chelicerata	
Class Arachnida	
	Superorder N.N.
	Order Amblypygi
	Order Araneae
	Order Opiliones
	Order Palpigradi
	Order Pseudoscorpiones

(Continued)

Table 2. (Continued)

	Order Ricinulei
	Order Schizomida
	Order Scorpiones
	Order Solifugae
	Order Uropygi
	Superorder Acariformes
	Order Sarcoptiformes
	Order Trombidiformes
	Superorder Parasitiformes
	Order Holothyrida
	Order Ixodida
	Order Mesostigmata
	Order Opilioacarida
Class Merostomata	
	Order Xiphosura
Class Pycnogonida	
	Order Pantopoda
Subphylum Crustacea	
Class Branchiopoda	
	Order Anostraca
	Order Diplostraca
	Order Laevicaudata
	Order Notostraca
Class Cephalocarida	
	Order Brachypoda
Class Malacostraca	
	Subclass Eumalacostraca
	Superorder Eucarida
	Order Amphionidacea
	Order Decapoda
	Order Euphausiacea
	Superorder Peracarida
	Order Amphipoda
	Order Bochusacea
	Order Cumacea
	Order Isopoda
	Order Lophogastrida
	Order Mictacea
	Order Mysida
	Order Spelaeogriphacea
	Order Tanaidacea
	Order Thermosbaenacea
	Superorder Syncarida
	Order Anaspidacea

(Continued)

Table 2. (Continued)

	Order Bathynellacea
	Subclass Hoplocarida
	Order Stomatopoda
	Subclass Phyllocarida
	Order Leptostraca
Class	
Maxillopoda	
	Subclass
	Branchiura
	Order Arguloida
	Subclass
	Copepoda
	Infraclass Neocopepoda
	Superorder Gymnoplea
	Order Calanoida
	Superorder Podoplea
	Order Cyclopoida
	Order Gelyelloida
	Order Harpacticoida
	Order Misophrioida
	Order Monstrilloida
	Order Mormonilloida
	Order Siphonostomatoida
	Infraclass Progymnoplea
	Order Platycopioida
	Subclass Mystacocarida
	Order Mystacocaridida
	Subclass Pentastomida
	Order Cephalobaenida
	Order Porocephalida
	Subclass Tantulocarida (e.g., Basipodellidae)
	Subclass Thecostraca
	Infraclass Ascothoracida
	Order Dendrogastrida
	Order Laurida
	Infraclass Cirripedia
	Superorder Acrothoracica
	Order Cryptophialida
	Order Lithoglyptida
	Superorder Rhizocephala
	Order Akentrogonida
	Order Kentrogonida
	Superorder Thoracica
	Order Ibliformes
	Order Lepadiformes
	Order Scalpelliformes
	Order Sessilia
	Infraclass Facetotecta (<i>Hansenocaris</i>)
Class Ostracoda	

(Continued)

Table 2. (Continued)

	Order Halocyprida
	Order Myodocopida
	Order Paleocopida
	Order Platycopida
	Order Podocopida
Class Remipedia	
	Order Nectiopoda
Subphylum Hexapoda	
Class Collembola	
	Order Entomobryomorpha
	Order Neelipleona
	Order Poduromorpha
	Order Symphyleona
Class Diplura	
	Order N.N. (e.g., <i>Japygidae</i>)
Class Insecta	
	Subclass Archaeognatha
	Order Archaeognatha
	Subclass Dicondylia
	Order Zygentoma
	Subclass Pterygota
	Infraclass Neoptera
	Superorder Holometabola
	Order Coleoptera
	Order Diptera
	Order Hymenoptera
	Order Lepidoptera
	Order Mecoptera
	Order Siphonaptera
	Order Strepsiptera
	Order Trichoptera
	Superorder Neuropterida
	Order Megaloptera
	Order Neuroptera
	Order Raphidioptera
	Superorder Paraneoptera
	Order Hemiptera
	Order Psocodea
	Order Thysanoptera
	Superorder Polyneoptera
	Order Blattodea
	Order Dermaptera
	Order Embioptera
	Order Grylloblattodea
	Order Mantodea

