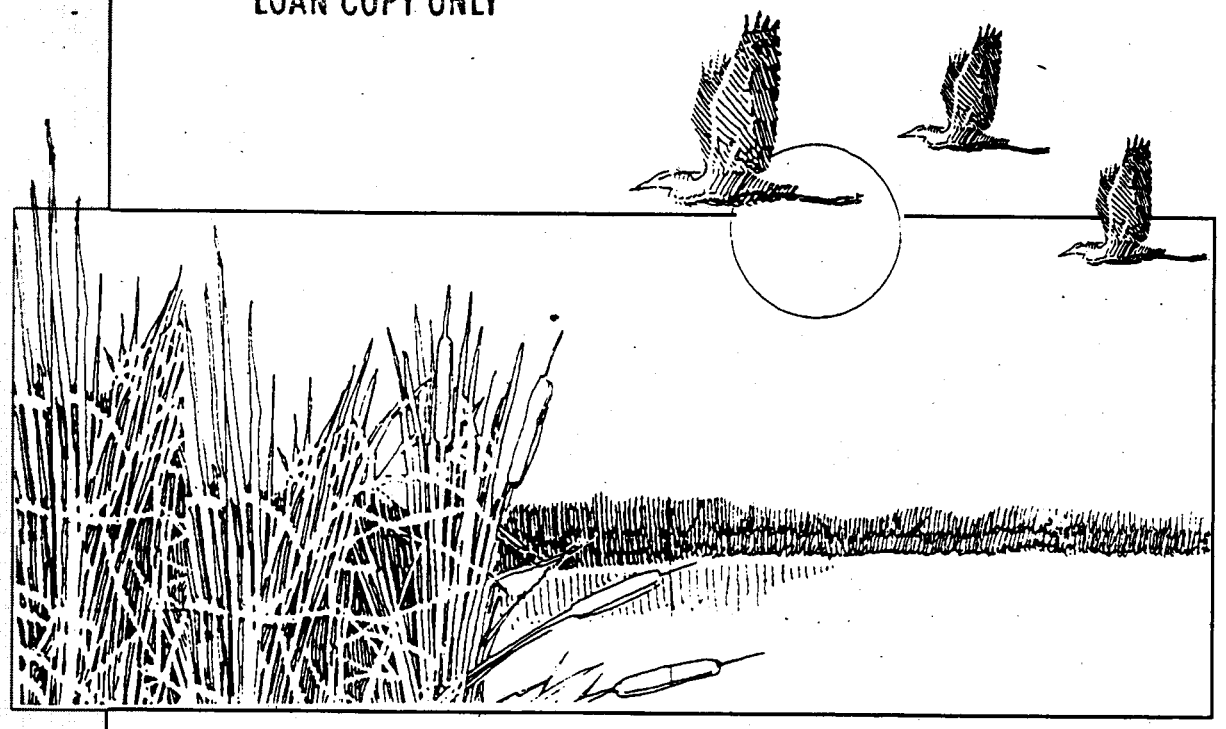

Old Woman Creek National Estuarine Research Reserve
& State Nature Preserve

# TECHNICAL REPORT No. 13

## Catalogue of the Algal Flora of Old Woman Creek Estuary, Watershed, and Adjacent Waters of Lake Erie

by
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**Old Woman Creek Site Profile - Contribution No. 4**

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**Technical Report No. 13**

**Old Woman Creek Site Profile – Contribution No. 4**

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# Catalogue of the Algal Flora and Lower Plants of Old Woman Creek Estuary, Watershed, and Adjacent Waters of Lake Erie

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# Catalogue of the Algal Flora and Lower Plants of Old Woman Creek Estuary, Watershed, and Adjacent Waters of Lake Erie

## INTRODUCTION

Although much of Ohio's Lake Erie shoreline is highly developed, a few areas with significant natural features remain relatively undisturbed. One of these is a freshwater estuary located at the mouth of Old Woman Creek, about 5 km east of the city of Huron, Ohio. On the south shore of Lake Erie, this estuary lies near the southernmost point of the Great Lakes system. The Ohio Department of Natural Resources (ODNR) began the process of acquiring the property surrounding this estuary in 1975 and applied to the National Oceanic and Atmospheric Administration (NOAA) for financial assistance to protect this unique natural area. In 1980 Old Woman Creek estuary received National Estuarine Research Reserve (NERR) designation. The NERR system is a network of federal, state, and community partnerships which serve to promote informed management of our nation's estuarine and coastal habitats through linked programs of scientific understanding, public education, and stewardship. The 230-hectare Old Woman Creek National Estuarine Research Reserve and State Nature Preserve (hereafter referred to as the Reserve) serves as a field laboratory where scientists can study naturally functioning systems and is a place where students and the public can learn about estuarine ecology in a natural setting.

As a transition zone between land and water, Old Woman Creek estuary and its immediate environs contain several distinct habitats, including woodlands, a prairie remnant, creek valley, swamp forest, marshes, wooded coves, open waters of the estuary, an island, barrier beach, and nearshore Lake Erie (Figure 1). The estuary is the drowned mouth of a relatively small tributary to Lake Erie. Estuarine wetlands, consisting of 60 hectares, extend 2 km south of the Lake Erie shore. As the result of wave action and littoral drift, a barrier beach has formed at the mouth which bars off the estuary for extended periods. The barrier is periodically broken by storm flow from the watershed, but occasionally Lake Erie storm surges spill over the bar and into the estuary.

Old Woman Creek drains 69 $km^2$ of primarily agricultural land in eastern Erie County and northeastern Huron County. The headwater tributaries of Old Woman Creek originate on a till plain surface at an elevation of approximately 270 m above sea level (Figure 2). The creek empties into Lake Erie 24 km downstream, dropping 96 m as it flows over the rolling till plain, through the high Berea escarpment, and down the gentle lake plain. Two main branches, east and west, originate in the till plain, cut independently through the sandstone escarpment, and join on the lake plain about 2 km south of the estuary. Floral habitats within the watershed include hardwood forests, meadows, ravines, sandstone hills, abandoned beach ridges, creek banks, floodplains, active and old agricultural fields, and rights-of-way margins.

As a member of the NERR system, the mission of the Reserve is to ensure the long-term protection of Old Woman Creek estuary and to provide for long-term research, monitoring, and education through comprehensive on-site administration and management. To achieve this mission, four goals have been established for the Reserve: (1) establish, manage and maintain a protected area typical of a Great Lakes estuary within the national network that represents the diverse biogeographical and typological estuarine ecosystems of the United States, (2) mobilize federal, state, and community resources to mutually define and achieve goals for coastal protection and wise uses of coastal attributes, (3) design and initiate a comprehensive program of research and monitoring to address estuarine science questions and coastal management issues, and (4) develop a compelling educational, interpretive, and information transfer program based on solid scientific principles to strengthen the understanding, appreciation, stewardship, and enlightened use of estuaries, coastal habitats, and associated watersheds.

In the 20 years that the Old Woman Creek Reserve as been in existence well over 100 research and monitoring projects have been completed by the professional staff and visiting researchers. The results of these studies have been reported in numerous scientific publications, technical reports, and student papers. Building on earlier studies, these research activities have added materially to our knowledge of the estuary, its watershed, and the adjoining waters of Lake Erie, and to our understanding of the complex ecological interactions that take place in these environments. The purposes of the Site Profile, of which this *Catalogue of the Algal Flora and Lower Plants* is a contribution, are to provide an overview of what we have learned about Old Woman Creek estuary and its environs in the past two decades, and to present general concepts that can be transferred to other estuarine and coastal wetlands environments throughout the Great Lakes region. To achieve these objectives, the Site Profile process is designed to (1) compile scientific datasets relating to the Reserve, (2) characterize the physical and biotic components of the environment, (3) synthesize the known ecological relationships within the Reserve and its watershed, (4) trace the impact of natural and human disturbances, and (5) explore the need for future research, education, and management initiatives.

## ALGAL FLORA AND LOWER PLANTS

For the purposes of this catalogue, "algal flora" is considered as those chlorophyll-bearing, aquatic organisms that lack vascular systems, true tissues, and root, stem, and leaf organs (Gray 1970) and "lower plants" include the fungi, lichens, mosses, horsetails, and ferns – those aquatic and terrestrial plant-like organisms with less complex vegetative and reproductive morphology than the gymnosperms (conifers) and angiosperms (flowering plants). The "higher plants" are addressed in Technical Report No. 10 of this series (a few of the lower plant groups that are partially covered in No. 10 are repeated in this catalogue in order to present the lower plants as a complete unit).

In general, the grouping of species into divisions, classes, orders, and families follows the classification system presented in *Synopsis and Classification of Living Organisms* (Parker 1982), except where noted. The algal flora and lower plants found in the vicinity of the Reserve embrace four of the five kingdoms of living organisms (Margulis and Schwartz 1988). As defined by Round (1969), this grouping includes the following major divisions (with typical examples):

Kingdom Monera
- Cyanobacteria (blue-green algae)

Kingdom Protista
- Rhodophytes (red algae)
- Chrysophytes (golden & yellow-green algae)
- Pyrrhophytes (fire algae)
- Cryptophytes (crytomonads)
- Euglenophytes (euglenoids)
- Chlorophytes (green algae)

Kingdom Fungi
- Myxomycetes (slime molds)
- Phycomycetes (algal fungi & water molds)
- Ascomysetes (yeasts, molds & cup fungi)
- Basidiomycetes (mushrooms, smuts, & rusts)
- Deuteromycetes (imperfect fungi)
- Mycophycohytes (lichens)

Kingdom Plantae
- Bryophytes (mosses & liverworts)
- Lycopodiophytes (clubmosses)
- Equisetophytes (horsetails & scouring rushes)
- Filicophytes (ferns)

## ALGAL FLORA

The primary features used to classify algae into their six divisions include (1) nuclear type, (2) pigmentation, (3) cell wall composition, and (4) locomotory organs:

| NAME & TYPICAL COLOR | NUCLEUS | PIGMENT | CELL WALL | LOCOMOTION |
|---|---|---|---|---|
| Cyanophyta (blue-green) | prokaryotic | chlorophyll *a*<br>phycocyanin<br>phycoerythrin | mucopeptide | some float & glide |
| Rhodophyta (red) | eukaryotic | chlorophyll *a,d*<br>carotenoids<br>phycoerythrin | cellulose | attached |
| Chrysophyta<br>chrysophytes (golden-brown) | eukaryotic | chlorophyll *a,c*<br>carotenoids<br>xanthophylls | pectin | few flagellated |
| xanthophytes (yellow-green) | eukaryotic | chlorophyll *a,c*<br>carotenoids<br>xanthophylls | pectin | most flagellated |
| diatoms (golden) | eukaryotic | chlorophyll *a,c*<br>carotenoids<br>xanthophylls | silica | sessile; some float |
| Pyrrhophyta<br>dinoflagellates (red-brown) | eukaryotic | chlorophyll *a,c*<br>xanthophylls | cellulose; may be in armored plates | all flagellated |
| Cryptophyta (various) | eukaryotic | chlorophyll *a,c*<br>carotenoids<br>phycoerythrin | absent | flagellated |
| Euglenophyta (green) | eukaryotic | chlorophyll *a,b*<br>xanthophylls | absent | flagellated |
| Chlorophyta (grass green) | eukaryotic | chlorophyll *a,b*<br>carotenoids<br>xanthophylls | cellulose | some flagellated |

## DIVISION CYANOPHYTA (blue-green algae)

Blue-green algae, sometimes called cyanobacteria, are the most primitive photosynthetic organisms in the estuary. Like the true bacteria, they have a prokaryotic cell structure – characterized by the lack of a nuclear membrane and distinct chloroplasts (plastids containing chlorophyll). They occur in unicellular, filamentous, and colonial forms which are usually encased in mucilaginous sheaths. Most of the blue-greens identified in Old Woman Creek estuary are planktonic and are either spherical-shaped members of the family Chroococcacea (e.g., *Microcystis* and *Coelosphaerium*) or unbranched, filamentous forms (e.g., *Anabaena* and *Oscillatoria*) in several families.

## DIVISION RHODOPHYTA (red algae)

Like the brown algae (Phaeophyta), the red algae are dominantly marine and are only sparsely represented in freshwater. One species, *Bangia atropurpurea*, occurs as short tuffs or dense mats on partially submerged rocks near the splash zone along Lake Erie shore. The simple, unbranched filaments are brownish purple in color and appear in late spring to early summer but disappear by mid-summer.

## DIVISION CHRYSOPHYTA (golden & yellow-green algae)

### Class Chrysophyceae (golden-brown algae)

Chrysophytes contain chromatophores that often produce a golden-brown coloration because of the high content of carotenoid and xanthophyll pigments. Most chrysophytes are unicellular and most cells are unflagellated. Many species lack a cell wall while others covered with calcareous or siliceous scales. Benthic and planktonic members of the estuary community include *Chrysoccoccus*, *Dinobryon*, and *Mallomonas*.

### Class Xanthophyceae (yellow-green algae)

Yellow-green algae are unicellular, colonial, or filamentous in form and are characterized by noticeable amounts of carotinoid pigments in comparison to chlorophyll that results in their distinct coloration. Most cells are motile, actuated by two flagella, one of which is considerably longer than the other. The cell wall, when present, contains a large amount of pectin and some species are silicified. Xanthophytes are often associated with substrates in the estuary, but a few are planktonic such as *Ophiocytium*.

### Class Bacillariophyceae (diatoms)

Diatoms are one of the most important group of algae in the estuary and the most important algal group in Lake Erie's nearshore waters. Over 300 species of diatoms have been identified from these habitats. Although the majority of species are sessile and associated with littoral vegetation or bottom sediments, many are important in the phytoplankton. Both unicellular and colonial forms are common. The class is divided in two orders based on shape: (1) Centrales are

centric diatoms with radial symmetry and (2) Pennales are pennate diatoms with bilateral symmetry. The cell wall (frustule) consists of two lid-like, silica valves which fit together one within the other. The siliceous frustule incorporated a variety of delicate and ornate structures that are useful as taxonomic characteristics (Wetzel 1983). Dominant genera include *Aulacoseira, Gomphonema, Fragilaria*, *Navicula*, and *Nitzschia.*

## DIVISION PYRRHOPHYTA (fire algae)

### Class Dinophyceae (dinoflagellates)

Dinoflagellates differ from other bi-flagellated algae in having one of the two flagella circumscribing the body in a transverse groove or "girdle" while the other extends from the girdle posteriorly through a narrower groove. In most species the body is armored with thick cellulose plates ranging in color from reddish-brown to yellow, which form a case or theca. The shape and number of these plates are an important taxonomic character for species identification. The upper part of the armored cell is referred to as the epitheca and the lower part is the hypotheca. A common Lake Erie planktonic dinoflagellate is the genus *Ceratium*, which has a shape that often resembles the Eiffel Tower. The genus *Gymnodinium*, which at times reaches bloom proportions in the estuary, has green chromatophores but lacks a distinct protective cellulose theca.

## DIVISION CRYPTOPHYTA (cryptomonads)

Cryptomonads are unicellular and motile by virtue of two anterior flagella. They are naked, in that they lack true cell walls, but possess distinct reservoir pockets and chloroplasts which contain a variety of pigments ranging from olive brown to blue to red. These algae are very small and flattened dorsoventrally. They comprise a common planktonic group in the estuary and in Lake Erie. They can be particularly abundant in the winter months under low light conditions. Common representatives include several species of *Crytomonas* and *Rhodomonas.*

## DIVISION EUGLENOPHYTA (euglenoids)

Euglenoid algae are unicellular, flagellates that typically have grassy green chloroplasts and a reddish sigma (eyespot with photoreceptive function). They store carbohydrates as granules in specialized reservoirs. Few species are truly benthic, most are planktonic in the estuary. Members of the genus *Trachelomonas* are housed in a self-secreted lorica which varies in shape depending on the species and environmental conditions.

Organisms known as "euglenoids" constitute a controversial group in terms of the traditional plant verses animal debate. Most euglenoids are chlorophyll-bearing (chlorophytes), protozoa-like organisms of the Protista, and as such the chlorophytes can be considered members of the algae, division Euglenophyta (Taft and Taft 1971). Euglenoids in the order Peranemida are colorless and obtain their nutrition by absorbing dissolved food through the cell membrane (saprobic) or by the ingestion of organic material as animals must do (holozoic). Because they exhibit a distinct gullet in

contrast to the indistinct gullet of the pigmented euglenoids, they are considered invertebrate protozoans and are not here listed as a component of the algal flora (see Old Woman Creek Technical Report No. 12 for *Catalogue of Invertebrate Fauna*).

