

## 579 Natural history of microorganisms, fungi, algae

Standard subdivisions are added for microorganisms, fungi, algae together; for microorganisms alone

Class here Protista, Thallobionta (Thallophyta)

Class here microbiology, protophytes; descriptive biology of microorganisms, fungi, algae; taxonomic biology of microorganisms, fungi, algae; comprehensive works on biology of microorganisms, fungi, algae; interdisciplinary works on microorganisms, fungi, algae

*For internal biological processes of microorganisms, fungi, algae, see 571.29.  
For a specific aspect of microorganisms, fungi, algae, see the aspect, e.g.,  
cooking mushrooms 641.658*

*See Manual at 577.3–577.7 vs. 579–590; also at 579–590; also at 579–590 vs.  
571–575; also at 630 vs. 579–590, 641.3*

.244 5 \*Papovaviridae

Including Papillomavirus, Polyomavirus, Simian virus 40

### .3 \*Prokaryotes

Variant names: Monera, Schizomycetes, Schizophyta

Class here Eubacteriales

Class here bacteria, bacteriology, comprehensive works on bacteria and viruses

Class bacteria culture for biological research in 571.638293

*For viruses, see 579.2*

*See Manual at 579.3*

.32 Minor kinds of bacteria

Not provided for elsewhere

Including Myxobacteria, Spirochetes

Including chemolithotrophic bacteria, colorless sulfur bacteria

Class comprehensive works on minor kinds of bacteria in 579.3

*See Manual at 579.3*

.321 \*Archaeobacteria

Including Halobacteriaceae

Including halophilic bacteria, methanogenic bacteria

- .39      \***Cyanobacteria and Prochlorales**  
           Oxygenic photosynthetic bacteria  
           Variant name for Cyanobacteria: Cyanophyta  
           Including Chroococcales, Nostocales, Oscillatoriales  
           Class here blue-green algae  
           Subdivisions are added for Cyanobacteria and Prochlorales together, for  
           Cyanobacteria alone
- .42      \***Zoomastigophorea**  
           Class here zooflagellates  
           Class phytoflagellates, comprehensive works on flagellates in 579.82
- .432     \***Amoebida**  
           Class here amoebas
- .49      \***Ciliophora**  
           Class here Ciliata  
           Class here ciliates
- .5      \*Fungi**  
           Class here Eumycophyta  
           Class here mycology; filamentous fungi, true fungi  
           Class comprehensive works on molds, on mildew in 579.53  
           *For lichens, see 579.7; for comprehensive works on mushrooms, on  
           macrofungi, see 579.6*
- .52      \***Myxomycotina**  
           Variant names: Mycetozoa, Myxomycetes, Myxomycophyta, Myxomycota  
           Including Acrasia, Physarales, Stemonitales, Trichiales  
           Including cellular slime molds  
           Class here Myxogastromycetidae  
           Class here slime molds  
           *For Plasmodiophoromycetes, see 579.53*
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- >        579.53–579.59 Eumycophyta  
           Class comprehensive works in 579.5

\*Add as instructed under 579.2–579.8

- .53        \*Miscellaneous fungi  
               Not provided for elsewhere  
               Including Chytridiomycetes, Hyphochytridiomycetes,  
               Plasmodiophoromycetes, Rhizopus, Trichomycetes, Zygomycetes  
               Including bread molds, unflagellate molds  
               Class here Mastigomycotina, Phycomycetes  
               Class here comprehensive works on molds, on mildew  
               Class slime molds in 579.52  
               *For Oomycetes, see 579.54; for ascomycete molds and mildew, see  
               579.56*
- .546       \*Peronosporales  
               Including Phytophthora  
               Class here downy mildew
- .55        \*Deuteromycotina  
               Variant name: Deuteromycetes, Fungi Imperfecti  
               Including Coelomycetes, Hyphomycetes, Melanconiales, Moniliales,  
               Mycelia Sterilia, Sphaeropsidales  
               Including sterile fungi  
               Class here imperfect fungi  
               When sexual reproduction of some members of a specific genus of imperfect  
               fungi has been established with a specific kind of sexually reproducing  
               fungi, class the genus with the kind of the sexually reproducing fungi,  
               e.g., *Penicillium* 579.5654, *Fusarium* 579.5677. If, however, members of  
               the genus are assigned to different families of fungi, class them here, e.g.,  
               *Septoria* 579.55
- .56        \*Ascomycotina  
               Class here Ascomycetes  
               *For Discomycetes, see 579.57*
- .562       \*Hemiascomycetes  
               Including Protomycetales, Taphrinales; comprehensive works on  
               Saccharomycetaceae  
               Including comprehensive works on yeasts  
               Class here Endomycetales  
               *For Saccharomyces, see 579.563. For a specific kind of yeasts not in  
               family Saccharomycetaceae, see the kind, e.g., basidiomycete yeasts  
               579.59*