(Continued)

Table 2. (Continued)

	Order Mantophasmatodea
	Order Orthoptera
	Order Phasmida
	Order Plecoptera
	Order Zoraptera
	Infraclass Palaeoptera
	Order Ephemeroptera
	Order Odonata
Class Protura	
	Order Acerentomata
	Order Eosentomata
	Order Sinentomata
Subphylum Myriapoda	
Class Chilopoda	
	Order Craterostigmomorpha
	Order Geophilomorpha
	Order Lithobiomorpha
	Order Scolopendromorpha
	Order Scutigermorpha
Class Diplopoda	
	Subclass Chilognatha
	Infraclass Helminthomorpha
	Superorder N.N.
	Order Platydesmida
	Order Polyzoniida
	Order Siphonocryptida
	Order Siphonophorida
	Superorder Juliformia
	Order Julida
	Order Spirobolida
	Order Spirostreptida
	Superorder Nematophora
	Order Callipodida
	Order Chordeumatida
	Order Stemmiulida
	Order Siphoniulida
	Superorder Merochaeta
	Order Polydesmida
	Infraclass Pentazonia
	Order Glomerida
	Order Glomeridesmida
	Order Sphaerotheriida
Subclass Penicillata	
	Order Polyxenida
Class Pauropoda	
	Order Hexamerocerata

(Continued)

Table 2. (Continued)

	Order Tetramerocerata
	Class Symphyla (e.g., Scolopendrellidae)
Phylum Kinorhyncha	
	Order Cyclorhagida
Phylum Loricifera	Order Homalorhagida
	Order Nanaloricida
Phylum Nematoda	
	Class Chromadorea
	Subclass Chromadoria
	Order Chromadorida
	Order Desmodorida
	Order Desmoscolecida
	Order Selachinematida
	Subclass Plectia
	Superorder Monhysterica
	Order Monhysterida
	Superorder Plectica
	Order Benthimermithida
	Order Leptolaimida
	Order Plectida
	Superorder Rhabditica
	Order Diplogasterida
	Order Drilonematida
	Order Panagrolaimida
	Order Rhabditida
	Order Spirurida
	Superorder Teratocephalica
	Order Teratocephalida
	Class Dorylaimea
	Subclass Bathyodontia
	Order Bathyodontida
	Order Mermithida
	Order Mononchida
	Subclass Dorylaimia
	Order Dorylaimida
	Subclass Trichocephalia
	Order Dioctophymatida
	Order Marimermithida
	Order Muspiceida
	Order Trichocephalida
	Class Enoplea
	Subclass Enoplia
	Order Alaimida
	Order Enoplida

(Continued)

Table 2. (Continued)

	Order Ironida
	Order Rhaptothyreida
	Order Trifusiida
	Order Tripyloidida
	Subclass Oncholaimia
	Order Oncholaimida
	Subclass Triplonchia
	Order Triplonchida
	Order Tripylida
Phylum Nematomorpha	
	Order Gordioidea
	Order Nectonematoidea
Phylum Onychophora	
	Class Udeonychophora
	Order Euonychophora
Phylum Priapula [= Priapulida]	
	Class N.N. (e.g., Priapulidae)
Phylum Tardigrada	
	Class Eutardigrada
	Order Apochela
	Order Parachela
	Class Heterotardigrada
	Order Arthrotardigrada
	Order Echiniscoidea
Superphylum Spiralia [= Lophotrochozoa]	
Phylum Acanthocephala	
	Class Archiacanthocephala
	Order Apororhynchida
	Order Gigantorhynchida
	Order Moniliformida
	Order Oligacanthorhynchida
	Class Eoacanthocephala
	Order Gyracanthocephala
	Order Neoechinorhynchida
	Class Palaeacanthocephala
	Order Echinorhynchida
	Order Heteramorphida
	Order Polymorphida
	Class Polyacanthocephala
	Order Polyacanthorhynchida
Phylum Annelida	
	Class N. N.
	Order Myzostomida

