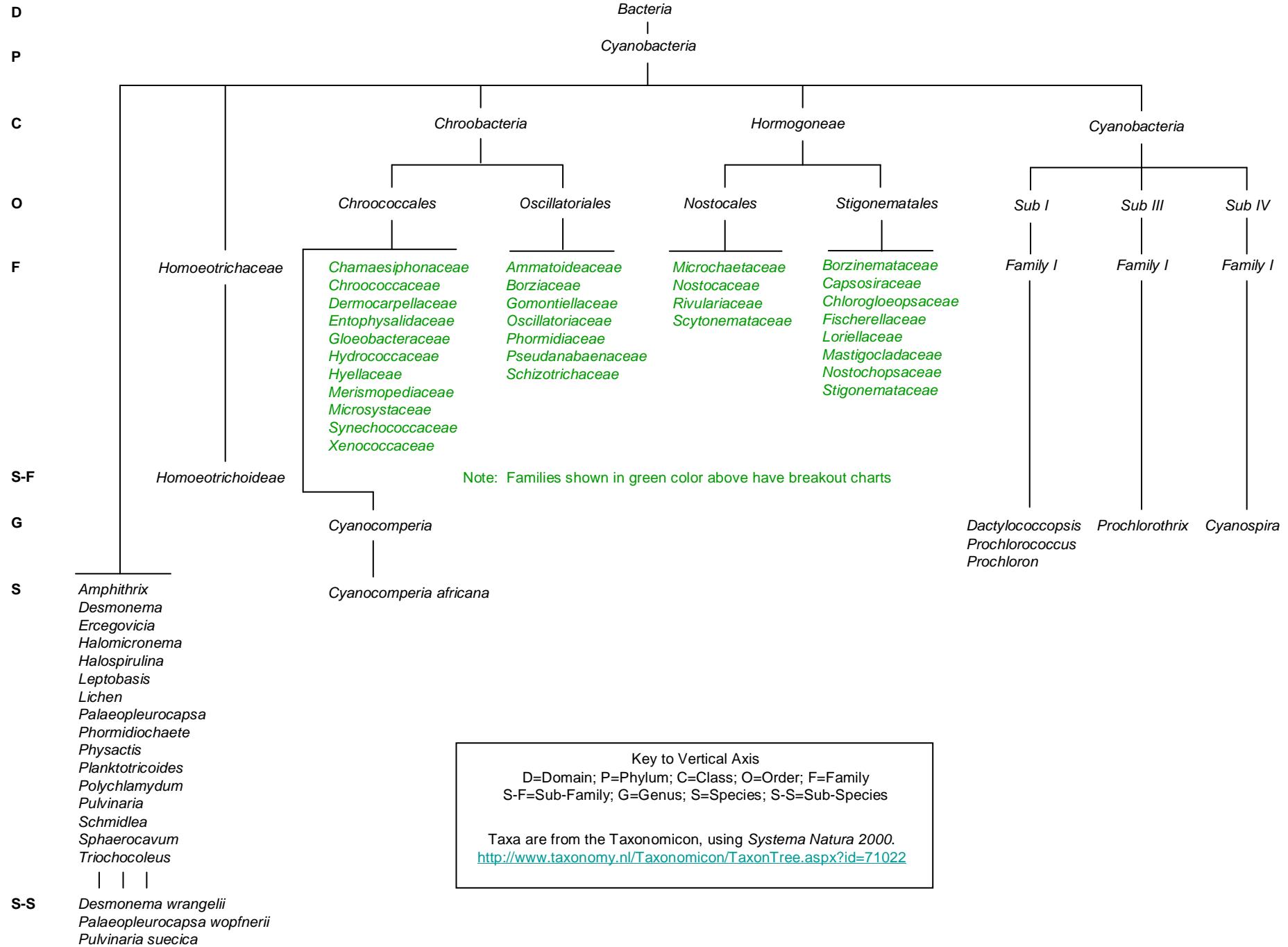


**DOMAIN**  
*Bacteria*

**PHYLUM**  
*Cyanobacteria*



# **Key Genera**

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Bacteria

Cyanobacteria

Chroobacteria

Chrooccales

Oscillatoriaceae

Hormogoneae

Cyanobacteria

Homoeotrichaceae

*Chamaesiphonaceae*  
*Chroococcaceae*  
*Dermocarpaceae*  
*Entophysalidaceae*  
*Gloeobacteraceae*  
*Hydrococcaceae*  
*Hyellaceae*  
*Merismopediaceae*  
*Microsyntaceae*  
*Synechococcaceae*  
*Xenococcaceae*

*Ammatoideaceae*  
*Borziaceae*  
*Gomontiellaceae*  
*Oscillatoriaceae*  
*Phormidiaceae*  
*Pseudanabaenaceae*  
*Schizotrichaceae*

*Microchaetaceae*  
*Nostocaceae*  
*Rivulariaceae*  
*Scytonemataceae*

*Borzinemataceae*  
*Capsosiraceae*  
*Chlorogloeopsaceae*  
*Fischerellaceae*  
*Loriellaceae*  
*Mastigocladaceae*  
*Nostochopsaceae*  
*Stigonemataceae*

Sub I

Sub III

Sub IV

Family I

Family I

Family I

Homoeotrichoideae

Note: Families shown in green color above have breakout charts

Cyanocomperia

*Dactylococcopsis*  
*Prochlorococcus*  
*Prochloron*

*Cyanospira*

*Amphithrix*  
*Desmonema*  
*Ercegovicia*  
*Halomicronema*  
*Halospirulina*  
*Leptobasis*  
*Lichen*  
*Palaeopleurocapsa*  
*Phormidiochaete*  
*Physactis*  
*Planktotricoides*  
*Polychlamydum*  
*Pulvinaria*  
*Schmidlea*  
*Sphaerocavum*  
*Triochocoleus*

*Cyanocomperia africana***Widespread Genera**

<i>Aphanocapsa</i>	<i>Arthrosphaera</i>	<i>Anabaena</i>	<i>Fischerella</i>	<i>Prochlorococcus</i>
<i>Aphanothecae</i>	<i>Glaucospira</i>	<i>Aphanizomenon</i>	<i>Stigonema</i>	
<i>Chroococcus</i>	<i>Lyngbya</i>	<i>Calothrix</i>		
<i>Gloeocapsa</i>	<i>Oscillatoria</i>	<i>Cylindrospermum</i>		
<i>Merismopedia</i>	<i>Phormidium</i>	<i>Nodularia</i>		
<i>Microcystis</i>	<i>Planktothrix</i>	<i>Nostoc</i>		
<i>Synechococcus</i>	<i>Spirulina</i>			
<i>Woronichinia</i>				

**Strong Bloom-Forming Genera**

<i>Cyanobium</i>	<i>Planktothrix</i>	<i>Anabaena</i>		
		<i>Aphanizomenon</i>		
		<i>Nodularia</i>		
		<i>Cylindrospermopsis</i>		

*Desmonema wrangelii*  
*Palaeopleurocapsa wopfnerii*  
*Pulvinaria suecica*

**CLASS**  
*Chroobacteria*

**ORDER**  
*Chroococcales*

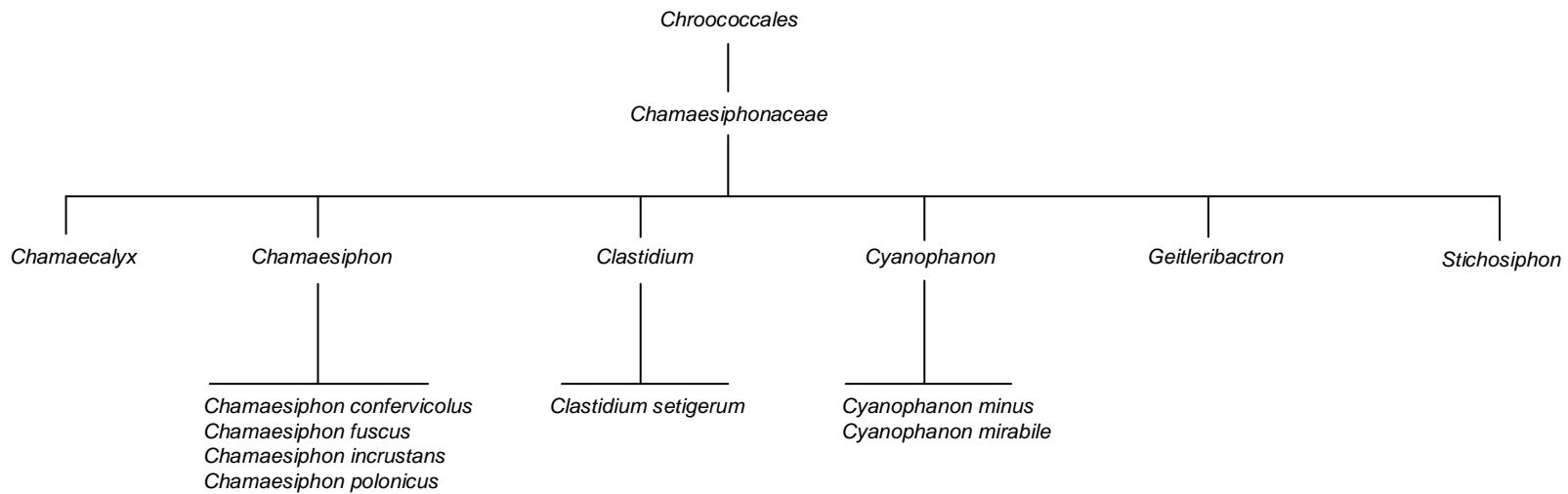
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*Chroococcales**Chroococcaceae*