### DIVISION CHLOROPHYTA (green algae)

Chlorophytes represent a large and diverse group of algae in the estuary which includes both benthic and planktonic forms. Green algae are a major component of the phytoplankton and includes such common genera as *Ankistrodesmus*, *Chlamydomonas*, *Closterium*, *Scenedesmus*, and *Pediastrum*. Filamentous, benthic forms of green algae include *Cladophora* and *Ulothrix*. The cell walls of green algae, like those of vascular plants, are composed cellulose and pectins. In some species, the walls are encrusted with calcium carbonate, silica, and other minerals such as iron oxides. The chloroplasts of this division are grass green, the result of a mixture of chlorophyll *a* and *b* and various accessory pigments. Body plans of greens shows a great range of organization, including unicellular, colonial, filamentous, membranous (sheetlike), and tubular types.

## LOWER PLANTS

Although most groups of lower plants are active in the fixation of carbon and the building of more complex organic molecules through the process photosynthesis, bacteria and fungi perform the equally vital breakdown of organic matter. Without these recycling organisms, the land and waters of the Reserve would rapidly become choked with debris that could only be decomposed slowly by chemical processes. Many of the environmental processes that we think of as purely chemical are mediated by microorganisms, such as the formation of rust (iron oxidation) can be facilitated by the bacteria *Leptothrix* – a common form in freshwater marshes. While bacteria tend to invade any organism as soon as it dies or is damaged, fungi, because they are larger and slower growing, are often secondary invaders (Round 1969). Saprophytic fungi, those growing on dead material, are thus the most numerous. Fundamentally, fungi are plant-like organisms that lack chlorophyll, cilia, or flagella (except some chytrids and oomycetes) and that form spores. Many construct a complex interweaving mass of the fungal hyphae (filamentous threads that make the body of a fungus) in upland habitats, while unicellular species occur in the sediments of the estuary and surrounding soil, releasing fungal spores or fragments into the water and air.

### DIVISION MYXOMYCOTA (mucus molds)

#### Class Myxomycetes (true slime molds)

Slime molds are "animallike plants" found in freshwater, in damp soil, and on rotting vegetation, particularly in woodlands on fallen logs. In the course of their life cycle, independently feeding amoeboid forms aggregate into a slimy mass or wet scum (plasmodium) that eventually dries and transforms itself into spore-forming reproductive body. Once released, the spores are dispersed by air currents. Typically the plasmodia are pigmented orange or yellow, but none

photosynthesize. They feed by engulfing decaying vegetation. As the mass dries the plasmodial protoplasm becomes concentrated into a mound, from which stalked fruit (sporangia) grow. Over 50 species of Myxomycetes have been reported for the region surrounding the Reserve.

## DIVISION PHYCOMYCOTA (algal fungi & water molds)

Members of this division of fungi are believed to be derived from algal progenitors which had lost their chlorophyll. As a result, phycomycetes have assumed a parasitic or saprophytic mode of life. Most species have nonseptate mycelium, in that they do not have cross walls in the mass of hyphae constituting the body of the fungus. This division contains the water molds which are frequently parasitic on algae or inhabit organic sediments. Over 40 species of both parasitic and saprophytic water molds have been reported for the Lake Erie islands to the west of the Reserve.

### Class Chytridiomycetes (chytrids or cooking pot fungi)

These tiny fungi are the only ones which possess motile cells with a single posterior flagellum. Chytrids have a simple sac-like thallus (undifferentiated body). Many species are aquatic and parasitize algae to such an extent that they can alter the balance of populations (Round 1969). Others are saprophytic on plants and animals in water and soil. Like other fungi, they feed and grow by extending threadlike hyphae (sometimes called rhizoids) into living hosts or dead organic debris, where they secrete digestive enzymes and absorb the resulting nutrients.

### Class Oomycetes (egg fungi)

Oomycetes include fungi known as water molds, white rusts, and downy mildews. They also feed by extending hyphae into their hosts tissue and appear most commonly as a gray fuzz on dead animals. *Saprolegnia* causes diseases in fish and fish eggs and may do significant damage in a fish hatchery. Members of this genus invade the skin of fish, consumes their scales and flesh, and finally kills the fish. Oomycetes produce zoospores that swim by means of two flagella (undulipodia) of unequal length. After transformation, zoospores germinate and grow a new thallus, the cell walls of which are composed of cellulose.

### Class Zygomycetes (pair fungi)

This class of fungi lack cross walls (septa) and reproduces by means of spores and by conjunction (transmission of genetic material from a donor to a recipient cell). No flagellated cells have been found in this class. Many of them live on decaying vegetation. Representatives of two orders have been reported in the region surrounding the Reserve. Members of the order Mucorales are mostly saprobic, in that they excrete extracellular digestive enzymes and adsorb dead organic matter, whereas those in the order Entomphthorales are parasitic on animals, mainly insects.

## DIVISION ASCOMYCOTA (ascomycetes or bladder fungi)

This division contains many familiar forms of fungi, such as yeast, fruit molds, morels, and truffles, as well as most of the fungal partners in lichens and other diverse parasitic and pathogenic

forms. Members are known by one distinguishing feature, the ascus – from which the name of this division is derived – a saclike structure containing the spores (ascospores). Some of the spore-producing fruiting bodies are large and edible, such as the morel or sponge mushroom, *Morchella*.

**Class Hemiascomycetes (yeasts)**

This class includes many yeasts and other simple asconomycetes, such as fungi which cause peach leaf curl (*Taphrina deformans*) and plum pockets (*Taphrina communis*). The asci of this group is not enclosed in an ascocarp (a spherical or cup-shaped fruiting body). Many species are parasitic on ferns and higher plants, causing spots and galls on leaves stems and fruit.

**Class Loculoascomycetes (scab molds)**

This class contains many species which are parasitic on economically important food plants. Some attack the leaves of many plants while others cause apple and pear scab. Members of this class have a characteristic bitunicate asci – the inner wall of the spore sac is elastic and expands greatly beyond the outer wall when spores are released.

**Class Plectomycetes (fruit molds)**

*Aspergillus* and *Penicillum* are well known genera in this class. These fungi form green and blue colonies fruits and produce organic acids that attack natural fibers. The fruiting bodies (ascocarps) are formed by a loose interwoven masses of hyphae, while the asci are usually unitunicate – the inner and outer wall ascus wall are more or less ridge and do not separate when spores are ejected. The spores are dispersed by air currents.

**Class Pyrenomycetes (flask fungi)**

This class contains the powdery mildews (order Erysiphales) and several orders of flask-shaped fungi. The "powdery" nature of the mildew is the result of chains of spores (conidia) budding off the spore sacs (conidiophores) at the tips of the hyphae. These fungi are mostly superficial, creating a coating of mycelium on stems, leaves, buds, and fruits of the host plants. The flask fungi, usually dark or brightly colored, often infest grasses and grains, producing a hardened hyphal mass (sclerotium) that resembles the grain in shape.

**Class Discomycretes (disc fungi)**

This class includes the cup fungi, earth tongues, and rots. Brown rot of stone and pome fruits (e.g., peaches and apples) is caused by members of the genus *Sclerotinia*. This fungus spread rapidly by means of oval conidia budding off in chains. As the growing season progresses, the hyphae which have spread throughout the fruits causes these to shrivel and mummify – they can often be seen attached to the fruit trees in winter. Those which fall to the ground and become buried will, in later years, grow long-stalked fruiting bodies (apothecia) of cup fungus from the mummified fruits (Round 1969).

## DIVISION BASIDIOMYCOTA (basidiomycetes or small base fungi)

Bascidomycetes are the most advanced division of fungi and can be distinguished from all others by the basidium – a microscopic clublike reproductive structure (spore producer) from which their name is derived. This division contains all of the woody fungi and nearly all of the large fleshy forms, including all but a few of the edible and poisonous mushrooms. Most bascidomycetes go through three stages of development, involving the production of basidiospores which upon germination give rise to septate (cross-walled) mycelia with uninucleated cell. When two compatible hyphae from mycelia meet, nuclei pass from one to another and a binucleated mycelium is formed, from which the plant body (thallus) is produced. With forest tree and shrubs, certain bascidomycetes form symbiotic associations called mycorrhizae. Mycorrhizal fungi are important mediators in the transfer of phosphorous and nitrogen to the host plants.

### Class Teliomycetes (rust & smut fungi)

Two important groups of plant parasites – sumts and rusts – form this class. The smuts form sootlike masses (teliospores) in the ovaries of grasses, in the anthers of the pink family (Caryophyllacea), and on the leaves of the buckwheat family (Polygonaceae). The parasitic mycelium tends to concentrate in the meristematic regions of the plant (sites of active cell division) without causing much damage to vegetative growth. The rusts are much more complex and are mostly obligate parasites producing colored (often red) spore bodies (sori) which burst through the leaf or stem of the host. Some rusts have up to five stages in their complex life history. The most infamous of the rusts is *Puccinia graminis*, causing black stem rust of wheat.

### Class Phragmobasidomycetes (jelly & waxy fungi)

The bodies (basidocarps) of these fungi are gelatinous to waxy. Many have brilliant yellow, orange, or reddish pigments. In the order Eutremellales, the basdia are borne in capsules extended above the surface of the gelatinous fruit body. *Tremella* forms a large, pigmented, foliose bodies that obtains nutrition saprophytically. Called trembling fungus, it looks like soft, clammy, yielding folds of jellylike material up to 10 cm high and wide that has a glistening appearance. Some species are edible.

### Class Hymenomycetes (exposed hymenium fungi)

All of the species in this class have a fruiting body with an exposed fertile surface (hymenium), such as gills, lined with basidia. Most of the mushroom-like fungi are included in the large order Agaricales, within this class. Nearly 60 species in the order have been reported for the region surrounding the Reserve. In this group, the cap (pilus) bears flat "gills" radiating from the stalk. The development process begins underground as small button-like swellings appear on mycelial strands that gradually swell to form short stalks and hemispherical caps. Between the cap and the stalk a chamber appears where the gills form. Rapid expansion of the fruit body tears the connection between the cap's rim and the stalk leaving the torn tissue as a skirt-like annulus around

the base of the base of the stalk. In the death cap, genus *Amanita*, a further layer of tissue covers the whole developing body (basidiocarp), but also eventually tears leaving a cup-like structure (volva) at the base of the stalk.

**Class Gasteromycetes (stomach fungi)**

Puff-balls are among the most common types of the Gasteromycetes and are found on the ground or on decaying wood in the vicinity of the Reserve; members of the genus *Lycoperdon.* are typical of this group. The spores are formed in cavities which gradually enlarge producing basidia on their internal surfaces . At maturity the whole inside of the bulbous thallus is full of spores and the outer surface (peridiium) becomes papery. Holes eventually appear, from which the spores are "puffed" out whenever the fruit body is disturbed. Other genera have more complex peridia which split into layers and expand as in the earth stars (*Geaster*).

**DIVISION DEUTEROMYCOTA (deuteromycetes or imperfect fungi)**

The imperfect fungi is an artificial division characterized by the absence of a sexual state, in which both Ascomycota-like mycelium and Basidiomycota-like mycelium are represented, but species can not be place in either of these divisions because their sexual state is not known. Most of the fungi that are pathogenic for humans are deuteromycetes. They form asexual spores, often several varieties in the same species. Many of them have a yeastlike parasitic phase as well as a mycelial saprophytic phase. Two classes are recognized by Parker (1982): the Hypomycetes, a group in which the propagation unit (conidium) is not formed within an enclosed structure and the Coelomycetes, a group in which spore formation is initiated within a closed fruiting body.

**DIVISION MYCOPHYCOPHYTA (lichens or fungus algae)**

Lichens constitute a special group of thallophytes (plant body not differentiated into roots, stems and leaves), in that they are a symbiotic association of a fungus and an alga. The algal member is usually a blue-green or green alga and the associated fungus is most commonly an ascomycete, although a few lichens have a basidiomycete component. Lichens typically grow on tree trunks, rocks, and moist soil. They occur as dry crusty patched (crustose), leaflike scales (foliose), or erect, branched tuffs (fruticose), and their colors range from gray-green, yellow-orange, brown, and white to black. Like the Deuteromycetes, Margulis and Schwartz (1988) consider lichen to constitute a separate "form division" and that classification is used for the purposes of this catalogue. Grouping of lichens into orders and families follows the scheme presented by Wolfe (1940) in *A Catalog of the Lichens of Ohio.*

The lichen partners are quite different from their free-living partners. The symbiots consist of algal cells embedded in the fungal mycelia, thus symbiosis is a crucial mechanism in the morphology, development, and evolution of lichens. Working together, the symbiots can synthesize organic acids and pigments that are lacking in individual algae and fungi growing alone.

They are slow growing as evidenced by studies of lichens on gravestones indicating a growth of only a few millimeters in a century. The dotted twig lichen, *Ramalina farinacea*, which has been reported for Erie County, is listed as an endangered plant species by the State of Ohio.

## DIVISION BRYOPHYTA (mosses & liverworts)

The remaining "lower plants" in this catalogue are all true plants in that they develop from an embryo and thus, are multicellular. Within the plant kingdom there are two basic groups: the bryophytes (nonvascular plants) and the tracheophytes (vascular plants). Bryophytes are rather inconspicuous plants growing in moist environments. They are not fully adapted to life on land in that their sperm must swim thorough water to reach their eggs (Margulis and Schwartz 1988). Because bryophytes lack the fluid-conducting tissues of the vascular plants (xylem and phloem), they also rely on surrounding water to conduct necessary fluids and salts during times of growth, but many are able to survive periods of desiccation.

### Class Hepaticopsida (liverworts)

Liverworts have a vegetative body (thallus) that is a somewhat fleshy, leaflike mass growing flat on moist soil or floating on the surface of a water body. The thallus carries out the main functions that in a flowering plant would be done by the roots and leaves. Distinct male and female organs are visible during the growing season. A few species of aquatic liverworts have been identified in the estuary, where they float free in the water or grow on the mud flats along the shore. *Ricciocarpus natans* has a leafy, lobed thallus that floats at the surface like duckweed, while *Riccia fluitans* normally occurs just below the surface, spreading slender branches to form a bright green network.

### Class Sphagnopsida (peat mosses)

This class contains only the genus *Sphagnum*, which has been divided into over 100 species. Several species have been identified in the region surrounding the estuary, but none within the Reserve. Peat mosses are boreal plants of lowland habitats and Ohio lies near the southern limit of their range. Biologically, these plants are important because of their ability to retard decomposition, acidify their surroundings, and hold large quantities of water. All peat mosses have two types of leaf cells: small, green ones for photosynthesis and large, dead ones for water storage. *Sphagnum palustre* forms compact mats that can extent over large areas of quiet waters, at times forming floating islands that can support the weight of a person.

### Class Bryopsida (true mosses)

Mosses frequently cover large areas of steam banks, grow on rocks and trees, and a few live submerged in flowing water. They grow crowded together like liverworts and lichens, with which they are commonly associated. However, their flat green leaves distinguish them from theses two associates, neither of which bear leaves. Many mosses anchor their cushiony stems to the soil by a

branched rootlike system of rhizoids. They are not true absorbing roots and they have no special conducting tissue in their leaves and stems. Although some mosses can survive drought conditions, all require moisture for active growth and reproduction. The hair cap moss, *Polytrichum commune*, often forms pure stand that are several meters across with stems up to 30 cm long. Male and female organs are borne on separate plants. Sperm cells swim to the egg cells, which when fertilized form spores within a capsule. When the spore are released, if they land in an area with sufficient moisture, they will germinate and produce vegetative filaments (protonema). The twisted teeth moss, *Barbula indica* var. *indica*, which has been reported for Erie County, is listed on the rare plant inventory for the State of Ohio.

**DIVISION LYCOPODIOPHYTA (clubmosses)**

**Class Lycopodiopsida**

The clubmosses are relicts of the ancient scale trees that once dominated the landscape during the latter part of the Paleozoic era and eventually became fossilized into the coal measures of southeastern Ohio. Modern lycopods are relatively inconspicuous and represented by a single genera, *Lycopodium*, in the vicinity of the Old Woman Creek watershed. This common clubmoss remains green all winter and has the appearance of a miniature pine tree. They are typically found in cool, moist woodlands, under maples, pines or oaks. The plant body consists of branching horizontal rhizomes (underground stems) and an upright part bearing branches and small leaves (microphylls) which are arranged in tight whorls on the aerial branches. Clubmosses bears no seeds, but produces spores which germinate into either male or female gametophytes.

**DIVISION EQUISETOPHYTA (horsetails)**

**Class Equisetopsida**

Horsetails are easily recognized by their jointed, hollow stems and rough, ribbed texture. The roughness is caused by mineral silica concentrated the epidermal cell of the green photosynthetic stems. The abrasive nature imparted by the silica accounts for another common name for these plants, scouring rush. The division is made up of a single herbaceous genus, *Equisetum*. They thrive on mud flats, along the banks of streams, in moist low wooded areas. In the Reserve, horsetails grow along the barrier beach and in the prairie remnant located southwest of the estuary's main basin. Like many other of the lower plants, horsetails produce spores which are borne by the wind.