(Continued)

Table 2. (Continued)

Class Clitellata		
Subclass N.N.		
		Order Branchiobdellida
Subclass Hirudinea		
		Order Acanthobdellida
		Order Arhynchobdellida
		Order Rhynchobdellida
Subclass Oligochaeta		
Superorder N.N.		
		Order N.N. (<i>Jennaria</i>)
		Order Enchytraeida
		Order Haplotaxida
		Order Lumbriculida
		Order Tubificida
Superorder Metagynophora		
		Order Moniligastrida
		Order Opisthophora
Class Polychaeta		
Subclass N.N.		
		Order N.N. (e.g., Nerillidae)
Subclass Echiura		
		Order Echiuroinea
		Order Heteromyota
		Order Xenopneusta
Subclass Errantia		
		Order Amphinomida
		Order Eunicida
		Order Phyllodocida
Subclass Sedentaria		
		Infraclass Canalipalpata
		Order Sabellida
		Order Spionida
		Order Terebellida
		Infraclass Scolecida (e.g., Arenicolidae)
Phylum Brachiopoda		
Class Craniata		
		Order Craniida
Class Lingulata		
		Order Lingulida
Class Rhynchonellata		
		Order Rhynchonellida
		Order Terebratulida
		Order Thecideida
Phylum Bryozoa		

(Continued)

Table 2. (Continued)

Class Gymnolaemata	
	Order Cheilostomata
	Order Ctenostomata
Class Phylactolaemata	
	Order Plumatellida
Class Stenolaemata	
	Order Cyclostomata
Phylum Cycliophora	
Class Eucycliophora	
	Order Symbiida
Phylum Entoprocta	
	Order Coloniales
	Order Solitaria
Phylum Gastrotricha	
	Order Chaetonotida
	Order Macrodasyida
Phylum Gnathostomulida	
	Order Bursovaginoidea
	Order Filospemoidea
Phylum Micrognathozoa	
Class Micrognathozoa	
	Order Limnognathida
Phylum Mollusca	
Class Bivalvia	
	Subclass Autobranchia
	Superorder Heteroconchia
	Order Carditida
	Order Lucinida
	Order Myida
	Order Pholadomyida
	Order Trigoniida
	Order Unionida
	Order Veneroida
	Superorder Pteriomorpha
	Order Arcida
	Order Limida
	Order Mytilida
	Order Ostreida
	Order Pectinida
	Order Pteriida
	Subclass Protobranchia
	Order Nuculanida
	Order Nuculida
	Order Solemyoida

(Continued)

Table 2. (Continued)

Class	
Caudofoveata	
	Order Chaetodermatida
Class	
Cephalopoda	
Subclass	
Coleoidea	
	Superorder Decabrachia
	Order Sepiida
	Order Sepiolida
	Order Spirulida
	Order Teuthida
	Superorder Octobrachia
	Order Octopoda
	Order Vampyromorphida
	Subclass Nautiloidea
	Order Nautilida
Class	
Gastropoda	
	Subclass Caenogastropoda
	Order Littorinimorpha
	Order Neogastropoda
	Subclass Cocculiniformia (e.g., Cocculinidae)
	Subclass Heterobranchia
	Order Acochlidioidea
	Order Anaspidea
	Order Cephalaspidea
	Order Gymnosomata
	Order Hygrophila
	Order Nudibranchia
	Order Pleurobranchomorpha
	Order Runcinacea
	Order Sacoglossa
	Order Stylommatophora
	Order Systellommatophora
	Order Thecosomata
	Order Umbraculida
	Subclass Neomphalina
	Order N.N. (e.g., Neomphalidae)
	Subclass Neritimorpha
	Order Cycloneritimorpha
	Subclass Patellogastropoda
	Order N.N. (e.g., Patellidae)
	Subclass Vetigastropoda
	Order N.N. (e.g., Ataphridae)
Class Monoplacophora	
	Order Tryblidiida
Class Polyplacophora	
	Order Chitonida