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graph TD
    CC[Chroococcaceae] --- AC[Asterocapsa]
    CC --- C1[Chroococcus]
    CC --- CK[Cyanokybus]
    CC --- CS[Cyanosarcina]
    CC --- CY[Cyanostylon]
    CC --- GC[Gloeocapsopsis]
    CC --- NC[Nephrococcus]
    CC --- PC[Pseudocapsa]
  
```

*Asterocapsa*    *Chroococcus*    *Cyanokybus*    *Cyanosarcina*    *Cyanostylon*    *Gloeocapsopsis*    *Nephrococcus*    *Pseudocapsa*

*Chroococcus aphanacapsoides*

*Chroococcus cohaerens*

*Chroococcus dispersus*

*Chroococcus distans*

*Chroococcus giganteus*

*Chroococcus limneticus*

*Chroococcus microscopicus*

*Chroococcus minimus*

*Chroococcus minor*

*Chroococcus minutus*

*Chroococcus pallidus*

*Chroococcus plantonicus*

*Chroococcus subnudus*

*Chroococcus tenax*

*Chroococcus turgidus*

*Chroococcus turicensis*

*Cyanostylon plancticum*

*Gloeocapsopsis crepidinum*

*Chroococcus turgidus* var. *maximus*

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*Chroococcales*

*Dermocarpellaceae*

*Cyanocystis*

*Dermocarpella*

*Stanieria*

*Dermocarpella prasina*

*Stanieria sphaerica*

*Stanieria sublitoralis*

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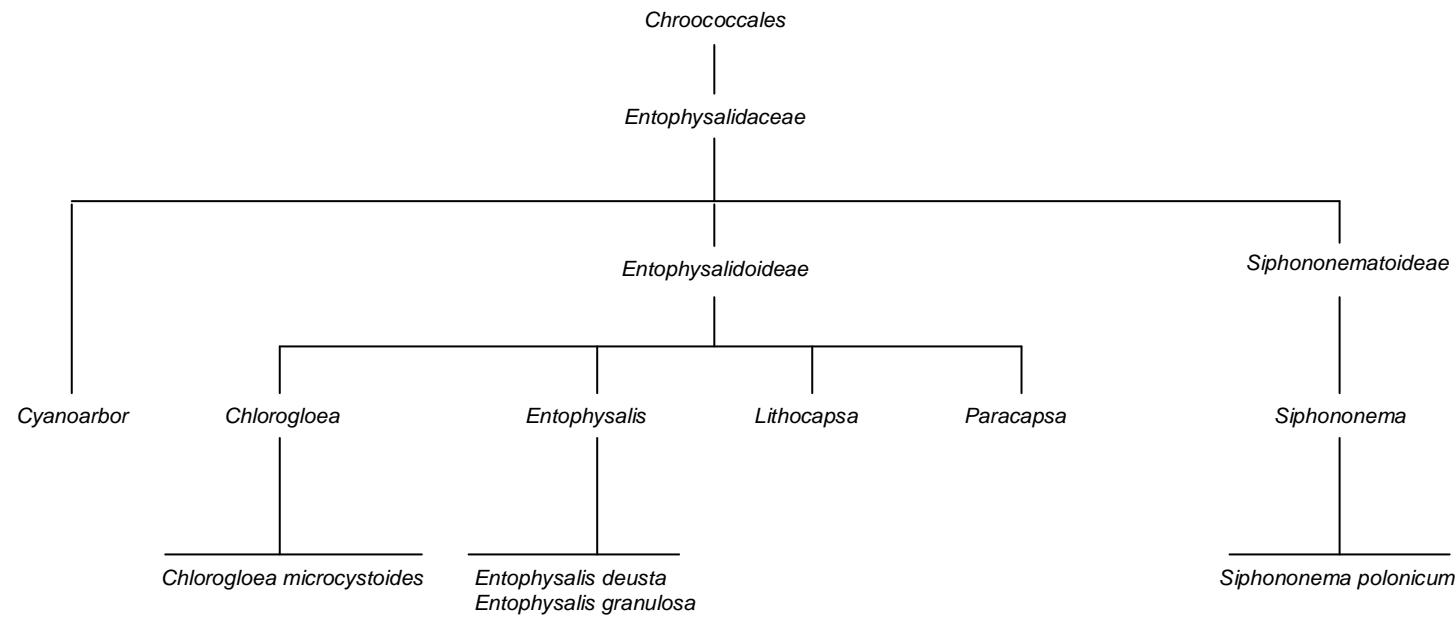
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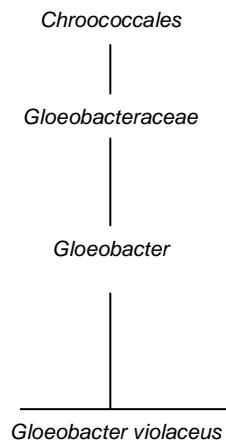
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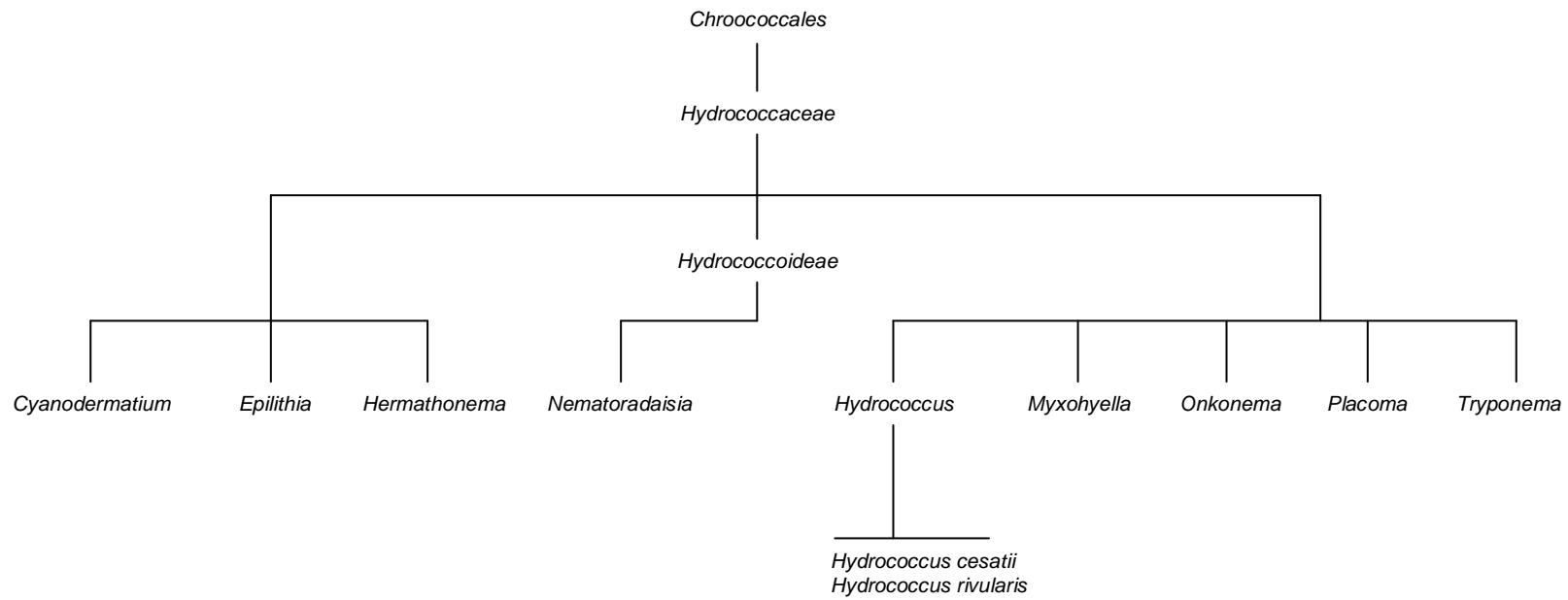
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*Chroococcales**Hyellaceae**Hyelloideae**Pascherinematoideae**Podocapsoideae**Solentioideae**Cyanoderma*   *Geitleriella*   *Hyella*   *Pleurocapsa*   *Radaisia**Cyanosaccus*   *Podocapsa**Cyanosaccus*   *Podocapsa**Hyella balana*  
*Hyella caespitosa**Pleurocapsa fuliginosa*