**DIVISION FILOPHYTA (ferns)**

**Class Filicopsida**

Ferns are familiar vascular plant of the woodlands that, like the bryophytes, lycopods, and equisetophytes, reproduce by means of spores, rather than seeds. Spores do not carry a food store for nourishment during germination as found in the seeds of higher plants. Unlike the other lower plants, ferns do have leaves, called megaphylls or fronds, that develop directly from the main

photosynthetic stem. Because their fertilization also requires the swimming of the sperm cell, ferns are limited to habitats that are at least occasionally moist. Fern fronds unroll from curled structures known as "fiddleheads." The fronds are usually compound, being divided into leaflets called pinnae that mat be subdivided further into pinnules. The margins or edges may be entire (not toothed or cut), toothed, or lobed. When the clefts are deep and the lobes are long and narrow, the frond margin is termed pinnatifid. A total of 18 species of ferns in 6 family occur within the Old Woman Creek watershed.

## CATALOGUE

This catalogue comprises Contribution No. 4 to the Reserve Site Profile and contains a listing of all the algae and lower plants reported in the scientific literature for the environs of Old Woman Creek estuary and in its watershed. The diversity of habitats found within the Reserve, Old Woman Creek watershed, and adjacent nearshore wters of Lake Erie contribute to a wide variety of algal and lower plant communities. A total of 1,330 taxa, in these groups of organisms, are contained in this catalogue. The totals by major divisions are as follows:

- Kingdom Monera – 49
  - Cyanobacteria (blue-green algae) – 49
- Kingdom Protista – 633
  - Rhodophytes (red algae) – 1
  - Chrysophytes (golden & yellow-green algae) – 351
    - Chrysophyceae (golden-brown algae) – 32
    - Xanthophyceae (yellow-green algae) – 6
    - Bacillariophyceae (diatoms) – 313
  - Pyrrhophytes (fire algae) – 10
  - Cryptophytes (crytomonads) – 21
  - Euglenophytes (euglenoids) – 77
  - Chlorophytes (green algae) – 173
- Kingdom Fungi – 470
  - Myxomycetes (slime molds) – 50
  - Phycomycetes (algal fungi & water molds) – 61
  - Ascomysetes (yeasts, molds & cup fungi) – 52
  - Basidiomycetes (mushrooms & rusts) – 147
  - Deuteromycetes (imperfect fungi) – 49
  - Mycophycohytes (lichens) – 111
- Kingdom Plantae – 178
  - Bryophytes (mosses & liverworts) – 156
  - Lycopodiophytes (clubmosses) – 2
  - Equisetophytes (horsetails) – 2
  - Filicophytes (ferns) – 18

The catalogue consists of 5 appendices. Appendix A contains of a complete phylogenetic (evolutionary relationship) listing of all the algal and lower plant taxa identified in Old Woman Creek estuary and watershed, and adjacent tributaries and waters of Lake Erie. Elements of the list include: (1) taxonomic classification, (2) scientific name, (3) describer (author of scientific name), and (4) common name, as well as codes for (5) data sources, (6) locations within the study area, and (7) habitat preferences. The data for this appendix were compiled from publications and reports prepared by some 34 scientists and naturalists who have conducted research in the Reserve, watershed, and environs. The individual source documents are cited at the end of Appendix A.

Appendix B is a checklist of the algal flora and lower plants in the study area, also arranged phylogenetically by division, class, and order, but abbreviated to include only the scientific name, common name, family, and general location (e.g. estuary, Old Woman Creek above the estuary, Lake Erie, and adjacent region). Appendix C consists of an alphabetized list, by scientific name and subdivided into major groups, of all the algae and lower plants known for the study area. Appendix D is a similar list, but alphabetized by common name and subdivided into major groups.

followed by the scientific name, phylum, and general locations for each species. Appendix E contains a list of taxa (genus and specific epithet) for which a synonym has been discovered. The taxon name as given in the source reference appears first, followed by the currently accepted name – or if preceded by a question mark (?), what we believe to be the currently accepted name.

Data sources, references, and keys for codes designations are given at the end of appropriate appendices. Authorities for systematics and specific nomenclature used in this catalogue for each of the major algal and lower plant groups are listed below (complete citations are located at the end of Appendix A):

| ALGAL GROUP | AUTHORITY |
|---|---|
| Cyanophyta | Geitler (1932), Desikachary (1959); Prescott (1962) |
| Chroococcales | Komárek & Anagnostidis (1999) |
| Rhodophyta | Parker (1982) |
| Chrysophyta | Huber-Pestalozzi (1941); Bold & Wynne (1985) |
| Chrysophyceae | Starmach (1985) |
| Xanthophyceae | Huber-Pestalozzi (1941); Ettl (1978) |
| Bacillariophyceae | Krammer & Lange-Bertalot (1986, 1988, 1991a,b) |
| Pyrrophyta | Huber-Pestalozzi (1968); Bold & Wynne (1985) |
| Dinophyceae | Popovsky' & Pfiester (1990) |
| Cryptophyta | Huber-Pestalozzi (1968); Bold & Wynne (1985) |
| Euglenophyta | Huber-Pestalozzi (1955); Bold & Wynne (1985) |
| Chlorophyta | Prescott (1962); Bold & Wynne (1985) |
| Vovocales | Ettl (1983) |
| Chlorococcales | Komárek & Fott (1983) |
| Desmidiaceae | Prescott et al. (1975, 1981, 1982) |
| **LOWER PLANT GROUP** | **AUTHORITY** |
| Fungi | Round (1969);Parker (1982) |
| Myxomycota | Fullmer (1921); Parker (1982); Keller & Braun (1999) |
| Phycomycota | Round (1969); Parker (1982) |
| Ascomycota | Round (1969); Groves (1979);Parker (1982) |
| Basidiomycota | Graham (1944); Groves (1979); Parker (1982) |
| Deuteromycota | Round (1969); Parker (1982) |
| Mycophycophyta | Fink (1935); Wolfe (1940); Taylor (1967, 1968) |
| Bryophyta | Parker (1982); Snider & Andreas (1996) |
| Lycopodiophyta | Parker (1982); Gleason & Cronquist (1991) |
| Equisetophyta | Parker (1982); Gleason & Cronquist (1991) |
| Filicopsida (Polypodiophyta) | Parker (1982); Gleason & Cronquist (1991); Kartesz & Meacham (1997) |

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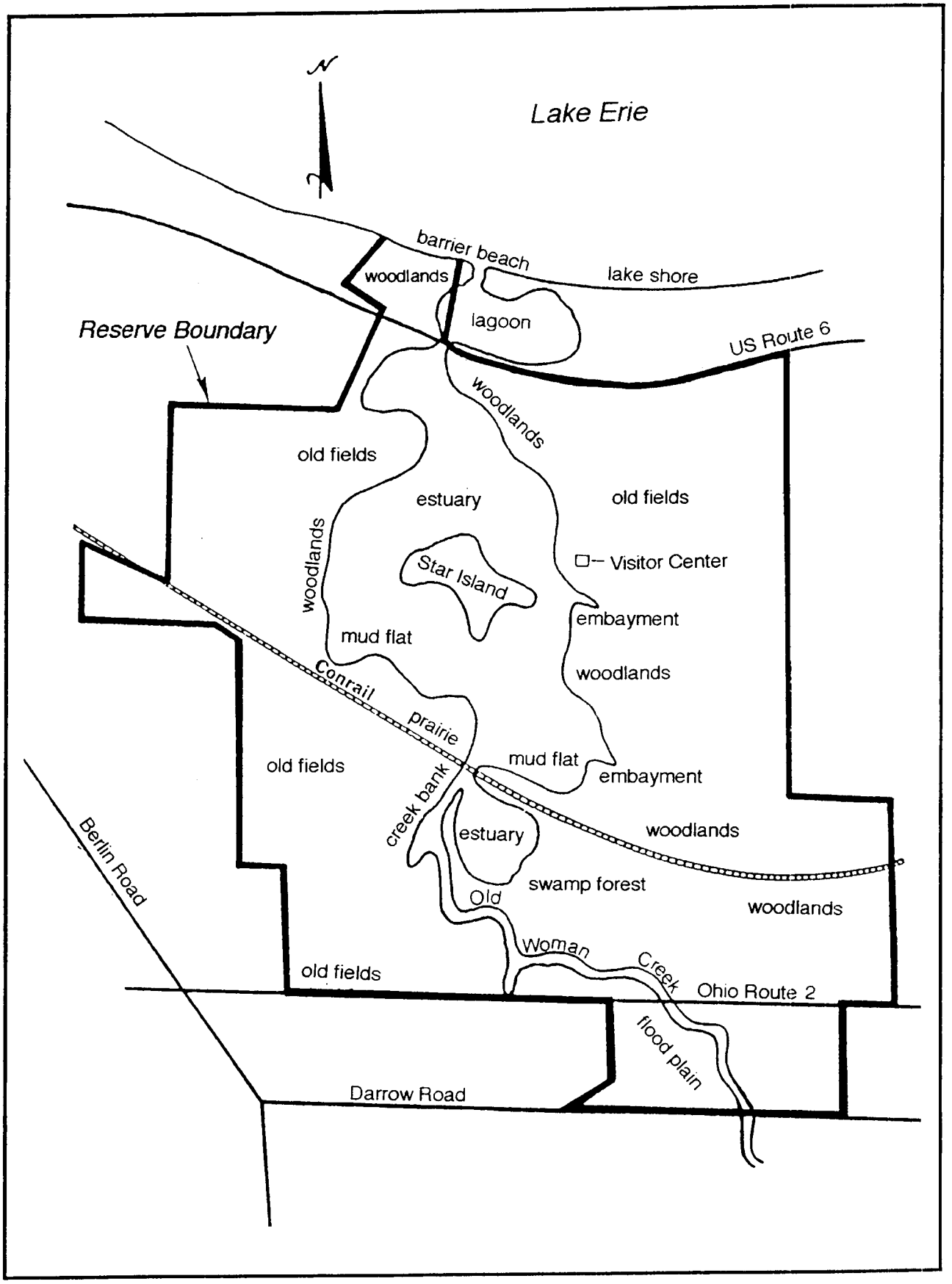


Figure 1. Old Woman Creek National Estuarine Research Reserve showing habitats.

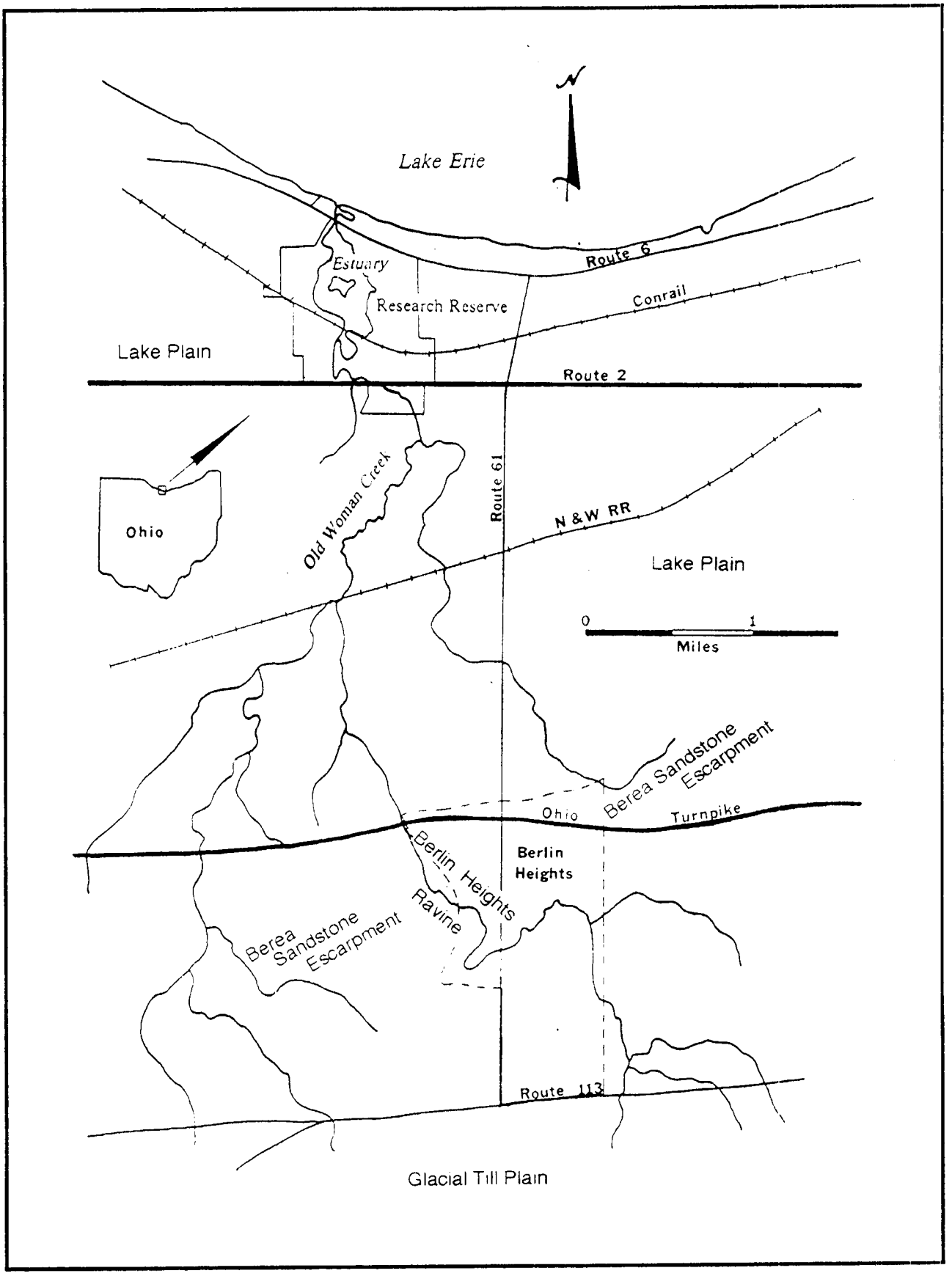


Figure 2. Old Woman Creek watershed showing tributary pattern.

# Appendix A

# Algal Flora and Lower Plants of Old Woman Creek Estuary, Watershed, and Adjacent Waters of Lake Erie

# ALGAL FLORA AND LOWER PLANTS OF OLD WOMAN CREEK ESTUARY, WATERSHED, AND ADJACENT WATERS OF LAKE ERIE

## KINGDOM MONERA
## DIVISION CYANOPHYTA (blue-green algae)
## CLASS CYANOPHYCEAE

### ORDER CHROOCOCCALES

| | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| **Family Chroococcaceae** | | | |
| • *Aphanocapsa delicatissima* West & West, 1912 * blue-green | 2,3,10 | ES | P |
| • *Aphanocapsa elachista* West & West, 1894 * blue-green | 2,3,10 | ES | P |
| • *Aphanocapsa incerta* (Lemmermann) Cronberg, 1994 [=*Microcystis incerta* (Lemmermann) Lemmermann, 1907] * blue-green | 3,10 | CK | R |
| • *Aphanothece saxicola* Nägeli, 1849 * blue-green | 10 | ES | P |
| • *Chroococcus dispersus* (Keissler) Lemmermann, 1904 * blue-green | 2,3,10 | CK,ES | P,R |
| • *Chroococcus minor* (Kützing) Nägeli, 1849 * blue-green | 2,3,10 | CK | R |
| • *Chroococcus minutus* (Kützing) Nägeli, 1849 * blue-green | 2,3,10 | CK,LE | R |
| • *Chroococcus planctonicus* Bethge, 1935 * blue-green | 10 | ES | P |
| • *Chroococcus* spp. Nägeli, 1849 * blue-greens | 3,9,10 | CK,ES | P,R |
| • *Coelosphaerium naegelianum* Unger, 1854 * blue-green | 10 | ES | P |
| • *Coelosphaerium pallidum* Lemmermann, 1898 * blue-green | 3,10 | ES | P |
| • *Dactylococcopsis irregularis* Smith, 1922 * blue-green | 10 | ES | P |
| • *Gloeocapsa aeruginosa* Kützing, 1843 * blue-green | 10 | CK | P |
| • *Gloeocapsa* sp. Kützing, 1843 * blue-green | 2 | ES | P |
| • *Gomphosphaeria lacustris* Chodat, 1898 * blue-green | 3,10 | ES | P |
| • *Merismopedia glauca* (Ehrenberg) Kützing, 1845 * blue-green | 5 | ES | C |
| • *Merismopedia minima* Beck, 1897 * blue-green | 2,3,10 | CK,ES | R |
| • *Merismopedia tenuissima* Lemmermann, 1898 * blue-green | 2,3,10 | ES | P |
| • *Microcystis aeruginosa* (Kützing) Kützing, 1846 * blue-green | 3,10 | ES | P |
| • *Microcystis minutissima* West, 1912 * blue-green | 10 | ES | P |
| • *Microcystis* sp. Kützing, 1833 * blue-green | 4,10 | ES | P |
| • *Rhabdoderma minima* Lemmermann, 1908 * blue-green | 10 | ES | P |
| • *Rhabdoderma* sp. Schmidle, 1900 * blue-green | 10 | ES | P |
| • *Synechococcus leopoliensis* (Raciborski) Komárek, 1970 * blue-green | 10 | ES | P |
| • *Synechococcus* sp. Nägeli, 1849 * blue-green | 3,10 | ES | P |