\*Add as instructed under 579.2–579.8

- .563      \*Saccharomyces  
             Class here common yeasts  
             Subdivisions are added for the genus as a whole and for individual species  
             Class comprehensive works on Saccharomycetaceae in 579.562
- .57        \*Discomycetes  
             Including Helotiales, Ostropales, Phacidiales, Tuberales  
             Including truffles  
             Class here cup fungi
- .578      \*Pezizales  
             Including Ascobolus  
             Including morels, saddle fungi
- .59        \*Basidiomycotina  
             Including Exobasidiales, Tremellales  
             Including basidiomycete yeasts, jelly fungi  
             Class here Basidiomycetes, Heterobasidiomycetes, Homobasidiomycetes  
             *For Agaricales, comprehensive works on mushrooms, see 579.6*
- .592      \*Uredinales  
             Class here rusts
- .593      \*Ustilaginales  
             Class here smuts
- .597      \*Polyporales  
             Variant name: Aphyllophorales  
             Including bracket fungi, club fungi, coral fungi, pore fungi, shelf fungi
- .599      \*Gasteromycetes  
             Including Lycoperdales, Nidulariales, Phallales  
             Including bird's-nest fungi, puffballs, stinkhorns

**.6 \*Mushrooms**

Including Boletaceae, Hydnaceae, Thelephoraceae

Including boletes, leather fungi, spine fungi

Class here Agaricales, Agaricaceae

Class here gill fungi, macrofungi, toadstools

Class comprehensive works on Basidiomycotina in 579.59

*For mushrooms, macrofungi of a specific order other than Agaricales, see the order in 579.5, e.g., morels 579.578*

**.82 \*Minor divisions of algae**

Including Chloromonadophyta, Cryptophyta, Xanthophyta

Including yellow-green algae

Class here Phytomastigophorea

Class here phytoflagellates; comprehensive works on flagellates, on organisms that may be regarded as either protozoa or algae

*For a specific kind of flagellate, see the kind, e.g., Zoomastigophorea 579.42, Oomycetes 579.54, dinoflagellates 579.87; for a specific organism that may be regarded as either protozoa or algae, see the kind in 579.8, e.g., euglenoids 579.84*

**.83 \*Chlorophyta**

Including Chaetophorales, Prasinophyceae, Siphonocladales

Class here Chlorophyceae

Class here green algae, green seaweeds

**.837 \*Zygnematales**

Variant name: Conjugales

Including Desmidiaceae

Including desmids

**.839 \*Charophyceae**

Class here Charales

Class here stoneworts

**.84 \*Euglenophyta**

Variant name: Euglenida

Class here euglenoids

**.85 \*Bacillariophyceae**

Class here diatoms

\*Add as instructed under 579.2–579.8

- .86      \*Chrysophyta  
            Including Haptophyceae  
            Class here Chrysophyceae  
            Class here golden algae
- .87      \*Pyrrophyta  
            Including Desmophyceae, Pfiesteriaceae  
            Including red tide  
            Class here Dinophyceae  
            Class here dinoflagellates
- .88      \*Phaeophyta  
            Class here Phaeophyceae  
            Class here brown algae, comprehensive works on seaweeds  
            *For green seaweeds, see 579.83; for red seaweeds, see 579.89*
- .89      \*Rhodophyta  
            Including Bangiophycideae  
            Including red seaweeds  
            Class here Florideophycideae, Rhodophyceae  
            Class here red algae  
            Class red tide in 579.87