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*Chroococcales**Merismopediaceae**Gomphosphaeroideae**Merismopedioideae*

G

<i>Coelosphaeriopsis</i>	<i>Gomphosphaeria</i>	<i>Siphonosphaera</i>	<i>Snowella</i>	<i>Woronichinia</i>	<i>Coccopedia</i>	<i>Mantellum</i>	<i>Merismopedia</i>	<i>Microcrosis</i>	<i>Pilgeria</i>	<i>Synechocystis</i>
<i>Coelomoron</i>	<i>Coelosphaerium</i>	<i>Gomphosphaeria</i>	<i>Snowella</i>	<i>Woronichinia</i>	<i>Aphanocapsa</i>	<i>Cyanotetras</i>	<i>Merismopedia</i>	<i>Microcrosis</i>	<i>Pannus</i>	<i>Synechocystis</i>

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<i>Coelomoron pusillum</i>	<i>Coelosphaerium aurugineum</i>	<i>Gomphosphaeria aponina</i>	<i>Snowella arachnoidea</i>	<i>Woronichinia botrys</i>	<i>Aphanocapsa delicatissima</i>	<i>Cyanotetras fusca</i>	<i>Merismopedia angularis</i>	<i>Microcrosis dietelli</i>	<i>Pannus leloupii</i>	<i>Synechocystis aquatilis</i>
<i>Coelomoron tripale</i>	<i>Coelosphaerium dubium</i>	<i>Gomphosphaeria natans</i>	<i>Snowella atomus</i>	<i>Woronichinia compacta</i>	<i>Aphanocapsa elachista</i>		<i>Merismopedia arctica</i>	<i>Microcrosis irregularis</i>	<i>Pannus microcystiformis</i>	<i>Synechocystis consortia</i>
	<i>Coelosphaerium kuetzingianum</i>	<i>Gomphosphaeria salina</i>	<i>Snowella fennica</i>	<i>Woronichinia delicatula</i>	<i>Aphanocapsa endophytica</i>		<i>Merismopedia confoluta</i>	<i>Microcrocis obvoluta</i>	<i>Pannus planus</i>	<i>Synechocystis endobiotica</i>
	<i>Coelosphaerium linicolum</i>	<i>Gomphosphaeria semen-vitis</i>	<i>Snowella lacustris</i>	<i>Woronichinia elorantae</i>	<i>Aphanocapsa fonticola</i>		<i>Merismopedia elegans</i>	<i>Merismopedia forrophila</i>	<i>Pannus spumosus</i>	<i>Synechocystis pevalekii</i>