### ORDER OSCILLATORIALES

| | | | |
|---|---|---|---|
| **Family Rivulariaceae** | | | |
| • *Calothrix fusca* (Kützing) Bornet & Flahault, 1886 * blue-green | 10 | CK | R |
| • *Calothrix* spp. Agardh, 1824 * blue-greens | 2,3,10 | CK | R |
| • *Raphidiopsis mediterranea* Skuja, 1937 * blue-green | 10 | LE | P |
| • *Spirulina* sp. Turpin, 1829 * blue-green | 4 | ES | P |
| **Family Nostocaceae** | | | |
| • *Anabaena circinalis* Rabenhorst, 1852 [*A. circinis*, orthographic error] * blue-green | 2 | ES | P |
| • *Anabaena spiroides* Klebahn, 1895 * blue-green | 10 | LE | P |
| • *Anabaena spiroides* var. *crassa* Lemmermann, 1898 * blue-green | 3 | LE | P |
| • *Anabaena variabilis* Kützing, 1843 * blue-green | 10 | ES | P |
| • *Anabaena* spp. Bory, 1822 * blue-greens | 2,3,5,10 | ES,LE | C,P |
| • *Aphanizomenon flos-aquae* (Linnaeus) Ralfs, 1850 * blue-green | 2,3 | ES,LE | P |
| **Family Oscillatoriaceae** | | | |
| • *Lyngbya* sp. Agardh, 1824 * blue-green | 2,3,9,10 | CK,ES | P |
| • *Microcoleus lyngbyaceus* (Kützing) Crouan, 1867 * blue-green | 10 | CK | P |
| • *Oscillatoria agardhii* Gomont, 1892 * blue-green | 2,3,10 | ES,LE | P |
| • *Oscillatoria amphibia* Agardh, 1827 * blue-green | 3,10 | ES | P |
| • *Oscillatoria chlorina* Kützing, 1853 * blue-green | 10 | LE | P |
| • *Oscillatoria granulata* Gardner, 1927 * blue-green | 8,10 | ES | P |
| • *Oscillatoria hamelii* Frémy, 1929 * blue-green | 8,10 | ES,LE | P |

| Family Oscillatoriaceae (continued) | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| • *Oscillatoria limosa* (Roth) Agardh, 1812 * blue-green | 2,3,10,28 | CK,ES | P |
| • *Oscillatoria prolifica* (Greville) Gomont, 1892 * blue-green | 10 | LE | P |
| • *Oscillatoria subbrevis* Schmidle, 1901 * blue-green | 2,3,8,10 | CK,ES | P,R |
| • *Oscillatoria tenuis* Agardh, 1813 * blue-green | 2,3,8,10 | CK,ES | P,R |
| • *Oscillatoria* spp. Vaucher, 1803 * blue-greens | 3,5,9,10 | ES,LE | P |
| • *Phormidium tenue* (Meneghini) Gomont, 1892 * blue-green | 2,3,10 | ES | P |
| • *Schizothrix calcicola* (Agardh) Gomont, 1892 * blue-green | 10 | CK,ES | R,V |

## KINGDOM PROTISTA
## DIVISION RHODOPHYTA (red algae)
## CLASS RHODOPHYCEAE

### ORDER BANGIALES
**Family Bangiaceae**

| | | | |
|---|---|---|---|
| • *Bangia atropurpurea* (Roth) Agardh * red alga | 10 | LE | B |

## DIVISION CHRYSOPHYTA (golden & yellow-green algae)
## CLASS CHRYSOPHYCEAE (chrysophycean algae)

### ORDER OCHROMONADALES
**Family Ochromonadaceae**

| | | | |
|---|---|---|---|
| • *Chrysococcus biporus* Skuja, 1939 * golden-brown alga | 10 | ES | P |
| • *Chrysococcus minutus* (Fritsch) Nygaard * golden-brown alga | 10 | ES | P |
| • *Chrysococcus rufescens* var. *tripora* Lund * golden-brown alga | 10 | ES | P |
| • *Chrysococcus triporus* Matvienko | 10 | ES | P |
| [*C. triolis*, orthographic error?] * golden-brown alga | 9 | ES | P |
| • *Chrysococcus* spp. Kelbs, 1892 * golden-brown algae | 4,9,10 | ES | P |
| • *Kephryion ovale* (Lackey) Huber-Pestalozzi * golden-brown alga | 10 | ES | P |
| • *Kephryion spirale* (Lackey) Conrad * golden-brown alga | 10 | LE | P |
| • *Kephryion* spp. Pascher, 1911 * golden-brown algae | 3,10 | ES | P |
| • *Microglena* sp. Ehrenberg, 1838 * golden-brown alga | 6 | ES | B |
| • *Monas guttula* Ehrenberg * golden-brown alga | 6 | ES | B |
| • *Monas socialis* (Kent) * golden-brown alga | 6 | ES | B |
| • *Monas* sp. Müller, 1786 * golden-brown alga | 6 | ES | B |
| • *Ochromonas ludibunda* Pascher * golden-brown alga | 6 | ES | B |
| • *Ochromonas nana* Doflein or *Chromulina nannos* Naumann | | | |
| [?=*Chromulina nana*] * golden-brown alga | 9 | ES | P |
| • *Ochromonas* sp. Wyssotzki, 1887 * golden-brown alga | 6,9 | ES | B,P |
| • *Physomonas vestita* Stokes, 1885 * golden-brown alga | 6 | ES | B |
| • *Spumella* sp. Cienkowski, 1870 * golden-brown alga | 9 | ES | P |
| **Family Mallomonadaceae** | | | |
| • *Anthophysa steinii* Senn, 1900 * golden-brown alga | 6 | ES | B |
| • *Anthophysa vegetans* (Müller) Stein, 1878 * golden-brown alga | 6 | ES | B |
| • *Mallomonas acaroides* Perty, 1852 * golden-brown alga | 2 | ES | P |
| • *Mallomonas elegans* Lemmermann, 1904 * golden-brown alga | 6 | ES | B |
| • *Mallomonas intermedia* Kisseler, 1931 * golden-brown alga | 6 | ES | B |
| • *Synura uvella* Ehrenberg, 1838 * golden-brown alga | 2,3 | ES | P |
| **Family Dinobryacae** | | | |
| • *Dinobryon bavaricum* Imhof, 1890 * golden-brown alga | 3,6,10 | ES | B,P |
| • *Dinobryon divergens* Imhof, 1887 * golden-brown alga | 2,3,10 | ES | P |
| • *Dinobryon sertularia* Ehrenberg, 1835 * golden-brown alga | 3,6,10 | ES | B,P |
| • *Dinobryon sociale* Ehrenberg, 1835 * golden-brown alga | 10 | ES | P |
| • *Dinobryon* sp. Ehrenberg, 1835 * golden-brown alga | 2 | ES | B,P |
| • *Epipyxis tabellariae* (Lemmermann) Smith, 1950 | 10 | ES | P |
| [=*Dinobryon tabellariae* (Lemmermann) Pascher, 1913] * golden-brown alga | 3,10 | ES | P |
| • *Pseudokephyrion cylindricum* (Lackey) Bourrelly, 1957 * golden-brown alga | 10 | ES | P |
| • *Pseudokephyrion entzii* f. *granulata* Bourrelly, 1957 * golden-brown alga | 10 | ES | P |
| • *Stokesiella* sp. Lemmermann, 1910 * golden-brown alga | 6 | ES | B |

## CLASS XANTHOPHYCEAE (yellow-green algae)

| | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| **ORDER RHIZOCHLORIDACEAE** | | | |
| **Family Stipitociccaceae** | | | |
| • *Stipitococcus vasiformis* Tiffany, 1934 * yellow-green alga | 2 | ES | P |
| **ORDER MISCHOCOCCALES** | | | |
| **Family Pleurochloridaceae** | | | |
| • *Goniochloris fallax* Fott, 1957 * yellow-green alga | 10 | ES | P |
| • *Pseudostaurastrum hastatum* (Reinsch) Chodat, 1921 * yellow-green alga | 10 | ES | P |
| **Family Centritractaceae** | | | |
| • *Centritractus ellipsoideus* Starmach, 1966 * yellow-green alga | 10 | ES | P |
| **Family Ophiocytaceae** | | | |
| • *Ophiocytium capitatum* var. *longispina* (Moebius) Lemmermann, 1899 * yellow-green alga | 2,3,10 | ES | P |
| **ORDER VAUCHERIALES** | | | |
| **Family Vaucheriaceae** | | | |
| • *Vaucheria* sp. DeCandolle, 1803 * yellow-green alga | 4 | ES | P |

## CLASS BACILLARIOPHYCEAE (diatoms)

| | | | |
|---|---|---|---|
| **ORDER CENTRALES (centric diatoms)** | | | |
| **Family Melosiraceae** | | | |
| • *Aulacoseira alpigena* (Grunow) Krammer, 1990 | 8,9,10 | ES | A,P |
| [=*Melosira distans* var. *alpigena* Grunow, 1882] * centric diatom | 1,2,3,10 | ES | P,V |
| • *Aulacoseira ambigua* (Grunow) Simonsen, 1979 | | | |
| [=*Melosira ambigua* (Grunow) Müller, 1903] * centric diatom | 1,2,3 | ES | V |
| • *Aulacoseira crassipunctata* Krammer, 1990 * centric diatom | 8 | ES | A |
| • *Aulacoseira granulata* (Ehrenberg) Simonsen, 1979 | 8 | ES | A |
| [=*Melosira granulata* (Ehrenberg) Ralfs, 1861] * centric diatom | 10 | ES | P |
| • *Aulacoseira granulata* var. *angustissima* (Müller) Simonsen, 1979 | 8 | ES | A |
| [=*Melosira granulata* var. *angustissima* Müller, 1899] * centric diatom | 10 | LE | P |
| • *Aulacoseira islandica* (Müller) Simonsen, 1979 | 9,10 | ES | P |
| [=*Melosira islandica* Müller, 1906] | 3,10 | ES | P |
| [=*Melosira islandica* ssp. *helvetica* Müller, 1906] * centric diatom | 10 | ES | P |
| • *Aulacoseira italica* (Ehrenberg) Simonsen, 1979 | 8 | ES | A |
| [=*Melosira italica* (Ehrenberg) Kützing, 1844] * centric diatom | 10 | ES | P |
| • *Aulacoseira* spp. Thwaites, 1848 * centric diatoms | 9,10 | ES | P |
| • *Melosira varians* Agardh, 1827 * centric diatom | 1,2,3,8,9,10 | ES | P,V |
| **Family Thalassiososiraceae** | | | |
| • *Cyclostephanos invisitatus* | 8 | ES | A |
| (Hohn & Hellerman) Theriot, Stoermer, & Håkansson, 1987 | | | |
| [=*Stephanodiscus invisitatus* Hohn & Hellerman, 1963] * centric diatom | 10 | ES | P |
| • *Cyclostephanos tholiformis* Stoermer, Håkansson, & Theriot, 1987 * centric diatom | 8 | ES | A |
| • *Cyclotella atomus* Hustedt, 1937 * centric diatom | 1,2,3,8,9,10 | ES | P,V |
| • *Cyclotella atomus* var. 1 * centric diatom | 8 | ES | A |
| • *Cyclotella meneghiniana* Kützing, 1844 | 1,2,3,8,9,10 | ES | A,P,V |
| [=*C. kuetzingiana* Thwaites, 1848] * centric diatom | 3,10 | ES | P |
| • *Cyclotella meneghiniana* var. 1 * centric diatom | 8 | ES | A |
| • *Cyclotella pseudostelligera* Hustedt, 1939 * centric diatom | 1,3,8,9,10 | ES | P,V |
| • *Cyclotella radiosa* (Grunow) Lemmermann, 1900 | | | |
| [=*C. comta* Kützing, 1849] * centric diatom | 1,2,3 | ES | P,V |
| • *Cyclotella stelligera* Cleve & Grunow, 1882 * centric diatom | 2,3,8 | ES | P |
| • *Cyclotella* spp. (Kützing) Brébisson, 1838 * centric diatoms | 8,9,10 | ES | A,P |
| • *Skeletonema potamos* (Weber) Hasle, 1976 | 3,8,9,10 | ES | P,V |
| [=*Microsphona potamos* Weber, 1970] * centric diatom | 1,2 | ES | P,V |
| • *Thalassiosira pseudonana* Hasle & Heimdal, 1970 * centric diatom | 1,2,3,8 | ES | P,V |
| • *Thalassiosira weissflogii* (Grunow) Fryxell & Hasle, 1977 | 8 | ES | A |
| [=*T. fluviatilis* Hustedt, 1926] * centric diatom | 1,2,3 | ES | V |

| | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| **Family Coscinodiscaceae** | | | |
| • *Actinocyclus normanii* (Gregory) Hustedt, 1957 | 8,10 | ES | A,P |
| [=*A. normanii* var. *subsalsa* (Juhlin-Dannfelt) Hustedt, 1957] * centric diatom | 1,2,3,10 | ES | P,V |
| • *Coscinodiscus* sp. Ehrenberg, 1838 * centric diatom | 3,10 | ES | P |
| • *Stephanodiscus alpinus* Hustedt, 1942 * centric diatom | 1,8 | ES | V |
| • *Stephanodiscus binderanus* (Kützing) Krieger, 1927 | 3,8,10 | ES,LE | P |
| [=*Melosira binderana* Kützing, 1844] * centric diatom | 2 | ES | P |
| • *Stephanodiscus hantzschii* Grunow, 1880 | 1,2,3,8,10 | ES | P,V |
| [=*S. hantzschii* var. *tenuis* (Hustedt) Håkansson & Stoermer, 1984] | 8 | ES | A |
| [=*S. tenuis* Hustedt, 1939] * centric diatom | 1,2 | ES | V |
| • *Stephanodiscus minutulus* (Kützing) Cleve & Möler, 1878 | 8,9,10 | ES | A,P |
| [=*S. astraea* var. *minutula* (Kützing) Grunow, 1882] * centric diatom | 1,2,3,10 | ES | P,V |
| • *Stephanodiscus nipigonensis* Håkansson & Kling, 1990 * centric diatom | 8 | ES | A |
| • *Stephanodiscus parvus* Stoermer & Håkansson, 1984 * centric diatom | 8,9 | ES | A,P |
| • *Stephanodiscus rotula* (Kützing) Hendey, 1964 | | | |
| [=*S. astraea* (Ehrenberg) Grunow, 1882] * centric diatom | 1,2,3,10 | CK,ES,LE | P,V |
| • *Stephanodiscus subtilis* (VanGoor) Cleve-Euler, 1951 * centric diatom | 1,2,3 | ES | V |
| • *Stephanodiscus* sp. Ehrenberg, 1846 * centric diatom | 8,9 | ES | A,P |
| **Family Rhizosoleniaceae** | | | |
| • *Acanthoceras zachariasii* (Brun) Simonsen, 1979 | | | |
| [=*Attheya zachariasii* Brun, 1894] * centric diatom | 3,10 | ES | P |
| • *Rhizosolenia eriensis* Smith, 1872 * centric diatom | 3,10 | ES | P |
| **ORDER PENNALES (pennate diatoms)** | | | |
| **Family Fragilariaceae** | | | |
| • *Asterionella formosa* Hassall, 1850 * pennate diatom | 2,3 | ES,LE | P |
| • *Diatoma mesodon* (Ehrenberg) Kützing, 1844 * pennate diatom | 8 | ES | A |
| • *Diatoma tenuis* Agardh, 1812 | 8,10 | ES | A,V |
| [=*D. tenue* var. *elongatum* Lyngbye, 1819] * pennate diatom | 1,2,3 | ES | V |
| • *Diatoma vulgaris* Bory, 1824 | 1,8 | ES | P |
| [=*D. vulgare* Bory, 1828] * pennate diatom | 1,2,3 | ES | V |
| • *Diatoma vulgaris* var. *distorta* Grunow, 1881 * pennate diatom | 8 | ES | A |
| • *Fragilaria capucina* Desmazieres, 1925 * pennate diatom | 1,2,3,8,9,10 | CK,ES,LE | R,V |
| • *Fragilaria capucina* var. *gracilis* (Østrup) Hustedt, 1950 | | | |
| [=*Synedra rumpens* var. *familiaris* (Kützing) Grunow, 1881] * pennate diatom | 1,2,3 | ES | V |
| • *Fragilaria capucina* var. *radians* (Kützing) Lange-Bertalot, 1991 | | | |
| [=*Synedra radians* Kützing, 1844] * pennate diatom | 8 | ES | A |
| • *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot, 1991 | 10 | ES | P |
| [=*Synedra rumpens* Kützing, 1844] * pennate diatom | 3,10 | CK | R |
| • *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot, 1980 | 10 | CK,ES | R,V |
| [=*F. vaucheriae* (Kützing) Petersen, 1938] * pennate diatom | 1,2,3,8,10 | CK,ES | R,V |
| • *Fragilaria construens* (Ehrenberg) Grunow * pennate diatom | 9 | ES | P |
| • *Fragilaria construens* f. *venter* (Ehrenberg) Hustedt, 1957 | 8,10 | ES | A,V |
| [=*F. construens* var. *venter* (Ehrenberg) Grunow, 1881] * pennate diatom | 3,10 | CK,ES | R,V |
| • *Fragilaria crotonensis* Kitton, 1869 * pennate diatom | 1,2,3,8 | ES,LE | P,V |
| • *Fragilaria fasciculata* (Agardh) Lange-Bertalot, 1980 | 10 | ES | V |
| [=*Synedra fasciculata* (Agardh) Kützing, 1844] | 10 | ES | V |
| [*Synedra fasiculata*, orthographic error] | 1,2,3 | ES | V |
| [=*Synedra fasiculata* var. *truncata* (Greville) Patrick, 1966] * pennate diatom | 2,3 | CK,ES | R |
| • *Fragilaria leptostauron* var. *martyi* (Héribaud) Lange-Bertalot, 1991 | | | |
| [=*Opephora martyi* Héribaud, 1902] * pennate diatom | 10 | ES | P |
| • *Fragilaria parasitica* var. *subconstricta* Grunow, 1881 | | | |
| [=*Synedra parasitica* var. *subconstricta* (Grunow) Hustedt, 1930] * pennate diatom | 8 | ES | A |
| • *Fragilaria pulchella* (Ralfs) Lange-Bertalot, 1980 | | | |
| [=*Synedra pulchella* (Ralfs) Kützing, 1844] | 1,2,3,8 | ES | V |
| [=*Synedra pulchella* var. *capitata* Pantocsek, 1912] * pennate diatom | 1,2 | ES | V |
| • *Fragilaria tenera* (Smith) Lange-Bertalot, 1980 | | | |
| [=*Synedra tenera* Smith, 1856] * pennate diatom | 8 | ES | A |