(Continued)

Table 2. (Continued)

		Order Lepidopleurida
	Class Scaphopoda	
		Order Dentaliida
		Order Gadilida
	Class Solenogastres	
		Superorder Aplotegmentaria
		Order Cavibelonia
		Order Sterrofustia
		Superorder Pachytegmentaria
		Order Neomeniamorpha
		Order Pholidoskepia
Phylum Nemertea		
	Class Anopla	
		Order N.N. (e.g., Gorgonothychidae)
	Class Enopla	
		Order Monostilifera
		Order Polystilifera
		Class Paleonemertea (e.g., Carinomidae)
Phylum Phoronida		
	Class N.N. (e.g., <i>Phoronis</i>)	
Phylum Platyhelminthes		
Subphylum Catenulidea		
		Order Catenulida
Subphylum Rhabditophora		
	Class Macrostomorpha	
		Order Haplopharyngida
		Order Macrostomida
	Class Neophora	
		Subclass Eulecithophora
		Infraclass Adiaphanida
		Order Fecampiida
		Order Prolecithophora
		Order Tricladida
		Infraclass Rhabdocoela
		Order Dalytyphloplanida
		Order Endoaxonemata
		Order Kalyptorhynchia
		Subclass Neodermata
		Infraclass Cestoda
		Order Amphilinidea
		Order Bothriocephalidea
		Order Caryophyllidea

(Continued)

Table 2. (Continued)

	Order Cyclophyllidea
	Order Diphyllidea
	Order Diphylobothriidea
	Order Gyrocotylidea
	Order Lecanicephalidea
	Order Litobothriidea
	Order Proteocephalidea
	Order Pseudophyllidea
	Order Rhinebothriidea
	Order Spathebothriidea
	Order Tetrabothriidea
	Order Tetraphyllidea
	Order Trypanorhyncha
	Infraclass Monogenea
	Order Capsalidea
	Order Chimaericolidea
	Order Dactylogyridea
	Order Diclybothriidea
	Order Gyrodactylidea
	Order Mazocraeidea
	Order Monocotylidea
	Order Montchadskyellidea
	Order Polystomatidea
	Infraclass Trematoda
	Order Aspidogastrida
	Order Diplostomida
	Order Plagiorchiida
	Order Stichocotylida
	Class Polycladidea
	Order Lecithoepitheliata
	Order Polycladida
	Subclass Proseriata
	Order Proseriata
Phylum Rotifera	
	Class Eurotatoria
	Subclass Bdelloidea (e.g., Adinetidae)
	Subclass Monogonta
	Order Collothecaceae
	Order Flosculariaceae
	Order Ploima
	Class Pararotatoria
	Order Seisonacea
Phylum Sipuncula	
	Class Phascolosomatidea

(Continued)

Table 2. (Continued)

	Order Aspidosiphoniformes
	Order Phascolosomatiformes
Class	
Sipunculidea	
	Order Golfingiiformes
	Order Sipunculiformes
INFRAKINGDOM	
DEUTEROSTOMIA	
Phylum Chordata	
Subphylum Cephalochordata	
	Order Amphioxiformes
Subphylum Urochordata	
Class Appendicularia	
	Order Copelata
Class Ascidiacea	
	Order Enterogona
	Order Pleurogona
Class Thaliacea	
	Order Doliolida
	Order Pyrosomida
	Order Salpida
Subphylum Vertebrata [= Craniata]	
Infraphylum Agnatha	
Class	
Cephalaspidomorphi	
	Order Petromyzontiformes
Class	
Myxini	
	Order Myxiniiformes
Infraphylum Gnathostomata	
Superclass Actinopterygii	
Class	
Chondrostei	
	Order Acipenseriformes
Class Cladistei	
	Order Polypteriformes
Class Holostei	
	Order Amiiformes
	Order Lepisosteiformes
Class Teleostei	
	Order Acanthuriformes
	Order Albuliformes
	Order Alepocephaliformes
	Order Anabantiformes
	Order Anguilliformes
	Order Argentiniformes
	Order Ateleopodiformes
	Order Atheriniformes
	Order Aulopiformes