	<i>Coelosphaerium minusittimum</i>	<i>Gomphosphaeria virieuxii</i>	<i>Snowella litoralis</i>	<i>Woronichinia fremyl</i>	<i>Aphanocapsa grevillei</i>		<i>Merismopedia holistica</i>	<i>Merismopedia glauca</i>		<i>Synechocystis salina</i>
	<i>Coelosphaerium punctiferum</i>	<i>Gomphosphaeria wichurae</i>	<i>Snowella septentrionalis</i>	<i>Woronichinia fusca</i>	<i>Aphanocapsa incerta</i>		<i>Merismopedia haumanii</i>	<i>Merismopedia insignis</i>		
				<i>Woronichinia karelica</i>	<i>Aphanocapsa koordersii</i>		<i>Merismopedia marssonii</i>			
				<i>Woronichinia naegelianae</i>	<i>Aphanocapsa litoralis</i>		<i>Merismopedia minima</i>			
				<i>Woronichinia robusta</i>	<i>Aphanocapsa marina</i>		<i>Merismopedia punctata</i>			
				<i>Woronichinia ruzickae</i>	<i>Aphanocapsa muscicola</i>		<i>Merismopedia smithii</i>			
				<i>Woronichinia tenera</i>	<i>Aphanocapsa parasitica</i>		<i>Merismopedia tenuissima</i>			
					<i>Aphanocapsa planctonica</i>		<i>Merismopedia thermalis</i>			
					<i>Aphanocapsa pulchra</i>		<i>Merismopedia trolleri</i>			
					<i>Aphanocapsa reinboldii</i>		<i>Merismopedia warmingiana</i>			
					<i>Aphanocapsa rivularis</i>					
					<i>Aphanocapsa roeseana</i>					
					<i>Aphanocapsa salina</i>					

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Aphanocapsa  
elachista

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*Chroococcales**Microcystaceae**Chondrocystis**Eucapsis**Gloeocapsa**Microcystis**Chondrocystis dermochroa*

*Eucapsis alpina*  
*Eucapsis minor*  
*Eucapsis minuta*  
*Eucapsis parallelepipedon*  
*Eucapsis starmachii*

*Gloeocapsa atrata*  
*Gloeocapsa caldariorum*  
*Gloeocapsa compacta*  
*Gloeocapsa granosa*  
*Gloeocapsa mellea*  
*Gloeocapsa montana*  
*Gloeocapsa punctata*  
*Gloeocapsa rupestris*  
*Gloeocapsa sanguinea*

*Microcystis aeruginosa*  