| Family Fragilariaceae (continued) | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| • *Fragilaria ulna* (Nitzsch) Lange-Bertalot, 1980 | 10 | ES | V |
| [=*Synedra ulna* (Nitzsch) Ehrenberg, 1832] * pennate diatom | 2,3,8,10 | CK,ES | R,V |
| • *Fragilaria ulna* var. *acus* (Kützing) Lange-Bertalot, 1980 | | | |
| [=*Synedra acus* Kützing] * pennate diatom | 2,3 | ES | V |
| • *Fragilaria ulna* var. *danica* (Kützing) Lange-Bertalot, 1980 | | | |
| [=*Synedra ulna* var. *danica* (Kützing) VanHeurck, 1885] * pennate diatom | 8 | ES | A |
| • *Fragilaria ulna* var. *obtusa* (Smith) Lange-Bertalot, 1980? | 10 | CK | R |
| [=*Synedra ulna* var. *obtusa* (Smith) VanHeurck, 1881] * pennate diatom | 2,3,10 | CK | R,V |
| • *Fragilaria ulna* var. *oxyrhynchus* (Kützing) Lange-Bertalot, 1980 | 10 | CK | R |
| [=*Synedra ulna* var. *oxyrhynchus* (Kützing) VanHeurck, 1885] * pennate diatom | 10 | CK | R |
| • *Fragilaria ulna* var. 1 | | | |
| [=*Synedra ulna* var. 1] * pennate diatom | 8 | ES | A |
| • *Fragilaria virescens* Ralfs, 1843 * pennate diatom | 1,2,3,10 | CK,ES | R,V |
| • *Meridion circulare* (Greville) Agardh, 1831 * pennate diatom | 1,2,3,8,9,10 | CK,ES | P,R,V |
| • *Meridion circulare* var. *constrictum* (Ralfs) VanHeurck, 1880 * pennate diatom | 3,9,10 | ES | P,V |
| • *Tabellaria fenestrata* (Lyngbye) Kützing, 1844 * pennate diatom | 1,2,3 | ES | B,V |
| • *Tabellaria* sp. Ehrenberg, 1840 * pennate diatom | 4 | ES | P |
| **Family Eunotiaceae** | | | |
| • *Eunotia arcus* var. *bidens* Grunow, 1881 * pennate diatom | 1,2,3 | ES | V |
| • *Eunotia bilunaris* var. *bilunaris* (Ehrenberg) Mills, 1934 | 10 | ES | P |
| [=*E. curvata* (Kützing) Lagerstedt, 1884] * pennate diatom | 1,2,3,8 | ES | V |
| • *Eunotia bilunarius* var. *mucophila* Lange-Bertalot, 1991 | | | |
| [=*E. curvata* var. *subarcuta* Nägeli, 1849] * pennate diatom | 1,2 | ES | V |
| • *Eunotia denticulata* (Brébisson) Rabenhorst, 1864 * pennate diatom | 8 | ES | A |
| • *Eunotia diodon* Ehrenberg, 1837 | 10 | ES | V |
| [*E. dioden*, orthographic error] * pennate diatom | 3 | ES | V |
| • *Eunotia exigua* (Brébisson) Rabenhorst, 1864 * pennate diatom | 8 | ES | A |
| • *Eunotia formica* Ehrenberg, 1843 * pennate diatom | 3,10 | ES | V |
| • *Eunotia pectinalis* (Dillwyn?, Müller?, Kützing) Rabenhorst, 1864 | | | |
| [=*E. pectinalis* var. *minor* (Kützing) Rabenhorst, 1864] * pennate diatom | 1,2,3 | ES | V |
| • *Eunotia* sp. Ehrenberg, 1837 * pennate diatom | 9 | ES | P |
| **Family Naviculaceae** | | | |
| • *Amphilpleura pellucida* (Kützing) Kützing, 1844 * pennate diatom | 3,10 | CK,ES | R,V |
| • *Anomoeoneis brachysira* (Brébisson) Grunow, 1895 | | | |
| [=*A. serians* var. *brachysira* (Brébisson) Cleve, 1882] * pennate diatom | 5 | ES | C |
| • *Anomoeoneis sphaerophora* (Ehrenberg) Pfitzer, 1871 * pennate diatom | 10 | ES | C |
| • *Caloneis amphisbaena* (Bory) Cleve, 1894 * pennate diatom | 2,3,10 | CK,ES | R,V |
| • *Caloneis bacillum* (Grunow) Cleve, 1894 * pennate diatom | 1,2,3,5,8,10 | CK,ES | A,C,R,V |
| • *Caloneis clevei* (Lagerstedt) Cleve, 1894 * pennate diatom | 1,2,3 | ES | V |
| • *Caloneis molaris* (Grunow) Krammer, 1985 * pennate diatom | 8 | ES | A |
| • *Caloneis schumanniana* (Grunow) Cleve, 1894 | | | |
| [=*C. lewisii* Patrick, 1945] * pennate diatom | 1,2,3,5 | ES | C,V |
| • *Caloneis thermalis* (Grunow) Krammer, 1985 | | | |
| [=*C. bacillaris* var. *thermalis* (Grunow) Cleve, 1895] * pennate diatom | 1,2,3 | ES | V |
| • *Entomoneis ornata* (Bailey) Reimer, 1975 | | | |
| [=*Amphiprora ornata* Bailey, 1850] * pennate diatom | 10 | LE | P |
| • *Frustulia rhomboides* (Ehrenberg) DeToni, 1891 * pennate diatom | 8 | ES | A |
| • *Frustulia vulgaris* (Thwaites) DeToni, 1891 * pennate diatom | 8 | ES | A |
| • *Gyrosigma acuminatum* (Kützing) Rabenhorst, 1853 * pennate diatom | 3,5,8,10 | CK,ES | C,R |
| • *Gyrosigma attenuatum* (Kützing) Rabenhorst, 1853 * pennate diatom | 8 | ES | A |
| • *Gyrosigma exilis* (Grunow) Reimer, 1966 * pennate diatom | 8,10 | ES | A,V |
| • *Gyrosigma scalproides* (Rabenhorst) Cleve, 1894 * pennate diatom | 1,2,3,8 | ES | V |
| • *Gyrosigma* sp. Hassall, 1843 * pennate diatom | 10 | ES | V |
| • *Navicula absoluta* Hustedt, 1950 * pennate diatom | 8 | ES | A |
| • *Navicula agnita* Hustedt, 1955 * pennate diatom | 2,3 | ES | V |
| • *Navicula arvensis* Hustedt, 1937 * pennate diatom | 5 | ES | V |
| • *Navicula atomus* (Kützing) Grunow, 1860 * pennate diatom | 1,2,3,8 | ES | C,V |

| Family Naviculaceae (continued) | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| • *Navicula atomus* var. *permitis* (Hustedt) Lange-Bertalot, 1985 * pennate diatom | 8 | ES | A |
| • *Navicula bacillum* Ehrenberg, 1843 * pennate diatom | 5 | ES | V |
| • *Navicula bahusiensis* (Grunow) Grunow, 1884 [=*N. frugalis* Hustedt, 1957] * pennate diatom | 5 | ES | V |
| • *Navicula capitata* Ehrenberg, 1838 * pennate diatom | 1,2,3,5,8 | ES | A,C,V |
| • *Navicula capitata* var. *capitata* Ehrenberg, 1838 [=*N. hungarica* var. *capitata* (Ehrenberg) Cleve, 1895] * pennate diatom | 2,3,9,10 | ES | P,V |
| • *Navicula capitatoradiata* Germain, 1981 [=*N. salinarum* var. *intermedia* (Grunow) Cleve, 1895] * pennate diatom | 8<br>1,2,3,10 | ES<br>ES | V |
| • *Navicula cincta* (Ehrenberg) Ralfs, 1861 * pennate diatom | 3,8,10 | ES | V |
| • *Navicula confervacea* (Kützing) Grunow, 1880 * pennate diatom | 1,2,3,10 | ES | P,V |
| • *Navicula contenta* Grunow, 1885 [?=*N. contenta* var. *biceps* (Arnott) Cleve, 1894] * pennate diatom | 1,2,3 | ES | V |
| • *Navicula cryptocephala* Kützing, 1844 [=*N. cryptocephala* var. *exilis* Grunow, 1880] * pennate diatom | 1,2,3,5,8,10<br>1,2,3 | ES<br>ES | V<br>V |
| • *Navicula cryptotenella* Lange-Bertalot, 1985 [=*N. radiosa* var. *tenella* (Brébisson) VanHeurck, 1885] * pennate diatom | 8<br>1,2,3,5,10 | CK,ES<br>CK,ES | R,V |
| • *Navicula cuspidata* (Kützing) Kützing, 1844 [=*N. cuspidata* var. *ambigua* (Ehrenberg) Cleve, 1843] [=*N. cuspidata* var. *cuspidata* (Kützing) Kützing, 1844] * pennate diatom | 3,10<br>5<br>5 | CK,ES<br>ES<br>ES | R<br>A<br>A |
| • *Navicula decussis* Østrup, 1910 * pennate diatom | 3,10 | CK,ES | V |
| • *Navicula elginensis* (Gregory) Ralfs, 1861 * pennate diatom | 1,2,3,8 | CK,ES | R,V |
| • *Navicula erifuga* Lange-Bertalot, 1985 [=*N. heufleri* var. *leptocephala* (Brébisson) Peragallo & Peragallo, 1897-1908 * pennate diatom | 8<br>1,2,3 | ES<br>ES | V<br>V |
| • *Navicula goeppertiana* (Bleisch) Smith, 1874-1879 * pennate diatom | 8 | ES | A |
| • *Navicula goeppertiana* var. *goeppertiana* (Bleisch) Smith, 1874-1879 [=*N. mutica* var. *tropica* Hustedt, 1937] [=*N. terminata* Hustedt, 1966] [=*Pinnularia termitina* (Ehrenberg) Patrick, 1966] * pennate diatom | 1,2,3,10<br>1,2<br>1,2,3 | ES<br>ES<br>ES | V<br>V<br>V |
| • *Navicula goeppertiana* var. *monita* (Hustedt) Lange-Bertalot, 1985 [=*N. mobiliensis* Boyer, 1922] * pennate diatom | 8 | ES | A |
| • *Navicula gregaria* Donkin, 1861 * pennate diatom | 1,2,3,8,10 | CK,ES | R,V |
| • *Navicula grunowii* var. 1 * pennate diatom | 8 | ES | A |
| • *Navicula halophila* (Grunow) Cleve, 1894 [=*N. halophila* f. *tenuirostris* Hustedt, 1942] [=*N. halophila* var. *tenuirostris* Hustedt, 1942] * pennate diatom | 5,8<br>1,2,3<br>5 | ES<br>ES<br>ES | A,C<br>V<br>C |
| • *Navicula heimansii* VanDam & Kooyman, 1982 * pennate diatom | 8 | ES | A |
| • *Navicula hustedtii* Krasske, 1923 * pennate diatom | 8 | ES | A |
| • *Navicula ingenua* Huestedt, 1957 * pennate diatom | 8 | ES | A |
| • *Navicula insocibilis* Krasske, 1932 * pennate diatom | 8 | ES | A |
| • *Navicula integra* (Smith) Ralfs, 1861 * pennate diatom | 8 | ES | A |
| • *Navicula lanceolata* (Agardh) Ehrenberg, 1838 * pennate diatom | 1,2,3,5,8,10 | CK,ES | C,R,V |
| • *Navicula menisculus* Schumann, 1867 * pennate diatom | 8 | ES | A |
| • *Navicula menisculus* var. *grunowii* Lange-Bertalot, 1991 * pennate diatom | 8 | ES | A |
| • *Navicula menisculus* var. *upsaliensis* Grunow, 1880 * pennate diatom | 2,3,8,10 | CK,ES | A,R,V |
| • *Navicula minima* Grunow, 1880 [=*N. tantula* Hustedt, 1943] * pennate diatom | 3<br>1,2,3,8 | CK,ES<br>ES | R,V<br>A,V |
| • *Navicula minima* var. *pseudofossalis* (Krasske) Reimer, 1966 [*N. minima* var. *pseudofossilis*, orthographic error, Pierre Compere per com. 2/2/2000] * pennate diatom | 1,2 | ES | V |
| • *Navicula minusculoides* Hustedt, 1942 * pennate diatom | 1,2,3 | ES | V |
| • *Navicula molestiformis* Hustedt, 1949 [=*N. paucivisitata* Patrick, 1959] * pennate diatom | 1,2,3 | ES | V |
| • *Navicula monoculata* Hustedt, 1945 * pennate diatom | 8 | ES | A |
| • *Navicula mutica* Kützing, 1844 * pennate diatom | 2,3 | ES | V |