(Continued)

Table 2. (Continued)

	Order Batrachoidiformes
	Order Beloniformes
	Order Beryciformes
	Order Blenniiformes
	Order Carangiformes
	Order Centrarchiformes
	Order Characiformes
	Order Cichliformes
	Order Cirrhitiformes
	Order Clupeiformes
	Order Cypriniformes
	Order Cyprinodontiformes
	Order Elopiformes
	Order Ehippiiformes
	Order Esociformes
	Order Gadiformes
	Order Galaxiiformes
	Order Gobiiformes
	Order Gonorynchiformes
	Order Gymnotiformes
	Order Hidontiformes
	Order Holocentriformes
	Order Istiophoriformes
	Order Kurtiformes
	Order Labriformes
	Order Lampridiformes
	Order Lepidogalaxiiformes
	Order Lobotiformes
	Order Lophiiformes
	Order Mugiliformes
	Order Myctophiformes
	Order Notacanthiformes
	Order Ophidiiformes
	Order Osmeriformes
	Order Osteoglossiformes
	Order Pempheriformes
	Order Perciformes
	Order Percopsiformes
	Order Pholidichthyiformes
	Order Pleuronectiformes
	Order Polymixiiformes
	Order Salmoniformes
	Order Scombriformes
	Order Siluriformes
	Order Spariformes
	Order Stomiiformes
	Order Stylephoriformes
	Order Synbranchiformes

(Continued)

Table 2. (Continued)

	Order Syngnathiformes
	Order Terapontiformes
	Order Tetraodontiformes
	Order Uranoscopiformes
	Order Zeiformes
Superclass Chondrichthyes	
Class Elasmobranchii	
	Order Carcharhiniformes
	Order Heterodontiformes
	Order Hexanchiformes
	Order Lamniformes
	Order Myliobatiformes
	Order Orectolobiformes
	Order Pristiformes
	Order Pristiophoriformes
	Order Rajiformes
	Order Squaliformes
	Order Squatiniformes
	Order Torpediniformes
Class Holocephali	
	Order Chimaeriformes
Superclass Sarcopterygii	
Class Coelacanthi	
	Order Coelacanthiformes
Class Dipnoi	
	Order Ceratodontiformes
	Order Lepidosirenoformes
Superclass Tetrapoda	
Class Amphibia	
	Order Anura
	Order Caudata
	Order Gymnophiona
Class Mammalia	
	Subclass Prototheria
	Order Monotremata
Subclass Theria	
	Infraclass Eutheria [= Placentalia]
	Order Afrosoricida
	Order Artiodactyla
	Order Carnivora
	Order Cetacea
	Order Chiroptera
	Order Cingulata
	Order Dermoptera
	Order Erinaceomorpha

(Continued)

Table 2. (Continued)

	Order Hyracoidea
	Order Lagomorpha
	Order Macroscelidea
	Order Perissodactyla
	Order Pholidota
	Order Pilosa
	Order Primates
	Order Proboscidea
	Order Rodentia
	Order Scandentia
	Order Sirenia
	Order Soricomorpha
	Order Tubulidentata
	Infraclass Metatheria [= Marsupialia]
	Order Dasyuromorphia
	Order Didelphimorphia
	Order Diprotodontia
	Order Microbiotheria
	Order Notoryctemorphia
	Order Paucituberculata
	Order Peramelemorphia
	Class Reptilia
	Subclass Aves
	Infraclass Neognathae
	Superorder Galloanseri
	Order Anseriformes
	Order Galliformes
	Superorder Neoaves
	Order Accipitriformes
	Order Apodiformes
	Order Bucerotiformes
	Order Caprimulgiformes
	Order Cariamiformes
	Order Charadriiformes
	Order Ciconiiformes
	Order Coliiformes
	Order Columbiformes
	Order Coraciiformes
	Order Cuculiformes
	Order Eurypygiformes
	Order Falconiformes
	Order Gaviiformes
	Order Gruiformes
	Order Leptosomiformes
	Order Mesitornithiformes
	Order Musophagiformes
	Order Opisthocomiformes
	Order Otidiformes