*Microcystis botrys*  
*Microcystis firma*  
*Microcystis flos-aquae*  
*Microcystis ichthyoblabe*  
*Microcystis marginata*  
*Microcystis natans*  
*Microcystis novacekii*  
*Microcystis pulverea*  
*Microcystis robusta*  
*Microcystis smithii*  
*Microcystis stagnalis*  
*Microcystis viridis*  
*Microcystis wesenbergii*

*Microcystis pulverea*

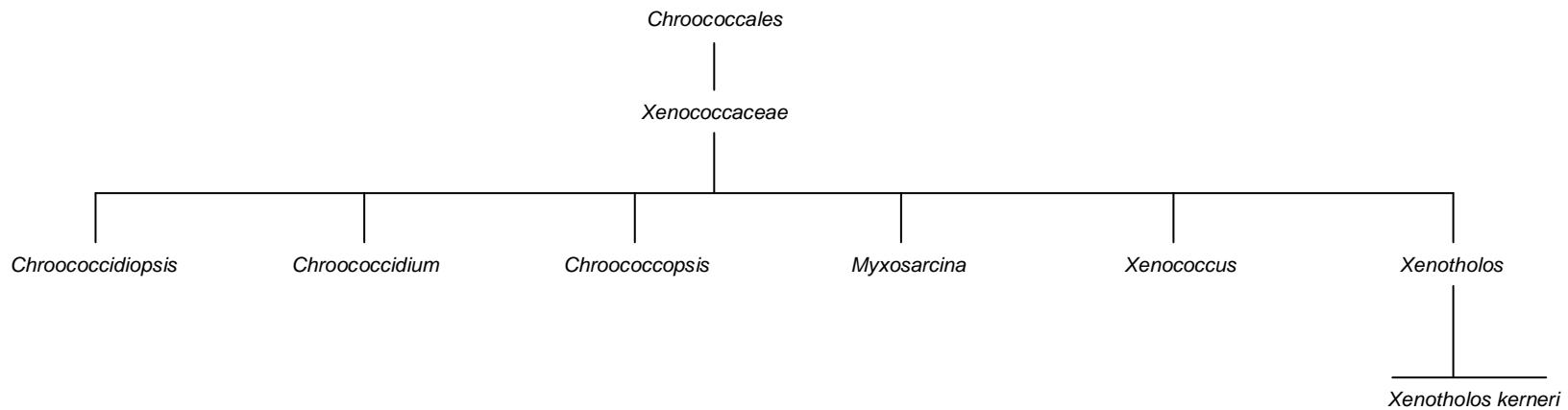
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*Chroococcales**Synechococcaceae**Aphanothecoideae**Synechococcoideae: See Next Page**Cyanobacterium**Cyanocatena**Cyanogranis**Cyanonephron**Cyanothece**Epigloeosphaera**Gloeothece**Hormothece**Lithococcus**Radiocystis**Aphanothece**Cyanobium**Cyanocatena**Cyanodictyon**Cyanonephron**Cyanothece**Gloeothece**Hormothece**Lithococcus**Radiocystis**A. bachmannii**A. caldarium**A. castagnei**A. clathrata**A. conglom-**erata**A. Desika-**charyi**A. elabens**A. endophytica**A. floccosa**A. gardneri**A. gelatinosa**A. heterospora**A. minutissima**A. naegelii**A. nostocopsis**A. pallida**A. piscinalis**A. prasina**A. pulverulenta**A. saxicola**A. smithii**A. stagnina**Cyanobacterium cedrorum**C. diatomicola**C. plantonica**C. basifica**C. ferruginea**C. filiforme**C. iac**C. imperfectum**C. plantonicum**C. reticulatum**C. tubiforme**C. aeruginosa**C. major**G. confluens**G. linearis**G. palea**G. rupestris**G. subtilis**G. tepidariorum**E. glebulenta**R. aphanothecoidea*  
*R. elongata*  
*R. deminata*

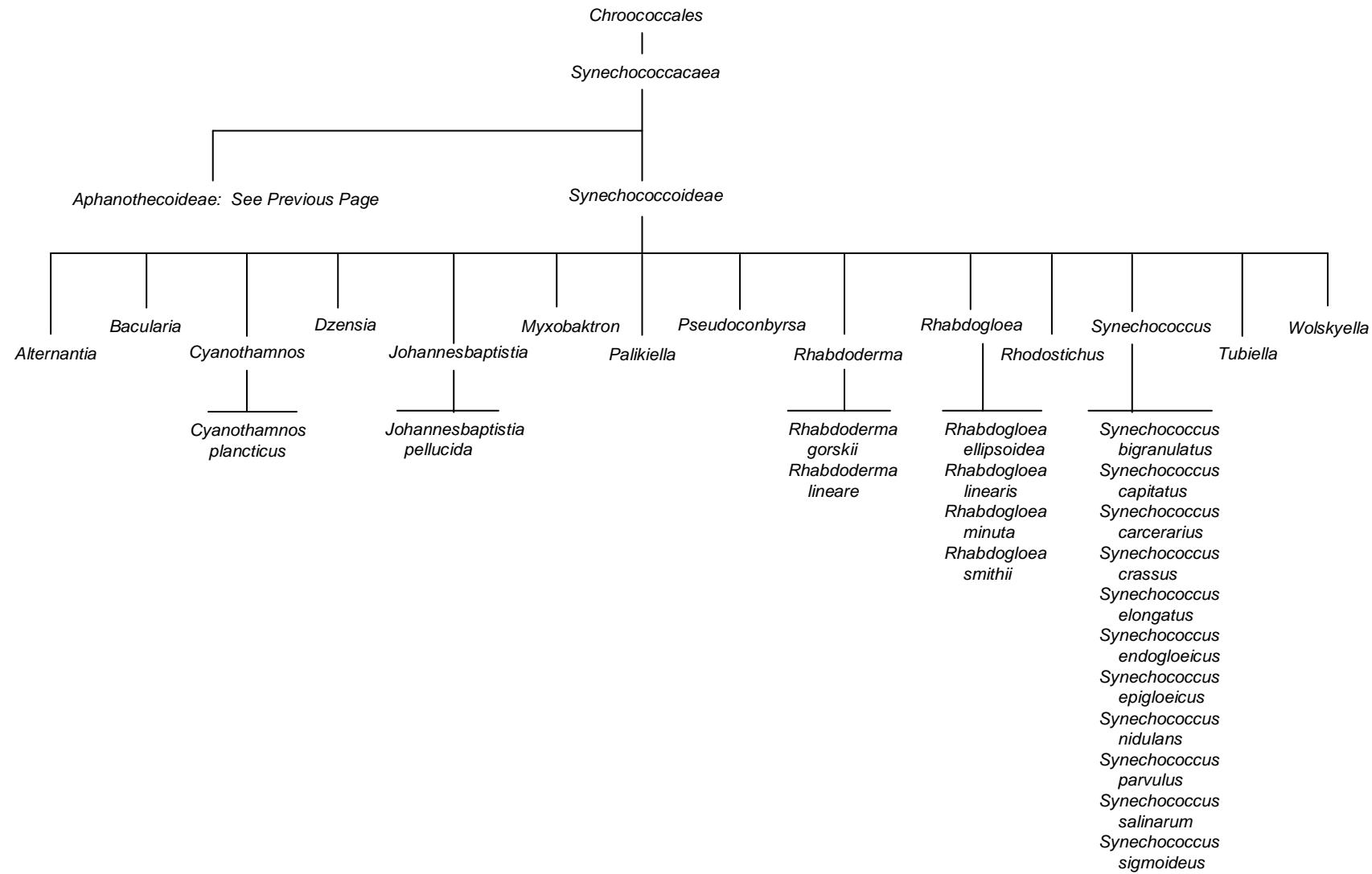
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**CLASS**  
*Chroobacteria*

**ORDER**  
*Oscillatoriales*

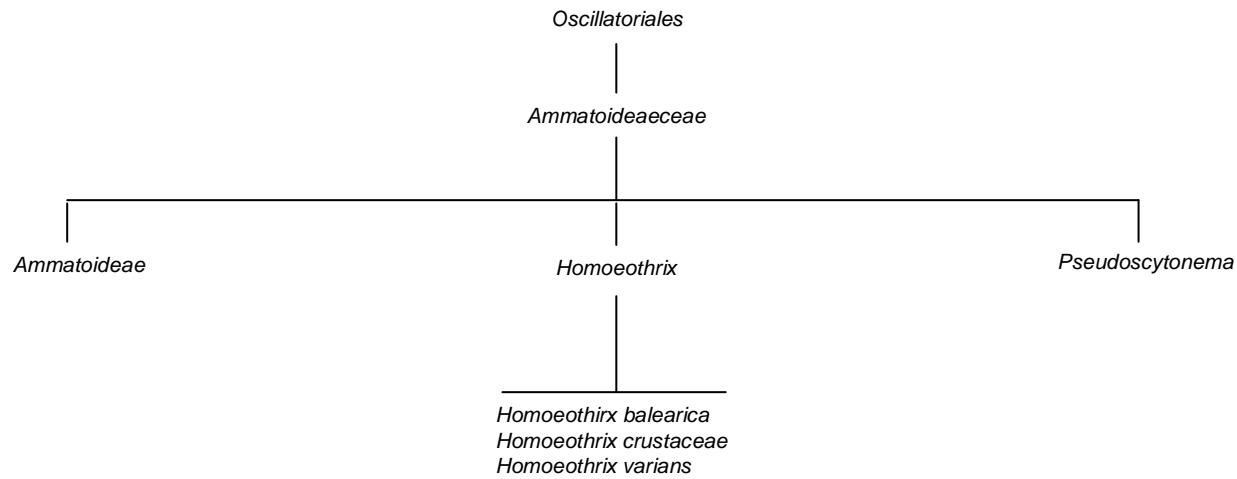
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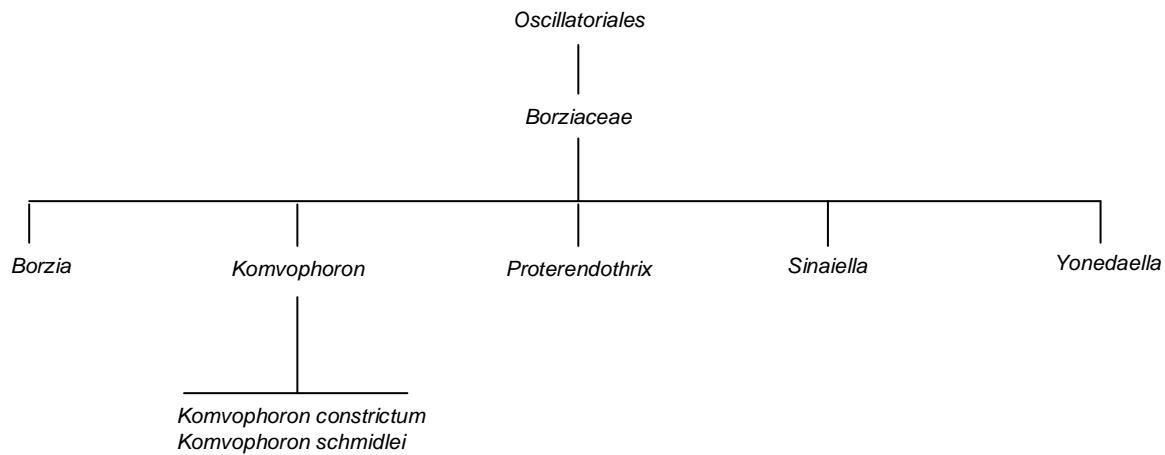