| **Family Naviculaceae (continued)** | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| • *Navicula mutica* var. *ventricosa* (Kützing) Cleve & Grunow, 1880 * pennate diatom | 8 | ES | A |
| • *Navicula pelliculosa* (Brébisson) Hilse, 1863 * pennate diatom | 1,2,3 | ES | V |
| • *Navicula praeterita* Hustedt, 1945 * pennate diatom | 8 | ES | A |
| • *Navicula pseudolanceolata* Lange-Bertalot, 1980 * pennate diatom | 5 | ES | C |
| • *Navicula pupula* Kützing, 1844 * pennate diatom | 1,2,3,5,8 | ES | V |
| • *Navicula pupula* var. *aquaeductae* (Krasske) Hustedt, 1930 [=*N. aquaeductae* Krasske, 1925] [*N. aquadurae*, orthographic error?] * pennate diatom | 8 | ES | A |
| • *Navicula pupula* var. *rectangularis* (Gregory) Cleve, 1880 * pennate diatom | 1,2,3 | ES | V |
| • *Navicula pygmaea* Kützing, 1849 * pennate diatom | 1,2,3,5,8,10 | ES | A,C,V |
| • *Navicula radiosa* Kützing, 1844 * pennate diatom | 1,2,3,5,8 | ES | A,C,V |
| • *Navicula recens* (Lange-Bertalot) Lange-Bertalot, 1985 * pennate diatom | 8 | ES | A |
| • *Navicula rhynchocephala* Kützing, 1844 [*N. rhyncocephala*, orthographic error?] * pennate diatom | 5,8 | ES | A,C |
| • *Navicula salinarum* Grunow, 1880 * pennate diatom | 1,2,3,5,8,10 | CK,ES | R,V |
| • *Navicula saprophila* Lange-Bertalot & Bonik, 1976 * pennate diatom | 8 | CK,ES | A |
| • *Navicula schroeterii* Meister, 1932 | 8 | ES | A |
| [=*N. schroeterii* var. *escambia* Patrick, 1958] | 1,2,3 | ES | V |
| [=*N. symmetrica* Patrick, 1944] * pennate diatom | 1,2,3,10 | ES | V |
| • *Navicula seminulum* Grunow, 1860 * pennate diatom | 1,2,3,8,10 | ES | A,V |
| • *Navicula similis* Krasske, 1929 * pennate diatom | 8 | ES | A |
| • *Navicula splendicula* VanLandingham, 1975 * pennate diatom | 1,2,3 | ES | V |
| • *Navicula subminuscula* Manguin, 1941 * pennate diatom | 8 | ES | A |
| • *Navicula submolesta* Hustedt, 1949 * pennate diatom | 8 | ES | A |
| • *Navicula tenelloides* Hustedt, 1937 * pennate diatom | 8 | ES | A |
| • *Navicula tenera* Hustedt, 1937 * pennate diatom | 3,10 | ES | V |
| • *Navicula tripunctata* (Müller) Bory, 1822 | 1,3,8,10 | CK,ES | A,R,V |
| [=*N. tripunctata* var. *tripunctata* (Müller) Bory, 1822] * pennate diatom | 2 | ES | V |
| • *Navicula tripunctata* var. *schizonemoides* (VanHeurck) Patrick, 1959 * pennate diatom | 2,3 | ES | V |
| • *Navicula trivialis* Lange-Bertalot, 1980 * pennate diatom | 8 | ES | A |
| • *Navicula vaucherie* Petersen, 1915 * pennate diatom | 1,2,3 | ES | V |
| • *Navicula veneta* Kützing, 1844 | 1,8,10 | CK,ES | A,V |
| [=*N. cryptocephala* var. *veneta* (Kützing) Rabenhorst, 1864] * pennate diatom | 3,10 | CK,ES | R |
| • *Navicula viridula* (Kützing) Ehrenberg, 1838 * pennate diatom | 1,2,3,10 | ES | V |
| • *Navicula viridula* var. *germainii* (Kützing) Lange-Bertalot, 1991 | 8 | ES | A |
| [=*N. rhynchocephala* var. *germainii* (Wallace) Patrick, 1966] * pennate diatom | 3,10 | CK,ES | R |
| • *Navicula viridula* var. *rostellata* (Kützing) Cleve, 1895 * pennate diatom | 3,5,8,10 | CK,ES | R |
| • *Navicula viridula* var. 1 * pennate diatom | 8 | ES | A |
| • *Navicula* spp. Bory, 1822 * pennate diatoms | 8,9 | ES | A,P |
| • *Nedium affine* (Ehrenberg) Pfitzer, 1871 * pennate diatom | 5 | ES | A |
| • *Nedium dubium* (Ehrenberg) Cleve, 1894 * pennate diatom | 5 | ES | A |
| • *Pinnularia abaujensis* var. *rostrata* (Patrick) Patrick, 1966 * pennate diatom | 2,3 | ES | V |
| • *Pinnularia borealis* Ehrenberg, 1843 * pennate diatom | 3,10 | LE | C |
| • *Pinnularia intermedia* (Lagerstedt) Cleve, 1895 | 3,10 | ES | V |
| [=*Navicula intermedia* Lagerstedt, 1873] * pennate diatom | 8 | ES | V |
| • *Pinnularia microstauron* (Ehrenberg) Cleve, 1891 * pennate diatom | 2,3,8 | ES | A,V |
| • *Pinnularia microstauron* var. *brebissonii* (Kützing) Mayer, 1912 | 10 | ES | V |
| [=*P. brebissonii* (Kützing) Rabenhorst, 1864] * pennate diatom | 1,2,3,10 | ES | V |
| • *Pinnularia microstauron* var. *brebissonii* f. *diminuta* (Grunow) Hustedt, 1930 | | | |
| [=*P. brebissonii* var. *diminuta* (Grunow) Cleve, 1895] | 1,2 | ES | V |
| [*P. brebissonii* var. *diminuata*, orthographic error] * pennate diatom | 3 | ES | V |
| • *Pinnularia nodosa* (Ehrenberg) Smith, 1856 * pennate diatom | 1,2,3,10 | ES | V |
| • *Pinnularia obscura* Krasske, 1932 * pennate diatom | 3,8,10 | ES | A,P |
| • *Pinnularia stomatophora* (Grunow) Cleve, 1891 * pennate diatom | 1,2,3 | ES | V |
| • *Pinnularia viridis* (Nitzsch) Ehrenberg, 1843 * pennate diatom | 1 | ES | V |

| Family Naviculaceae (continued) | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| • *Pinnularia* sp. Ehrenberg, 1843 * pennate diatom | 5 | ES | C |
| • *Plagiotropis lepidoptera* var. *probosidea* (Cleve) Reimer, 1975 * pennate diatom | 1,2,3 | ES | V |
| • *Pleurosigma delicatulum* Smith, 1852 * pennate diatom | 3,10 | CK | R |
| • *Stauroneis anceps* Ehrenberg, 1843 * pennate diatom | 1,2,3,10 | ES | V |
| • *Stauroneis kriegeri* Patrick, 1945 * pennate diatom | 1,2,3 | ES | V |
| • *Stauroneis phoenicenteron* (Nitzsch) Ehrenberg, 1843 | | | |
| [=*S. phoenicenteron* var. *gracilis* (Ehrenberg) Hustedt, 1930] * pennate diatom | 1,2,3 | ES | V |
| • *Stauroneis smithii* Grunow, 1860 * pennate diatom | 3,5,8,10 | ES | A,C,V |
| • *Stauroneis thermicola* (Petersen) Lund, 1946 * pennate diatom | 8 | ES | A |
| **Family Cymbellaceae** | | | |
| • *Amphora montana* Krasske, 1932 | 8 | ES | A |
| [=*A. submontana* Hustedt, 1949] * pennate diatom | 1,2,3 | ES | V |
| • *Amphora pediculus* (Kützing) Grunow, 1880 | 8,9,10 | ES | A,P |
| [=*A. ovalis* var. *pediculus* (Kützing) VanHeurck, 1885] | 2,3 | ES | V |
| [=*A. perpusilla* Grunow, 1884-1887] * pennate diatom | 1,2,3,10 | CK,ES | R,V |
| • *Amphora ovalis* (Kützing) Kützing, 1844 * pennate diatom | 8 | ES | A |
| • *Amphora* sp. Ehrenberg, 1844 * pennate diatom | 8 | ES | A |
| • *Cymbella affinis* Kützing, 1844 * pennate diatom | 8 | ES | A |
| • *Cymbella caespitosa* (Kützing) Brun, 1880 * pennate diatom | 8 | ES | A |
| • *Cymbella microcephala* Grunow, 1880 * pennate diatom | 8 | ES | A |
| • *Cymbella minuta* Hilse, 1862 | 1,2,3,10 | CK,ES | R,V |
| [=*Cymbella ventricosa* Kützing, 1844] * pennate diatom | 2 | ES | V |
| • *Cymbella naviculiformis* (Auerswald) Cleve, 1894 * pennate diatom | 1,2,3 | ES | V |
| • *Cymbella prostrata* (Berkeley) Cleve, 1894 * pennate diatom | 3,10 | CK | R |
| • *Cymbella silesiaca* Bleisch, 1864 | 8,10 | CK,ES | A,R,V |
| [=*C. minuta* var. *silesiaca* (Bleisch) Reimer, 1975] * pennate diatom | 2,3,10 | CK,ES | R,V |
| • *Cymbella triangulum* (Ehrenberg) Cleve, 1894 * pennate diatom | 3,10 | LE | C |
| • *Cymbella tumida* (Brébisson) VanHeurck, 1880 | 1,2,3,8,10 | CK,ES | R,V |
| [=*C. tumida* var. *tumida* (Brébisson) VanHeurck, 1880] * pennate diatom | 10 | CK,ES | |
| • *Cymbella tumidula* Grunow, 1875 * pennate diatom | 3,10 | CK,ES | V |
| • *Cymbella turgidula* Grunow, 1875 * pennate diatom | 1,2,3,10 | CK,ES | R,V |
| • *Gomphonema acuminatum* Ehrenberg, 1832 * pennate diatom | 1,2,3,8 | ES | A,V |
| • *Gomphonema affine* Kützing, 1844 * pennate diatom | 1,2,8,10 | ES | A,V |
| [=*G. affine* var. *insigne* (Gregory) Andrews, 1970] | 1,2,3,10 | CK,ES | R,V |
| • *Gomphonema affine* var. *elongatum* (Mayer) Millie & Lowe, 1981 * pennate diatom | 1,2 | ES | V |
| • *Gomphonema amoenum* Lange-Bertalot, 1985 * pennate diatom | 8 | ES | A |
| • *Gomphonema angustatum* (Kützing) Rabenhorst, 1864 | 1,2,3,5,8,10 | CK,ES | R,V |
| [=*G. angustatum* var. *productum* Grunow, 1880] * pennate diatom | 3,10 | CK | R |
| • *Gomphonema angustatum* var. *citera* (Hohn & Hellerman) Patrick, 1975 * pennate diatom | 3,10 | CK | R |
| • *Gomphonema angustatum* var. *sarcophogus* (Gregory) Grunow, 1880 * pennate diatom | 1,2,3 | ES | V |
| • *Gomphonema angustum* Agardh, 1831 | | | |
| [=*G. bohemicum* Reich & Fricke, 1902] | 3 | ES | V |
| [=*G. intricatum* Kützing, 1844] | 1,2,3 | ES | V |
| [=*G. intricatum* var. *bohemicum* (Reich & Fricke) Cleve-Euler, 1955] * pennate diatom | 10 | CK | R |
| • *Gomphonema augur* Ehrenberg, 1840 * pennate diatom | 3,8,10 | CK,ES | R,V |
| • *Gomphonema augar* var. *spaerophorum* (Ehrenberg) Grunow, 1878 | | | |
| [=*G. spaerophorum* Ehrenberg, 1845] * pennate diatom | 3,10 | CK | R |
| • *Gomphonema clavatum* Ehrenberg, 1832 | 8 | ES | A |
| [=*G. subclavatum* (Grunow) Grunow, 1885] * pennate diatom | 1,2,3,10 | ES | V |
| • *Gomphonema clevei* Fricke, 1902 * pennate diatom | 8 | ES | A |
| • *Gomphonema dichotomum* Kützing, 1833 * pennate diatom | 3 | ES | V |
| • *Gomphonema gracile* Ehrenberg, 1838 * pennate diatom | 1,2,3,8 | ES | A,V |

| **Family Cymbellaceae (continued)** | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| • *Gomphonema minutum* (Agardh) Agardh, 1831 * pennate diatom | 8 | ES | A |
| • *Gomphonema minutum* f. *lamanense* Lange-Bertalot & Reichardt, 1991 * pennate diatom | 8 | ES | A |
| • *Gomphonema olivaceum* (Hornemann) Brébisson, 1838 * pennate diatom | 1,2,3,8,10 | CK,ES | A,R,V |
| • *Gomphonema parvulum* (Kützing) Kützing, 1849 | 1,2,3,8,9,10 | CK,ES | A,P,R,V |
| [=*G. parvulum* var. *exilissima* Grunow, 1880] * pennate diatom | 8 | ES | A |
| • *Gomphonema truncatum* Ehrenberg, 1832 * pennate diatom | 8 | ES | A |
| • *Gomphonema truncatum* var. *elongata* (Peragallo & Heribaud) Patrick, 1975 * pennate diatom | 10 | ES | C |
| • *Gomphonema* sp. Ehrenberg, 1832 * pennate diatom | 9 | ES | P |
| • *Reimeria sinuata* (Gregory) Kociolek & Stoermer, 1987 | 5 | ES | C |
| [=*Cymbella sinuata* Gregory, 1858] * pennate diatom | 3,8,10 | CK,ES | R |
| **Family Nitzschiaceae** | | | |
| • *Cylindrotheca gracilis* (Brébisson) Grunow, 1882 * pennate diatom | 5 | ES | C |
| • *Hantzschia amphioxys* (Ehrenberg) Grunow, 1880 * pennate diatom | 1,2,3,5,10 | ES | C,P,V |
| • *Nitzschia acicularis* (Kützing) Smith, 1853 * pennate diatom | 3,5,8,10 | ES | A,C,P |
| • *Nitzschia acidoclinata* Lange-Bertalot, 1976 | 10 | ES | V |
| [=*N. frustulum* var. *perminuta* Grunow, 1881] * pennate diatom | 1,2,3,10 | ES | V |
| • *Nitzschia acuminata* (Smith) Grunow, 1878 * pennate diatom | 2,3 | ES | V |
| • *Nitzschia admissoides* Cholnoky, 1968 * pennate diatom | 10 | CK | R |
| • *Nitzschia agnita* Hustedt, 1957 * pennate diatom | 1,2,3 | ES | V |
| • *Nitzschia amphibia* Grunow, 1862 * pennate diatom | 1,2,3,5,8,10 | CK,ES | A,C,R,V |
| • *Nitzschia angustata* (Smith) Grunow, 1880 * pennate diatom | 1,2,3,8 | ES | A,V |
| • *Nitzschia angustatula* Lange-Bertalot, 1987 * pennate diatom | 8 | ES | A |
| • *Nitzschia angustiforaminata* Lange-Bertalot, 1980 * pennate diatom | 8 | ES | A |
| • *Nitzschia bita*? Hohn & Hellerman, 1963 * pennate diatom | 10 | CK | R |
| • *Nitzschia brevissima* Grunow, 1881 * pennate diatom | 8 | ES | A |
| • *Nitzschia capitellata* Hustedt, 1922 * pennate diatom | 1,2,3,8,10 | ES | A,V |
| • *Nitzschia clausii* Hantzsch, 1860 * pennate diatom | 8 | ES | A |
| • *Nitzschia closterium* (Ehrenberg) Smith, 1853 * pennate diatom | 5 | ES | C |
| • *Nitzschia communis* Rabenhorst, 1860 | 1,2,3,10 | ES | V |
| [=*N. communis* var. *abbreviata* Grunow, 1880] * pennate diatom | 3,10 | CK | R |
| • *Nitzschia commutatoides* Lange-Bertalot, 1987 * pennate diatom | 8 | ES | A |
| • *Nitzschia compressa* var. *vexans* (Grunow) Lange-Bertalot, 1987 * pennate diatom | 8 | ES | A |
| • *Nitzschia constricta* (Kützing) Ralfs, 1861 | 10 | CK | R |
| [=*N. apiculata* (Gregory) Grunow, 1878] * pennate diatom | 3,5,8,10 | CK | A,C,R |
| • *Nitzschia dissipata* (Kützing) Grunow, 1862 | 3,5,8,10 | CK,ES | A,C,R |
| [=*N. dissipata* var. *genuina* Mayer, 1913] * pennate diatom | 10 | CK | R |
| • *Nitzschia dissipata* var. *media* (Hantzsch) Grunow, 1881 * pennate diatom | 1,2,3,8 | ES | V |
| • *Nitzschia dubia* Smith, 1853 * pennate diatom | 8 | ES | A |
| • *Nitzschia filiformis* (Smith) VanHeurck, 1896 * pennate diatom | 1,2,3,8,10 | ES | A,V |
| • *Nitzschia fonticola* Grunow, 1879 | 1,2,3,8,10 | ES | A,V |
| [=*N. romana* Grunow, 1881] * pennate diatom | 1,2,3,10 | ES | V |
| • *Nitzschia frustulum* (Kützing) Grunow, 1880 * pennate diatom | 1,2,3,8 | ES | A,V |
| • *Nitzschia frustulum* var. *perpusilla* (Rabenhorst) Grunow, 1881 * pennate diatom | 1,2,3 | ES | V |
| • *Nitzschia fruticosa* Hustedt, 1957 | | | |
| [=*N. actinastroides* (Lemmermann) VanGoor, 1925] * pennate diatom | 1,2,3 | ES | V |
| • *Nitzschia gracilis* Hantzsch, 1860 * pennate diatom | 3,5,8,10 | ES | A,C,V |
| • *Nitzschia hantzschiana* Rabenhorst, 1860 * pennate diatom | 8 | ES | A |
| • *Nitzschia hungarica* Grunow, 1862 * pennate diatom | 1,2,3,5,8,10 | ES | A,C,P,V |
| • *Nitzschia inconspicua* Grunow, 1862 | 1,2,3,8,10 | ES | A,V |
| [=*N. epiphytica* Müller, 1905] * pennate diatom | 3,10 | ES | V |
| • *Nitzschia intermedia* Hantzsch, 1880 | 8 | ES | A |
| [=*N. philippinarum* Hustedt, 1942] | 1,2,3 | ES | V |
| [=*N. tarda* Hustedt, 1949] * pennate diatom | 1,2,3,10 | CK,ES | V |