(Continued)

Table 2. (Continued)

	Order Passeriformes
	Order Pelecaniformes
	Order Phaethontiformes
	Order Phoenicopteriformes
	Order Piciformes
	Order Podicipediformes
	Order Procellariiformes
	Order Psittaciformes
	Order Pteroclidiformes
	Order Sphenisciformes
	Order Strigiformes
	Order Suliformes
	Order Trogoniformes
	Infraclass Paleognathae
	Order Apterygiformes
	Order Casuariiformes
	Order Rheiformes
	Order Struthioniformes
	Order Tinamiformes
	Subclass Crocodylomorpha
	Order Crocodylia
	Subclass Rhynchocephalia
	Order Sphenodontida
	Subclass Squamata
	Order Anguimorpha
	Order Gekkota
	Order Inguania
	Order Lacertoidea
	Order Scincoidea
	Order Serpentes
	Subclass Testudinata
	Order Testudines
Phylum Echinodermata	
Subphylum Asterozoa	
Class Asteroidea	
	Order Brisingida
	Order Forcipulatida
	Order Notomyotida
	Order Paxillosida
	Order Peripoda
	Order Spinulosida
	Order Valvatida
	Order Velatida
	Class Ophiuroidea
	Order Euryalida
	Order Ophiurida

(Continued)

Table 2. (Continued)

Subphylum Crinozoa	
Class Crinoidea	
	Order Comatulida
	Order Cyrtocrinida
	Order Hyocrinida
	Order Isocrinida
Subphylum Echinozoa	
Class Echinoidea	
Subclass Cidaroidea	
	Order Cidaroida
	Subclass Euechinoidea
	Infraclass N.N.
	Order Echinothurioida
	Infraclass Acroechinoidea
	Order Aspidodiadematoidea
	Order Diadematoidea
	Order Micropygoida
	Order Pedinoida
	Infraclass Carinacea
	Order Arbacioidea
	Order Camarodonta
	Order Salenioda
	Order Stomopneustoida
	Infraclass Irregularia
	Order Cassiduloida
	Order Clypeasteroida
	Order Echinolampadoida
	Order Holasteroida
	Order Spatangoida
Class Holothuroidea	
	Order N.N. (<i>Thyone</i>)
	Order Apodida
	Order Aspidochirotida
	Order Dendrochirotida
	Order Elasipodida
	Order Molpadida
Phylum Hemichordata	
	Class Enteropneusta (e.g., Harrimaniidae)
Class Pterobranchia	
	Subclass Cephalodiscida (<i>Cephalodiscus</i>)
	Subclass Graptolithina
	Order Rhabdopleurida
Phylum Xenacoelomorpha	
Subphylum Acoelomorpha	
	Class Acoela (e.g., Diopisthoporidae)

(Continued)

Table 2. (Continued)

	Class Nemertodermatida (e.g., Nemertodermatidae)
Subphylum Xenoturbellida	
	Class N.N. (Xenoturbellidae)

Names below rank of infrakingdom are arranged alphabetically within each parent rank, except for taxa that are not named (N.N.). Brackets indicate synonyms. Quoted names are not validly published but in common use.

doi:10.1371/journal.pone.0130114.t002

Supporting Information

S1 Table. Proposed hierarchical classification from superkingdom to order.
(XLSX)

Reference

1. Ruggiero MA, Gordon DP, Orrell TM, Bailly N, Bourgoin T, Brusca RC, et al. (2015) A Higher Level Classification of All Living Organisms. PLoS ONE 10(4): e0119248. doi: [10.1371/journal.pone.0119248](https://doi.org/10.1371/journal.pone.0119248) PMID: [25923521](https://pubmed.ncbi.nlm.nih.gov/25923521/)