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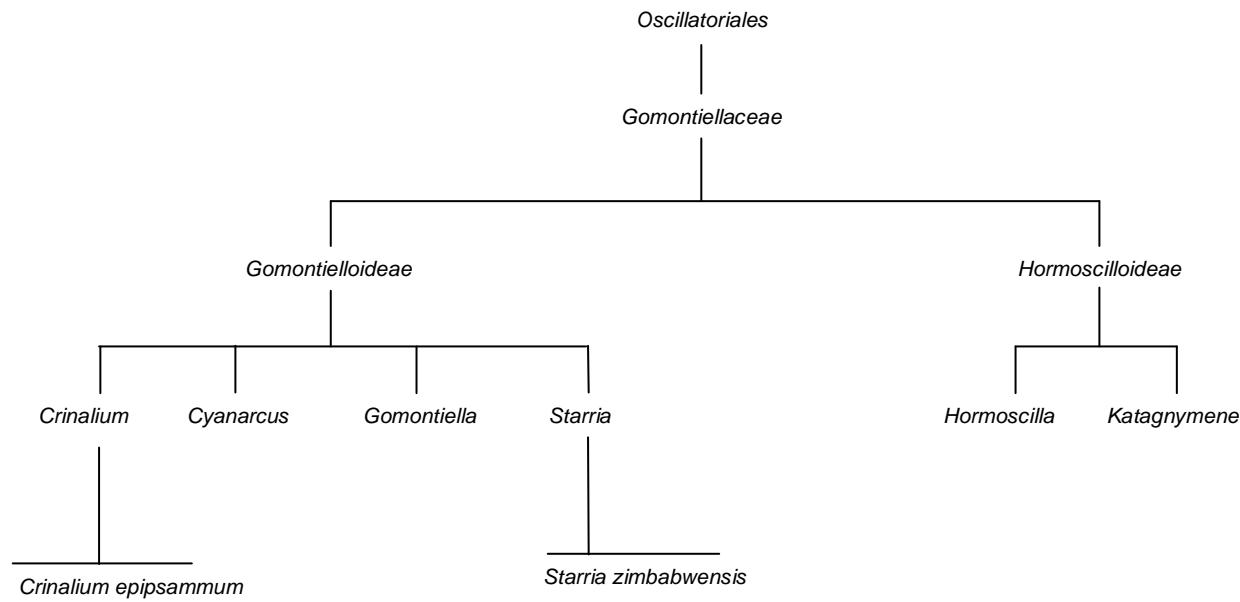
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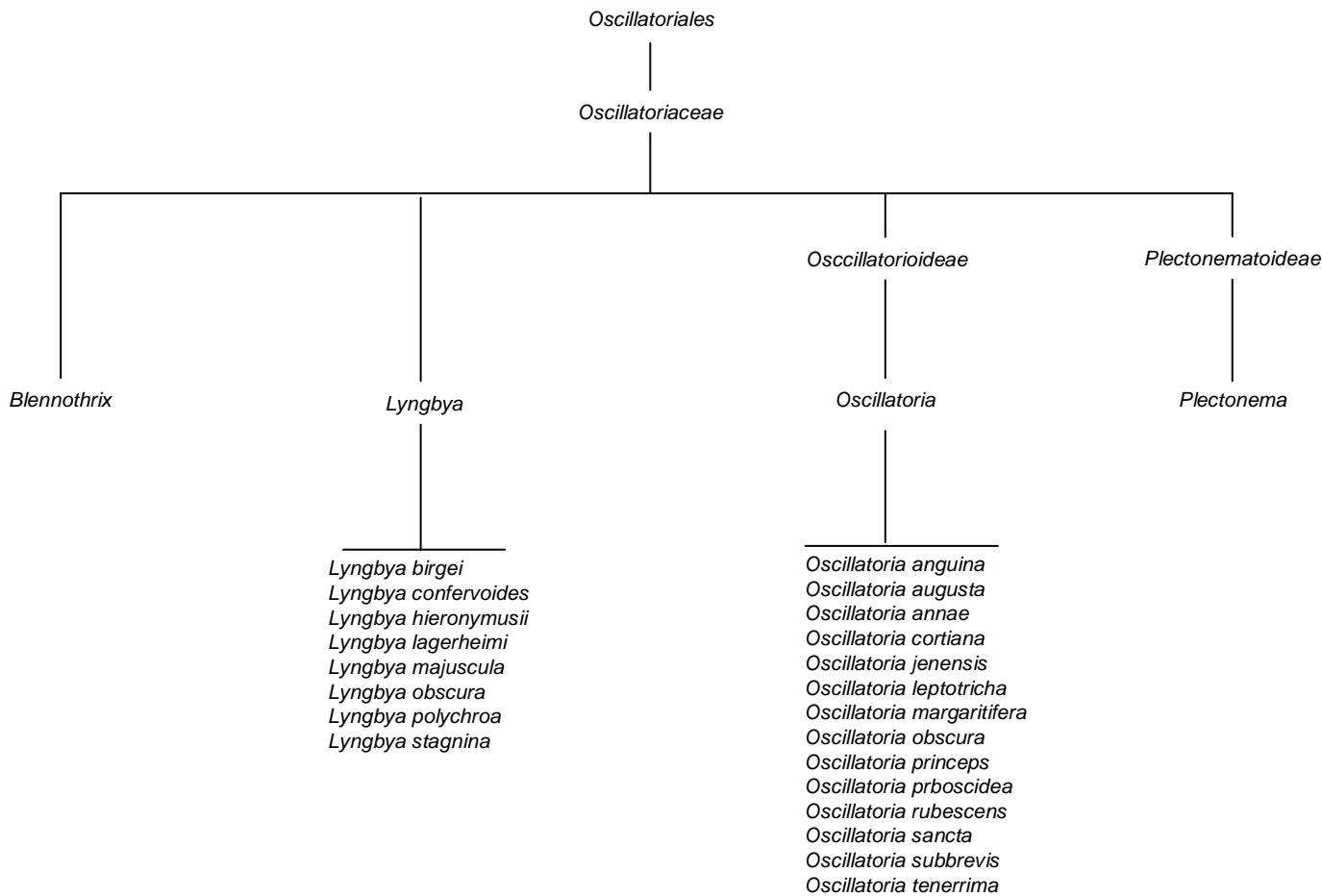
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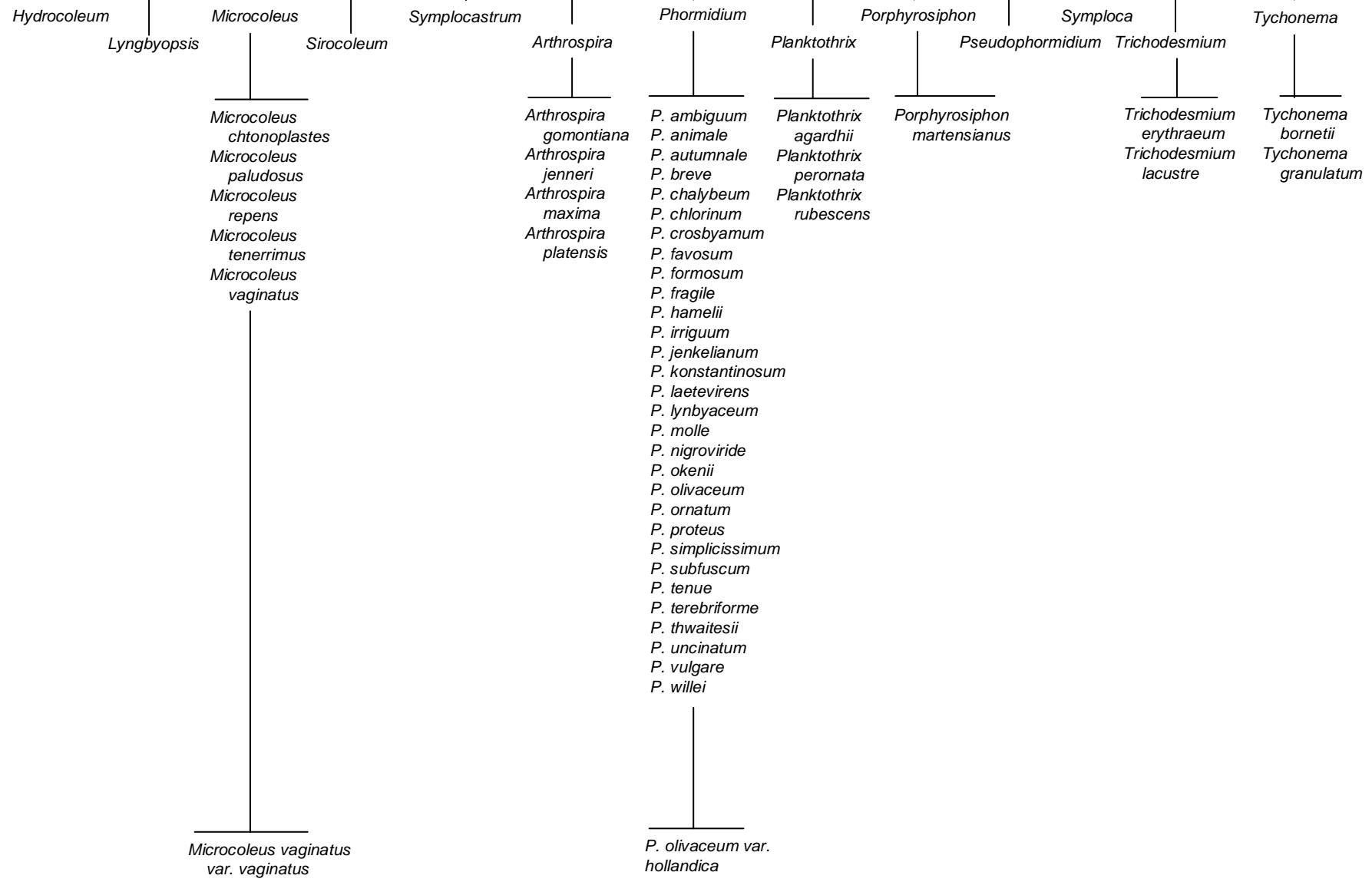
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Oscillatoriales

Phormidiaceae

Microcoleoideae

Phormidioideae



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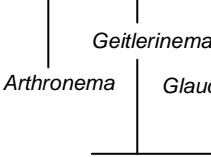
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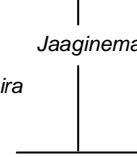
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*Oscillatoriales**Pseudanabaenaceae**Heteroleibleinioideae*

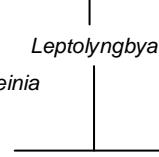
*Heteroleibleinia*  
*infixa*  
*Heteroleibleinia*  
*kuetzingii*



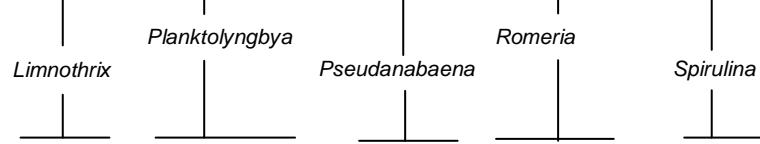
*Geitlerinema*  
*acutissimum*  
*Geitlerinema*  
*amphibium*  
*Geitlerinema*  
*dflexum*  
*Geitlerinema*  
*lemmermannii*  
*Geitlerinema*  
*splendidum*  
*Geitlerinema*  
*unigranulatum*



*Jaaginema*  
*angustissimum*  
*Jaaginema*  
*geminatum*  
*Jaaginema*  
*metaphyticum*



*Leptolyngbya*  
*augustissima*  
*Leptolyngbya*  
*battersii*  
*Leptolyngbya*  
*ectocarpi*  
*Leptolyngbya*  
*foveolarum*  
*Leptolyngbya*  
*norvegica*  
*Leptolyngbya*  
*nostocorum*  
*Leptolyngbya*  
*notata*  
*Leptolyngbya*  
*perelegans*  
*Leptolyngbya*  
*scottii*  
*Leptolyngbya*  
*terebrans*

*Pseudanabaenoideae*

*P. catenata*  
*P. curta*  
*P. galeata*  
*P. limnetica*  
*P. pseudanabaena*  
*R. crassa*  
*R. cylindro-*  
*cellularis*  
*R. simplex*  
*S. laxa*  
*S. laxissima*  
*S. nordstedtii*  
*S. platensis*  
*S. subsalsa*  
*S. tenuissima*

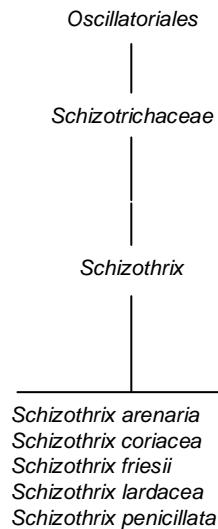
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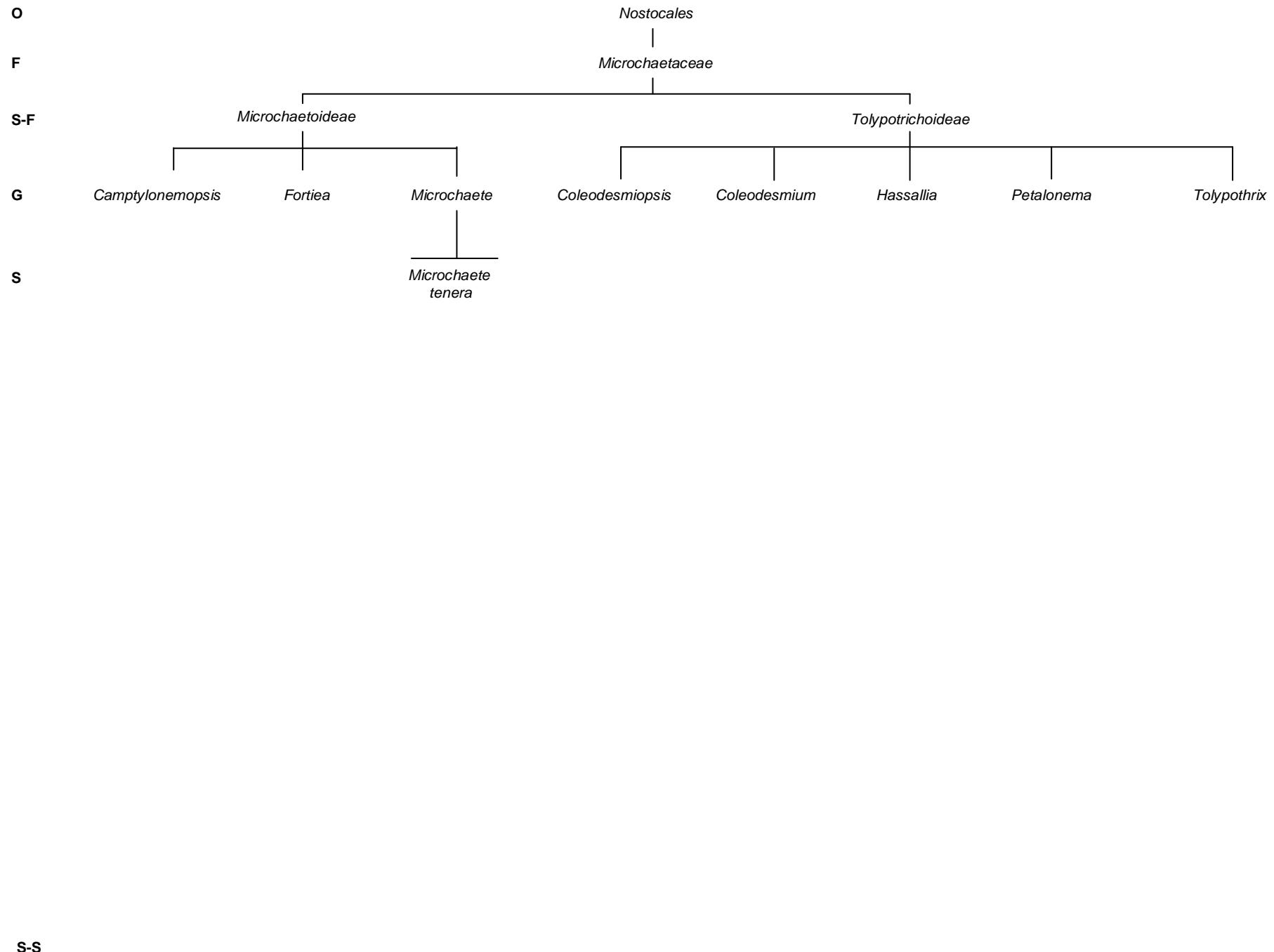