| Family Nitzschiaceae (continued) | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| • *Nitzschia levidensis* (Smith) Grunow, 1881 | 1,2,8 | ES | A,V |
| [=*N. tryblionella* var. *levidensis* (Smith) Grunow, 1880] * pennate diatom | 3,10 | ES | V |
| • *Nitzschia linearis* (Agardh) Smith, 1853 * pennate diatom | 1,2,3,5 | ES | C,V |
| • *Nitzschia linearis* var. *subtilis* (Grunow) Hustedt, 1923 * pennate diatom | 8 | ES | A |
| • *Nitzschia littoralis* Grunow, 1880 * pennate diatom | 8 | ES | A |
| • *Nitzschia microcephala* Grunow, 1878 * pennate diatom | 8 | ES | A |
| • *Nitzschia nereidis* Cholnoky, 1960 * pennate diatom | 8 | ES | A |
| • *Nitzschia palea* (Kützing) Smith, 1856 | 1,2,3,5,8,10 | CK,ES | A,C,R,V |
| [=*N. accomodata* Hustedt, 1949] * pennate diatom | 3,10 | ES | V |
| • *Nitzschia palea* var. *minuta* (Bleisch) Grunow, 1881 | | | |
| [=*N. minuta* Bleisch, 1863] * pennate diatom | 8 | ES | A |
| • *Nitzschia paleacea* (Grunow) Grunow, 1881 * pennate diatom | 1,8 | ES | A,V |
| • *Nitzschia parvula* Smith, 1853 | | | |
| [=*N. parvula* var. *terricola* Lund, 1946] * pennate diatom | 1,2,3 | ES | V |
| • *Nitzschia perspicua* Cholnoky, 1960 | | | |
| [*N. perpicua*, orthographic error?] * pennate diatom | 8 | ES | A |
| • *Nitzschia plana* Smith, 1853 * pennate diatom | 10 | ES | V |
| • *Nitzschia pusilla* Grunow, 1862 | 1,8 | ES | A,V |
| [=*N. kuetzingiana* Hilse, 1862] * pennate diatom | 1,2,3,10 | CK,ES | P,V |
| • *Nitzschia recta* Hantzsch, 1861-1879 * pennate diatom | 2,3,8,10 | CK,ES | A,R |
| • *Nitzschia reversa* Smith, 1853 | 5 | ES | C |
| [=*N. longissima* (Brébisson) Grunow, 1862] * pennate diatom | 3,10 | ES | P |
| • *Nitzschia sigma* (Kützing) Smith, 1853 * pennate diatom | 3,5,10 | ES | V |
| • *Nitzschia sigmoidea* (Nitzsch) Smith, 1853 * pennate diatom | 1,2,3,10 | CK,ES | R,V |
| • *Nitzschia sinuata* (Thwaites?) Grunow, 1880 * pennate diatom | 5 | ES | C |
| • *Nitzschia sinuata* var. *tabellaria* (Grunow) Grunow, 1881 * pennate diatom | 2,3,8,10 | CK,ES | R |
| • *Nitzschia spiculum* Hustedt, 1949 * pennate diatom | 3 | ES | V |
| • *Nitzschia sociabilis* Hustedt, 1957 * pennate diatom | 8 | ES | A |
| • *Nitzschia solita* Hustedt, 1953 * pennate diatom | 8 | ES | A |
| • *Nitzschia stricta* Hustedt, 1949 * pennate diatom | 1,2,3 | ES | V |
| • *Nitzschia subacicularis* Hustedt, 1922 | 3,10 | ES | P |
| [=*N. subrostrata* Hustedt, 1942] * pennate diatom | 1,2,3 | ES | V |
| • *Nitzschia supralitorea* Lange-Bertalot, 1979 * pennate diatom | 8 | ES | A |
| • *Nitzschia tropica* Hustedt, 1949 * pennate diatom | 3,10 | ES | V |
| • *Nitzschia tryblionella* Hantzsch, 1860 * pennate diatom | 1,2,3,5 | ES | C,V |
| • *Nitzschia tubicola* Grunow, 1880 * pennate diatom | 8 | ES | A |
| • *Nitzschia valga* Cholnoky, 1968 * pennate diatom | 3 | ES | P |
| **Family Epithemiaceae** | | | |
| • *Denticula kuetzingii* Grunow, 1862 * pennate diatom | 8 | ES | A |
| • *Epithemia adnata* (Kützing) Brébisson, 1838 * pennate diatom | 8 | ES | A |
| • *Epithemia turgida* (Ehrenberg) Kützing, 1844 | 10 | ES | C |
| [=*E. emarginata* Andrews, 1968] * pennate diatom | 10 | ES | C |
| **Family Surirellaceae** | | | |
| • *Cymatopleura elliptica* (Brébisson) Smith, 1851 * pennate diatom | 3 | CK | R |
| • *Cymatopleura solea* (Brébisson) Smith, 1851 * pennate diatom | 1,2,3,9 | ES | P,V |
| • *Surirella angusta* Kützing, 1844 * pennate diatom | 1,2,3,8,10 | ES | A,V |
| • *Surirella brebissonii* var. *kuetzingii* Krammer & Lange-Bertalot, 1987 * pennate diatom | 8 | ES | A |
| • *Surirella minuta* Brébisson, 1849 | 8,10 | ES | A,V |
| [=*S. ovata* Kützing, 1844] | 1,2,3,5,10 | CK,ES | C,R,V |
| [=*S. ovata* var. *pinnata* Brun, 1880] * pennate diatom | 1,2,3,5 | ES | C,V |
| • *Surirella ovalis* Brébisson, 1838 * pennate diatom | 9 | ES | P |
| • *Surirella suecica* Grunow, 1881 * pennate diatom | 8 | ES | A |
| • *Surirella tenera* Gregory, 1856 | | | |
| [=*S. tenera* var. *nervosa* Schmidt, 1875] * pennate diatom | 5 | ES | C |
| • *Surirella turgida* Smith, 1853 * pennate diatom | 1,2,3 | ES | V |

| Family Achnanthaceae | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| • *Achnanthes biasolettiana* Grunow, 1880 * pennate diatom | 8 | ES | A |
| • *Achnanthes clevei* Grunow, 1880 * pennate diatom | 8 | ES | A |
| • *Achnanthes conspicua* Mayer, 1919 | 10 | CK | R |
| [=*A. pinnata* Hustedt, 1922] * pennate diatom | 3,10 | CK | R |
| • *Achnanthes hungarica* (Grunow) Grunow, 1880 * pennate diatom | 1,2,3,5 | ES | C,V |
| • *Achnanthes grischuna* Wuthrich, 1975 * pennate diatom | 8 | ES | A |
| • *Achnanthes lanceolata* (Brébisson) Grunow, 1880 * pennate diatom | 1,2,3,5,8,9 | CK,ES | A,C,P,R,V |
| • *Achnanthes lanceolata* ssp. *dubia* (Grunow) Lange-Bertalot, 1991 * pennate diatom | 1,2,3,10 | CK,ES | V |
| • *Achnanthes lanceolata* ssp. *lanceolata* (Brébisson) Grunow, 1880 * pennate diatom | 10 | CK,ES | R,V |
| • *Achnanthes lanceolata* ssp. *lanceolata* var. *boyei* (Østrup) Lange-Bertalot, 1989 [=*A. lanceolata* var. *boyei*] * pennate diatom | 8 | ES | A |
| • *Achnanthes laurenburgiana* Hustedt, 1950 * pennate diatom | 3,10 | ES | V |
| • *Achnanthes minutissima* Kützing, 1833 * pennate diatom | 1,2,3,8 | CK,ES | R,V |
| • *Achnanthes minutissima* var. *gracillima* (Meister) Lange-Bertalot, 1989 * pennate diatom | 8 | ES | A |
| • *Achnanthes minutissima* var. *minutissima* Kützing, 1833 * pennate diatom | 10 | CK | R |
| • *Achnanthes minutissima* var. *saprophila* Kobayasi & Mayama, 1982 * pennate diatom | 8 | ES | A |
| • *Achnanthes minutissima* var. 2 * pennate diatom | 8 | ES | A |
| • *Achnanthes* sp. Bory, 1822 * pennate diatom | 8,9,10 | CK,ES | A,P,R,V |
| • *Cocconeis pediculus* Ehrenberg, 1839 * pennate diatom | 3,8,10 | ES | A,V |
| • *Cocconeis placentula* Ehrenberg, 1839 * pennate diatom | 1,2,3,10 | CK,ES | R,V |
| • *Cocconeis placentula* var. *euglypta* (Ehrenberg) Grunow, 1884 * pennate diatom | 1,2,3,8 | ES | A,V |
| • *Cocconeis placentula* var. *lineata* (Ehrenberg) VanHeurck, 1881 * pennate diatom | 1,2,3,8 | ES | A,V |
| • *Rhoicosphenia abbreviata* (Agardh) Lange-Bertalot, 1980 | 9,10 | CK,ES | P,V |
| [=*R. curvata* (Kützing) Grunow, 1864] * pennate diatom | 1,2,3,8,10 | CK,ES | R,V |

## DIVISION PYRRHOPHYTA (fire algae)

## CLASS DINOPHYCEAE (dinoflagellates)

### ORDER GYMNODINIALES

| Family Gymnodiniaceae | | | |
|---|---|---|---|
| • *Gymnodinium aeruginosun* Stein, 1883 | 10 | ES | P |
| [=*G. acidotum* Nygaard, 1949] * dinoflagellate | 2,3,10 | ES | P |
| • *Gymnodinium helveticum* Penard, 1891 * dinoflagellate | 2,3 | ES | P |
| • *Gymnodinium palustre* Schilling, 1891 * dinoflagellate | 10 | ES | P |
| • *Gymnodinium* spp. Stein, 1878 * dinoflagellates | 2,6,10 | CK,ES | B,P |
| • *Katodinium fungiforme* (Anisimova) Loeblich, 1965 | | | |
| [=*Gymnodinium fungiforme* Anisimova, 1920] * dinoflagellate | 6 | ES | B |

### ORDER PERIDINIALES

| Family Ceratiaceae | | | |
|---|---|---|---|
| • *Ceratium hirundinella* (Müller) Dujardin, 1841 * dinoflagellate | 2,3 | ES,LE | P |
| • *Ceratium* sp. Schrank, 1793 * dinoflagellate | 4 | ES | P |
| **Family Lophodiniaceae** | | | |
| • *Woloszynskia coronata* (Woloszynska) Thompson, 1950 * dinoflagellate | 10 | ES | P |
| **Family Peridiniaceae** | | | |
| • *Glenodinium* sp. Ehrenberg, 1837 * dinoflagellate | 2,3,10 | ES | P |
| • *Perdiniopsis quadridens* (Stein) Bourrelly, 1968 | 10 | ES | P |
| [=*Peridinium quadridens* Stein, 1883] * dinoflagellate | 3,10 | ES | P |

## DIVISION CRYPTOPHYTA (cryptomonads)

## CLASS CRYPTOPHYCEAE

### ORDER CRYPTOMONADALES

| | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| **Family Hemiselmidaceae [=Planonephraceae]** | | | |
| • *Planonephros parvula* (Skuja) Christensen, 1967 | 10 | ES | P |
| [=*Sennia parvula* Skuja, 1948] * cryptomonad | 3,6,10 | ES | P |
| **Family Cryptomonadaceae** | | | |
| • *Chilomonas* sp. Ehrenberg, 1838 * cryptomonad | 6 | ES | B |
| • *Chroomonas norstedtii* Hansgirg, 1892 * cryptomonad | 6 | ES | B |
| • *Chroomonas* sp. Hansgirg, 1885 * cryptomonad | 3,10 | ES | P |
| • *Cryptomonas compressa* Pascher, 1913 * cryptomonad | 6 | ES | B |
| • *Cryptomonas erosa* Ehrenberg, 1938 * cryptomonad | 2,3,6,9,10 | ES | B,P |
| • *Cryptomonas erosa* var. *reflexa* Marsson, 1904 * cryptomonad | 2,10 | CK | P |
| • *Cryptomonas marssonii* Skuja, 1948 * cryptomonad | 3,10 | ES | P |
| • *Cryptomonas obovata* Skuja, 1948 * cryptomonad | 6 | ES | B |
| • *Cryptomonas ovata* Ehrenberg, 1838 * cryptomonad | 3,6,10 | ES | B,P |
| • *Cryptomonas reflexa* Skuja, 1939 * cryptomonad | 6 | ES | B,P |
| • *Cryptomonas tenuis* Pascher, 1913 * cryptomonad | 6 | ES | B |
| • *Cryptomonas tetrapyrenoidosa* Skuja, 1948 * cryptomonad | 10 | ES | P |
| • *Cryptomonas* spp. Ehrenberg, 1838 * cryptomonads | 4,6,9,10 | ES | B,P |
| • *Rhodomonas lacustris* Pascher & Ruttner, 1913 * cryptomonad | 2,3,6,10 | ES | B,P |
| • *Rhodomonas lens* Pascher & Ruttner, 1913 * cryptomonad | 6 | ES | B |
| • *Rhodomonas minuta* Skuja, 1948 * cryptomonad | 6,10 | ES | B,P |
| • *Rhodomonas minuta* var. *nannoplanctonica* Skuja, 1948 * cryptomonad | 3,9,10 | ES,LE | P |
| • *Rhodomonas* spp. Karsten, 1898 * cryptomonads | 2,6,9,10 | CK,ES | B,P |
| **Family Cyathomonadaceae** | | | |
| • *Cyathomonas truncata* (Fresenius) Fisch, 1885 * cryptomonad | 6 | ES | B |
| • *Cyathomonas* sp. Fromentel, 1874 * cryptomonad | 6 | ES | B |

## DIVISION EUGLENOPHYTA (euglenoids)

## CLASS EUGLENOPHYCEAE

### ORDER EUGLENALES (green euglenas)

| | | | |
|---|---|---|---|
| **Family Euglenaceae** | | | |
| • *Ascoglena vaginicola* Stein, 1878 * euglenoid | 2,10 | ES | B,V |
| • *Ascoglena* sp. Stein, 1878 * euglenoid | 3 | ES | V |
| • *Euglena acus* Ehrenberg, 1830 * euglenoid | 2,3,5,6,9,10 | ES | B,P |
| • *Euglena bellovacensis* Chadefaud & Gojdics, 1937 * euglenoid | 10 | ES | P |
| • *Euglena deses* Ehrenberg, 1833 * euglenoid | 6 | ES | B |
| • *Euglena ehrenbergii* Klebs, 1883 * euglenoid | 3,6,10 | ES | B,P |
| • *Euglena elastica* Prescott, 1944 * euglenoid | 5 | ES | C |
| • *Euglena fronsundulata* Johnson, 1944 * euglenoid | 10 | ES | P |
| • *Euglena gasterosteus* Skuja, 1948 * euglenoid | 3,9,10 | CK,ES | P |
| • *Euglena gracilis* Klebs, 1883 * euglenoid | 2,3,5,6 | ES | B,P |
| • *Euglena ignobilis* Johnson, 1944 * euglenoid | 10 | ES | P |
| • *Euglena minima* Francé, 1893 * euglenoid | 5 | ES | C |
| • *Euglena oxyuris* Schmarda, 1846 * euglenoid | 2,3,5,10 | ES | B |
| • *Euglena oxyuris* var. *minima* Bourrelly, 1949 * euglenoid | 3,10 | ES | P |
| • *Euglena oxyuris* var. *minor* Deflandre, 1924 * euglenoid | 2,10 | ES | P |
| • *Euglena pisciformis* Kelbs, 1883 * euglenoid | 6 | ES | B |
| • *Euglena proxima* Dangeard, 1901 * euglenoid | 10 | ES | P |
| • *Euglena spathirhyncha* Skuja, 1948 * euglenoid | 3,10 | ES | P |
| • *Euglena spirogyra* Ehrenberg, 1830 * euglenoid | 3,5,10 | ES | C,P |
| • *Euglena tripteris* (Dujardin) Klebs, 1883 | 3,6,10 | ES | B,P |
| [*E. tripteras*, orthographic error] * euglenoid | 5 | ES | C |
| • *Euglena vermiforis* Carter, 1937 * euglenoid | 6 | ES | B |
| • *Euglena* spp. Ehrenberg, 1838 * euglenoids | 2,3,6,7,9,10 | CK,ES | B,P,V |