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**CLASS**  
*Hormogonia*

**ORDER**  
*Nostocales*



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S-F

Nostocales

Nostocaceae

Anabaenoideae

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Anabaenopsis

Cylindrospermopsis

Hormothamnion

Hydrocoryne

Raphidiopsis

Thiochaete

Nostocoideae

S

*Anabaena**Aphanizomenon**Cylindrospermum**Hormothamnion**Hydrocoryne**Raphidiopsis**Thiochaete**Aulosira**Nodularia**Trichormus**Isocystis**N. baltica*  
*N. sphaerocarpa*  
*N. spumigena**N. calcicola*  
*N. commune*  
*N. edaphicum*  
*N. linckia*  
*N. planctonicum*  
*N. punctiforme*  
*N. sphaericum**T. Azollae*  
*T. variabilis**A. aequalis*  
*A. affinis*  
*A. augstumalis*  
*A. azollae*  
*A. bergii*  
*A. catenula*  
*A. crassa*  
*A. cylindrica*  
*A. danica*  
*A. delicatula*  
*A. elliptica*  
*A. flos-aquae*  
*A. flos-aquae*  
*A. inequalis*  
*A. lapponica*  
*A. lemmermannii*  
*A. longicellularis*  
*A. minutissima*  
*A. mucosa*  
*A. nordenskioeldii*  
*A. perturbata*  
*A. plantonica*  
*A. randhawae*  
*A. smithii*  
*A. solitaria*  
*A. sphaerica*  
*A. spiroides*  
*A. subcylindrica*  
*A. subtropica*  
*A. torulosa*  
*A. variabilis*  
*A. verrucosa*  
*A. viguieri**A. arnoldii*  
*A. elenkinii**C. raciborskii**C. alatosporum*  
*C. marchicum**R. curvata**R. intracellularis**I. minutissima**N. spumigena*  
var. *ganuina**N. commune*  
var. *flagelliforme**A. bergeii* var. *limnetica*  
*A. flos-aquae* var. *flos-aquae*  
*A. lemmermannii* var. *lem*  
*A. spiroides* var. *minima*  
*A. spiroides* var. *spiroides*

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*Nostocales**Rivulariaceae*

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graph TD
    Nostocales[Nostocales] --- Rivulariaceae[Rivulariaceae]
    Rivulariaceae --- Calothrix[Calothrix]
    Rivulariaceae --- Dichothrix[Dichothrix]
    Rivulariaceae --- Gardnerula[Gardnerula]
    Rivulariaceae --- Gloeotrichia[Gloeotrichia]
    Rivulariaceae --- Isactis[Isactis]
    Rivulariaceae --- Rivularia[Rivularia]
    Rivulariaceae --- Sacconema[Sacconema]
    
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*Calothrix*

*Dichothrix*

*Gardnerula*

*Gloeotrichia*

*Isactis*

*Rivularia*

*Sacconema*

*Calothrix braunii*  
*Calothrix brevissima*  
*Calothrix confervicola*  
*Calthrix consociata*  
*Calothrix epiphytica*  
*Calothrix fusca*  
*Calothrix scopulorum*  
*Calothrix viguieri*

*Dichothrix baueriana*  
*Dichothrix gypsophila*  
*Dichothrix orsiniana*

*Gloeotrichia echinulata*

*Rivularia atra*  
*Rivularia beccariana*  
*Rivularia dura*  
*Rivularia minutula*  
*Rivularia villosa*

*Rivularia villosa*  
var. *major*

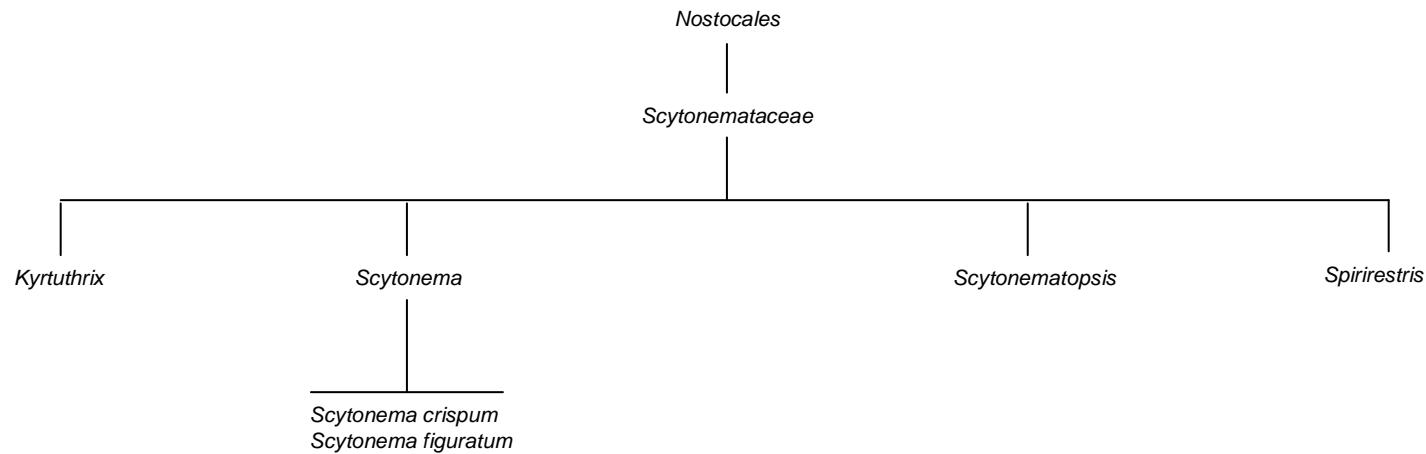
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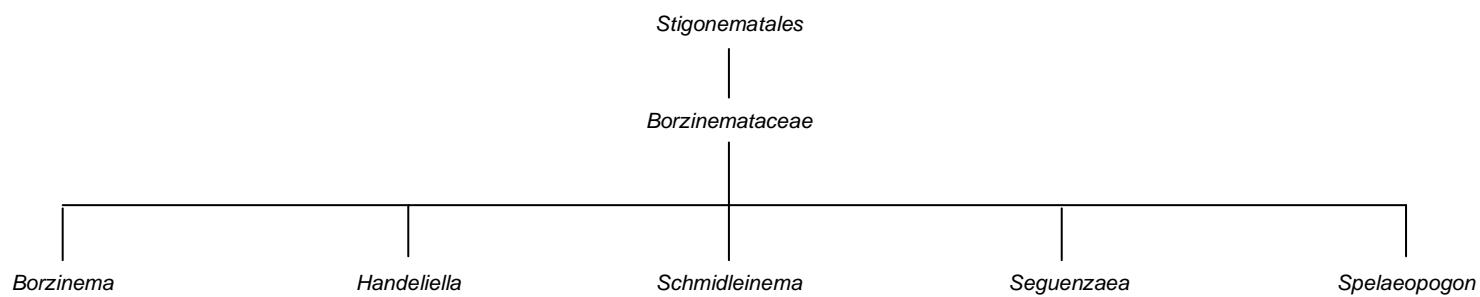
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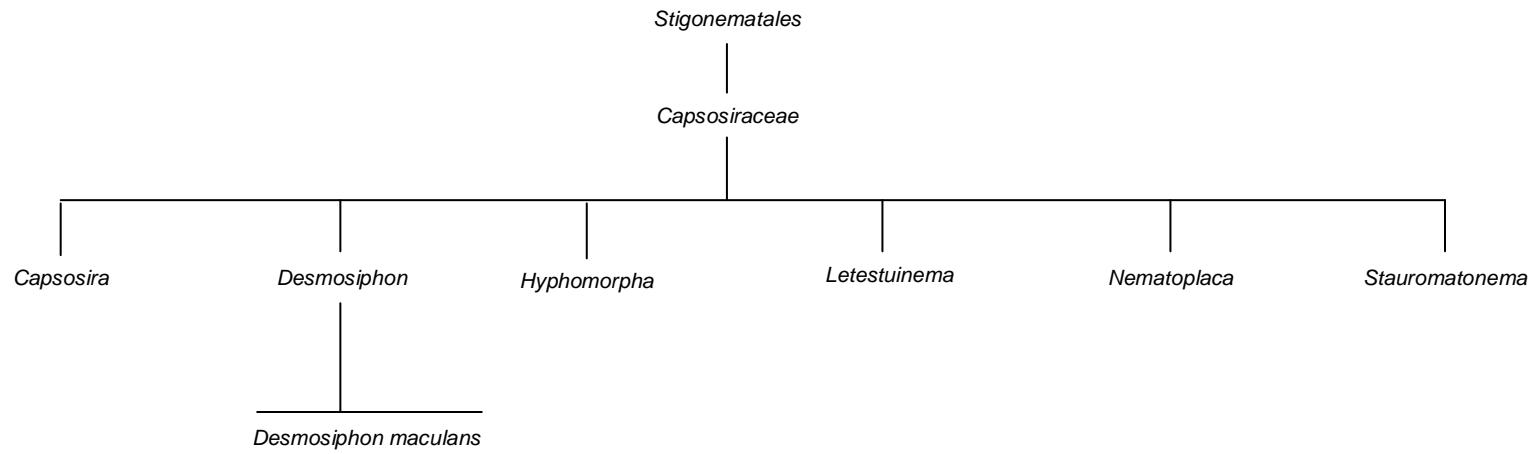
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**CLASS**  
*Hormogonia*

**ORDER**  
*Stigonematales*





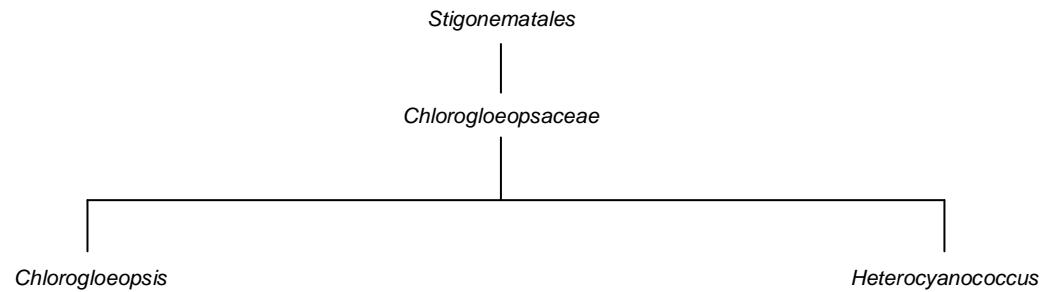
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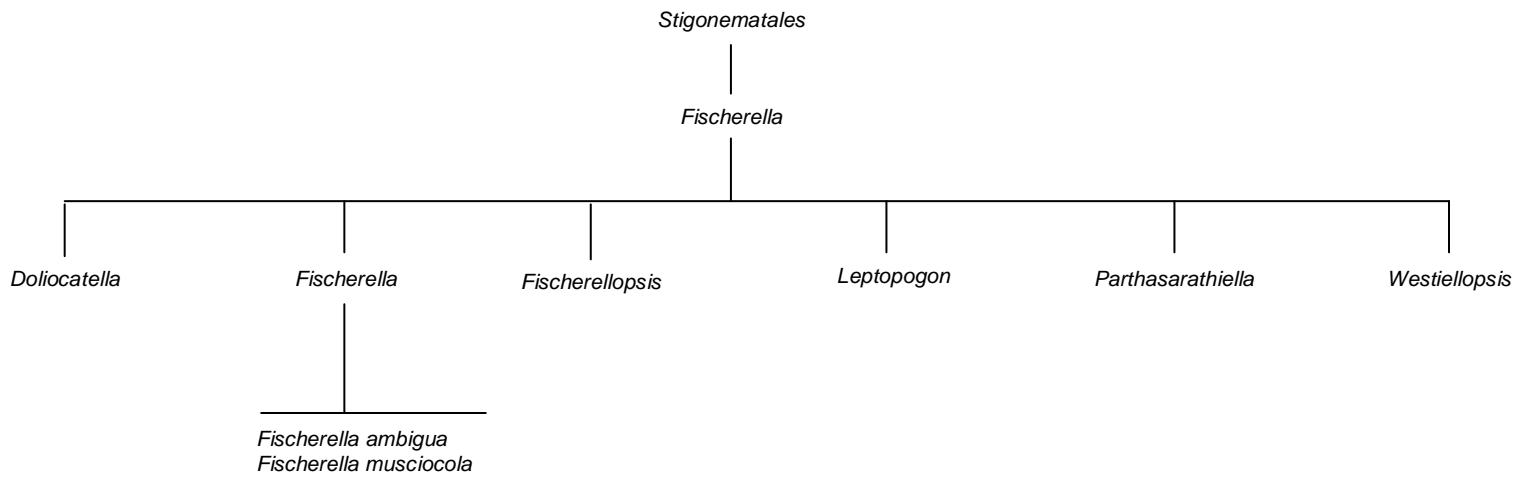
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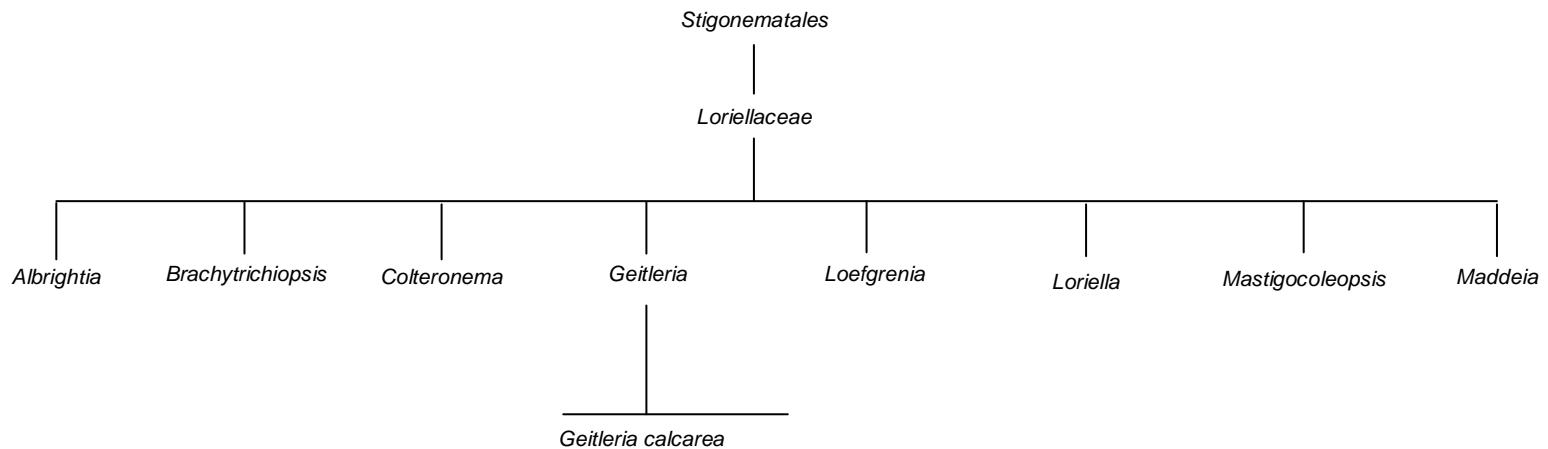
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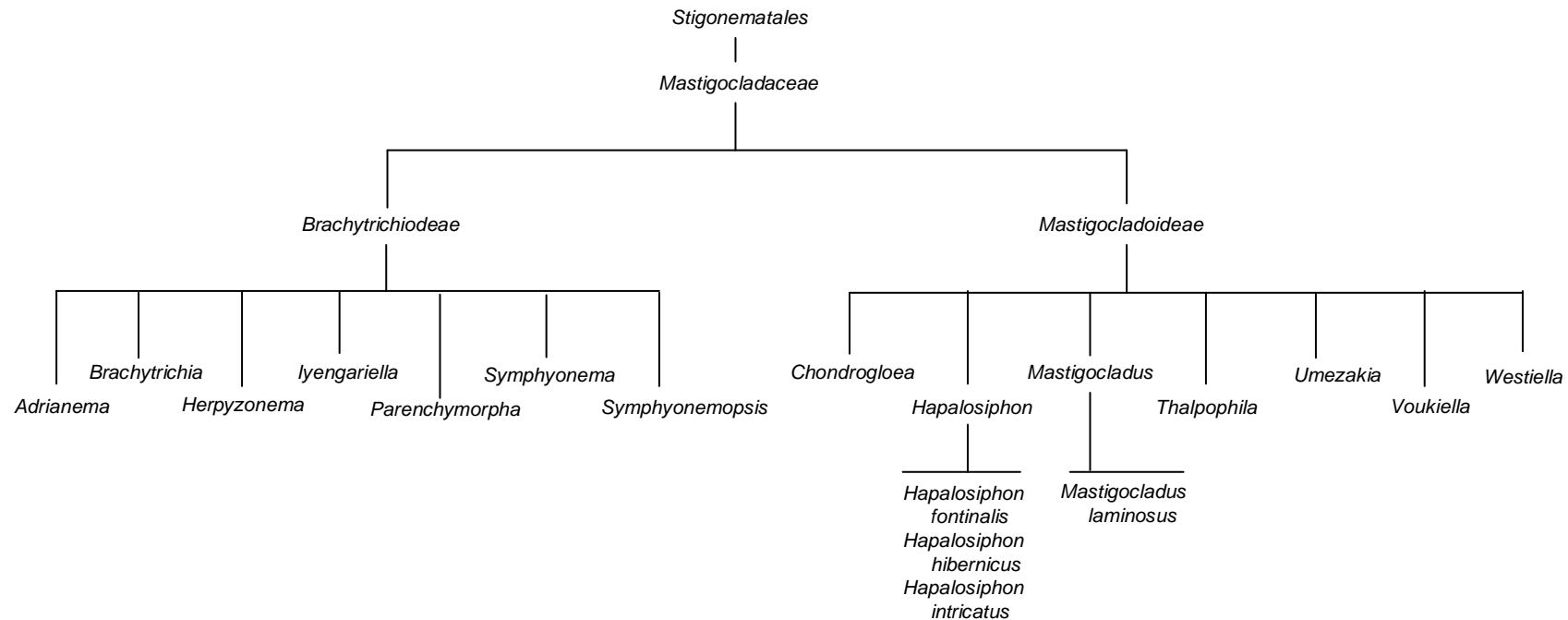
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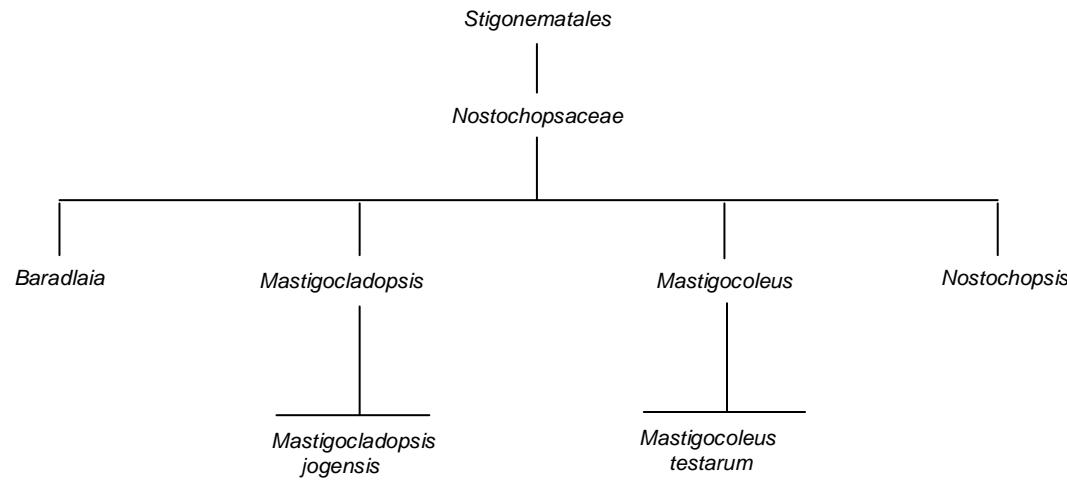
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