| Family Euglenaceae (continued) | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| • *Lepocinclis ovum* (Ehrenberg) Lemmermann, 1910 * euglenoid | 9,10 | ES | P |
| • *Lepocinclis ovum* var. *deflandriana* Conrad, 1935 * euglenoid | 10 | ES | P |
| • *Lepocinclis ovum* var. *dimidio-minor* Deflandre, 1924 * euglenoid | 10 | ES | P |
| • *Lepocinclis ovum* var. *ovata* f. *ecaudata* Deflandre, 1926 * euglenoid | 10 | ES | P |
| • *Lepocinclis ovum* f. *typica* (Ehrenberg) Lemmermann, 1901 * euglenoid | 10 | ES | P |
| • *Lepocinclis texta* f. *minor* Conrad, 1934 * euglenoid | 10 | ES | P |
| • *Lepocinclis* spp. Perty, 1852 * euglenoids | 2,3,5,6,9,10 | CK,ES | B,P |
| • *Phacus acuminatus* Stokes, 1881 * euglenoid | 2,3,10 | CK,ES | B,P |
| • *Phacus arnoldi* Swirenko, 1915 * euglenoid | 2 | ES | B |
| • *Phacus caudatus* Hübner, 1886 * euglenoid | 3,10 | ES | P |
| • *Phacus contortus* Bourrelly, 1952 * euglenoid | 3,10 | ES | P |
| • *Phacus curvicauda* Swirenko, 1915 * euglenoid | 3,10 | ES | P |
| • *Phacus helikoides* Pochmann, 1942 [or *P. helicoides*] * euglenoid | 2,3 | ES | B,P |
| • *Phacus longicauda* (Ehrenberg) Dujardin, 1841 * euglenoid | 5 | ES | P |
| • *Phacus obicularis* Hübner, 1886 * euglenoid | 3,10 | ES | P |
| • *Phacus pleuronectes* (Müller) Dujardin, 1841 * euglenoid | 5,6 | ES | B |
| • *Phacus pseudonordstedii* Pochmann, 1942 * euglenoid | 2,3,9,10 | ES | B,P |
| • *Phacus rudicula* (Playfair) Pochmann, 1942 * euglenoid | 10 | ES | P |
| • *Phacus tortus* (Lemmermann) Skvortzow, 1928 * euglenoid | 3,5,6,10 | ES | B,P |
| • *Phacus triqueter* (Ehrenberg) Dujardin, 1841 * euglenoid | 5 | ES | P |
| • *Phacus* sp. Dujardin, 1841 * euglenoid | 2,6,10 | ES | B |
| • *Strombomonas acuminata* (Schmarda) Deflandre, 1930 * euglenoid | 10 | ES | P |
| • *Strombomonas fluviatilis* (Lemmermann) Deflandre, 1930 | 10 | ES | P |
| [*S. fluviatile*, orthographic error?] * euglenoid | 9 | ES | P |
| • *Strombomonas gibberosa* (Playfair) Deflandre, 1930 * euglenoid | 2,3,9,10 | ES | B,P |
| • *Strombomonas longicauda* (Swirenko) Deflandre, 1930 * euglenoid | 3,10 | ES | P |
| • *Strombomonas schauinslandii* (Lemmermann) Deflandre, 1930 * euglenoid | 10 | ES | P |
| • *Strombomonas verrucosa* var. *zmiewika* (Swirenko) Deflandre, 1930 * euglenoid | 10 | ES | P |
| • *Strombomonas* sp. Deflandre, 1930 * euglenoid | 10 | ES | P |
| • *Trachelomonas abrupta* var. *minor* Deflandre, 1926 * euglenoid | 10 | ES | P |
| • *Trachelomonas armata* (Ehrenberg) Stein, 1878 * euglenoid | 6 | ES | B,P |
| • *Trachelomonas bulla* Stein, 1878 * euglenoid | 10 | ES | P |
| • *Trachelomonas crebea* (Kellicott) Deflandre, 1926 * euglenoid | 10 | ES | P |
| • *Trachelomonas granulosa* Playfair, 1916 * euglenoid | 10 | ES | P |
| • *Trachelomonas hispida* (Perty) Stein, 1883 * euglenoid | 6,10 | ES | B,P |
| • *Trachelomonas horrida* Palmer, 1905 * euglenoid | 6 | ES | B,P |
| • *Trachelomonas lacustris* Drezepolski, 1925 * euglenoid | 10 | ES | P |
| • *Trachelomonas oblonga* Lemmermann, 1899 * euglenoid | 10 | ES | P |
| • *Trachelomonas oblonga* var. *attenuata* Playfair, 1915 * euglenoid | 10 | ES | P |
| • *Trachelomonas oblonga* var. *truncata* Lemmermann, 1899 * euglenoid | 10 | ES | P |
| • *Trachelomonas oblonga* var. *umbilicophora* Deflandre, 1926 * euglenoid | 10 | ES | P |
| • *Trachelomonas planctonica* Swirenko, 1914 * euglenoid | 10 | ES | P |
| • *Trachelomonas scabra* Playfair, 1915 * euglenoid | 10 | ES | P |
| • *Trachelomonas spiralis* Skvortzov, 1925 * euglenoid | 6 | ES | B,P |
| • *Trachelomonas superba* (Swirenko) Deflandre, 1925 * euglenoid | 2,3,10 | ES | B,P |
| • *Trachelomonas varians* (Lemmermann) Deflandre, 1924 * euglenoid | 2,10 | ES | B,P |
| • *Trachelomonas volvocina* Ehrenberg, 1833 * euglenoid | 2,3,6,9,10 | ES | B,P |
| • *Trachelomonas volvocina* var. *minuta* Fritsch, 1919 | | | |
| [*T. volvocina* var. *minor*, orthographic error?] * euglenoid | 6 | ES | B,P |
| • *Trachelomonas* spp. Ehrenberg, 1833 * euglenoids | 2,3,5,6,9,10 | ES | B,P |
| **Family Astaciaceae** | | | |
| • *Astasia klebsii* Lemmermann, 1910 * euglenoid | 6 | ES | B |
| • *Astasia* spp. Dujardin, 1841 * euglenoids | 2,3,10 | ES | B,P |
| • *Scytomonas* sp. Stein, 1878 * euglenoid | 6 | ES | B |
| • *Urceolus ovatus* Roskin, 1931 * euglenoid | 6 | ES | B |
| • *Urceolus sabulosus* Stokes, 1886 * euglenoid | 6 | ES | B |

## ORDER RHABDOMONADALES

| | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| **Family Rhabdomonaceae** | | | |
| • *Menoidium gibbum* Skuja, 1939 * euglenoid | 6 | ES | B |
| • *Rhabdomonas* sp. Fresenius, 1858 * euglenoid | 6 | ES | B |

# DIVISION CHLOROPHYTA (green algae)

## CLASS CHLOROPHYCEAE

## ORDER VOLVOCALES

| | | | |
|---|---|---|---|
| **Family Chlamydomonadaceae** | | | |
| • *Carteria bourrellyi* Ettl, 1979 * green alga | 10 | ES | P |
| • *Carteria globosa* Korschikoff, 1927 * green alga | 6 | ES | B |
| • *Carteria wisconsinensis* Huber-Pestalozzi, 1961 | 3,10 | CK,ES | P |
| [=*C. klebsii* (Dangeard) Francé, 1896] * green alga | 2,10 | CK,ES | P |
| • *Carteria* sp. Diesing, 1866 * green alga | 10 | ES | P |
| • *Chlamydomonas globosa* Snow, 1902 * green alga | 2,3,6,10 | CK,ES | B,P |
| • *Chlamydomonas gracilis* Snow, 1902 * green alga | 6 | ES | B |
| • *Chlamydomonas monadina* Stein, 1878 * green alga | 6 | ES | B |
| • *Chlamydomonas reinhardtii* Dangeard, 1888 * green alga | 6 | ES | B |
| • *Chlamydomonas subasymmetrica* Pascher, 1927 * green alga | 6 | ES | B |
| • *Chlamydomonas* spp. Ehrenberg, 1833 * green algae | 2,6,9,10 | CK,ES,LE | B,P |
| • *Chlamydonephris excavata* (Conrad) Ettl, 1959 | | | |
| [=*Chlamydomonas excavata* Conrad, 1931] * green alga | 6 | ES | B |
| • *Chlorogonium elongatum* (Dangeard), Dangeard, 1899 * green alga | 6 | ES | B |
| • *Chlorogonium euchlorum* Ehrenberg, 1833 * green alga | 6 | ES | B |
| • *Chlorogonium hyalinum* * green alga | 6 | ES | B |
| • *Haematococcus pluvialis* Flotow, 1844 | 3 | ES | Z |
| [=*Haematococcus lacustris* (Girod) Rostafinski, 1871] * green alga | 10 | ES | Z |
| • *Sphaerellopsis* spp. Korschikoff, 1925 * green algae | 2,3,10 | ES | P |
| **Family Phacotaceae** | | | |
| • *Pedinopera* sp. Pascher, 1925 * green alga | 3,10 | ES | P |
| • *Phacotus lenticularis* (Ehrenberg) Stein, 1878 * green alga | 6 | ES | B |
| • *Phacotus* sp. Perty, 1852 * green alga | 2,3,10 | ES | P |
| • *Pteromonas angulosa* (Carter) Lemmermann, 1900 * green alga | 2,3,10 | ES | P |
| • *Pteromonas* sp. Seligo, 1887 * green alga | 6,10 | ES | B,P |
| **Family Volvocaceae** | | | |
| • *Eudorina elegans* Ehrenberg, 1831 * green alga | 3,10 | LE | P |
| • *Pandorinamorum* (Müller) Bory, 1924 * green alga | 6 | ES | B |
| • *Pandorina* sp. Bory, 1824 * green alga | 2,3,6,10 | ES | B,P |
| • *Volvox* sp. (Linnaeus) Ehrenberg, 1830 * green alga | 4 | ES | P |

## ORDER TETRASPORALES

| | | | |
|---|---|---|---|
| **Family Palmellaceae** | | | |
| • *Chlamydocapsa ampla* (Kützing) Fott, 1972 | | | |
| [=*Gloeocystis gigas* (Kützing) Lagerheim, 1883] * green alga | 2,3,10 | CK,ES | P,R |
| • *Chlamydocapsa planctonica* (West & West) Fott, 1972 | | | |
| [=*Gloeocystis planctonica* (West & West) Lemmermann, 1915] * green alga | 3,10 | ES | P |
| • *Chlamydocapsa* sp. Fott, 1972 | | | |
| [=*Gloeocystis* sp. Nägeli, 1849] * green alga | 10 | ES | P |
| • *Gloeocystis vesiculosa* Nägeli, 1849 * green alga | 2,3,10 | CK,ES | P,R |
| • *Pseudosphaerocystis lacustris* (Lemmermann) Nováková, 1965 | 10 | ES | P |
| [=*Sphaerocystis schroeteri* Chodat, 1897] * green alga | 2,3,10 | CK,ES | P |

## ORDER CHLOROCOCCALES

| | | | |
|---|---|---|---|
| **Family Chlorococcaceae** | | | |
| • *Ankyra judayi* (Smith) Fott, 1957 | 10 | ES | P |
| [=*Schroederia judayi* Smith, 1916] * green alga | 10 | ES | P |
| • *Characium curvatum* Smith, 1918 * green alga | 2,3 | ES | P |
| • *Characium* sp. Braun, 1849 * green alga | 2,10 | ES | P |

| Family Chlorococcaceae (continued) | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| • *Chlorococcum* sp. Meneghini, 1842 * green alga | 4 | ES | P |
| • *Korshikoviella limnetica* (Lemmermann) Silva, 1959 | 10 | ES | P |
| [=*Characium limnetica* Lemmermann, 1903] * green alga | 10 | ES | P |
| • *Schroederia indica* Philipose, 1967 * green alga | 10 | LE | P |
| • *Schroederia robusta* Korschik, 1953 * green alga | 10 | ES | P |
| • *Schroederia setigera* (Schroder) Lemmermann, 1898 * green alga | 2,3,9,10 | ES | P |
| • *Schroederia spiralis* (Printz) Korsikov, 1953 * green alga | 10 | ES | P |
| • *Tetraedron caudatum* (Corda) Hansgirg, 1888 * green alga | 2,3,10 | ES | P |
| • *Tetraedron incus* (Teiling) Smith, 1926 * green alga | 3,10 | ES | P |
| • *Tetraedron minimum* (Braun) Hansgirg, 1888 * green alga | 2,3,10 | CK,ES | P |
| • *Tetraedron muticum* (Braun) Hansgirg, 1888 * green alga | 10 | ES | P |
| • *Tetraedron regulare* Kützing, 1845 * green alga | 2,3,10 | ES | P |
| • *Tetraedron trigonum* var. *gracile* (Reinsch) DeToni, 1889 * green alga | 2,3,10 | ES | P |
| **Family Micractiniaceae** | | | |
| • *Golenkinia radiata* Chodat, 1894 * green alga | 2,3 | ES | P |
| • *Golenkiniopsis* sp. Korsikov, 1953 * green alga | 3 | ES | P |
| • *Micractinium pusillum* Fresenius, 1858 * green alga | 2,3 | ES | P |
| **Family Hydrodictyaceae** | | | |
| • *Pediastrum boryanum* (Turpin) Meneghini, 1840 * green alga | 2,3,10 | ES | P |
| • *Pediastrum duplex* Meyen, 1829 * green alga | 2,9 | ES | P |
| • *Pediastrum duplex* var. *duplex* Kützing, 1845 | 3,10 | ES | P |
| [=*P. duplex* var. *clathratum* (Braun) Lagerheim, 1882] * green alga | 2,3 | ES | P |
| • *Pediastrum duplex* var. *reticulatum* Lagerheim, 1882 * green alga | 2,3,5 | ES | C,P |
| • *Pediastrum simplex* Meyen, 1829 | 2 | ES | P |
| [=*P. simplex* var. *simplex* Meyen, 1829] * green alga | 3 | ES | P |
| • *Pediastrum simplex* var. *biwaense* Fukushima, 1956 | 3 | ES | P |
| [=*P. simplex* var. *duodenarium* (Bailey) Rabenhorst, 1868] * green alga | 2 | ES | P |
| • *Pediastrum simplex* var. *echinulatum* Wittrock, 1883 * green alga | 10 | ES | P |
| • *Pediastrum simplex* var. *sturmii* (Reinsch) Wolle, 1887 * green alga | 3 | ES | P |
| • *Pediastrum tetras* (Ehrenberg) Ralfs, 1844 * green alga | 2,3,10 | ES | P |
| • *Pediastrum tetras* var. *tetraodon* (Corda) Rabenhorst, 1868 | 2,10 | ES | P |
| [*P. tetras* var. *tetroadon*, orthographic error] * green alga | 3 | ES | P |
| • *Pediastrum* sp. Meyen, 1829 * green alga | 4 | ES | P |
| **Family Oocystaceae** | | | |
| • *Ankistrodesmus falcatus* (Corda) Ralfs, 1848 | | | |
| [*A. faleatus*, orthographic error] * green alga | 2 | ES | P |
| • *Ankistrodesmus stipitatus* (Corda) Komarkova-Legnerova, 1969 * green alga | 3 | ES | P |
| • *Closteriopsis acicularis* (Smith) Belcher & Swale, 1962 * green alga | 10 | ES | P |
| • *Franceia droescheri* (Lemmermann) Smith, 1933 * green alga | 2,3,10 | ES | P |
| • *Kirchneriella contorta* var. *contorta* (Schmidle) Bohlin, 1897 * green alga | 10 | ES | P |
| • *Kirchneriella contorta* var. *elegans* (Playfair) Komárek, 1979 * green alga | 10 | ES | P |
| • *Kirchneriella lunaris* (Kirchner) Moebius, 1894 * green alga | 2,3 | ES | P |
| • *Kirchneriella* sp. Schmidle, 1893 * green alga | 2,10 | ES | P |
| • *Lagerheimia balatonica* (Scherffel) Hindak, 1978 * green alga | 3,9,10 | ES | P |
| • *Lagerheimia ciliata* (Lagerheim) Chodat, 1895 * green alga | 2 | ES | P |
| • *Lagerheimia citriformis* (Snow) Collins, 1909 * green alga | 3 | ES | P |
| • *Lagerheimia genevensis* (Chodat) Chodat, 1895 | 3,9 | ES | P |
| [=*L. genevensis* var. *subglobosa* (Lemmermann) Chodat, 1902] | 2,3,10 | ES | P |
| [=*L. quadriseta* (Lemmermann) Smith, 1926] * green alga | 2 | ES | P |
| • *Lagerheimia marssonii* Lemmermann, 1900 * green alga | 10 | ES | P |
| • *Lagerheimia subsalsa* Lemmermann, 1898 * green alga | 10 | ES | P |
| • *Lagerheimia wratislawiensis* Schroeder, 1897 * green alga | 3,9 | ES | P |
| • *Monoraphidium arcuatum* (Korsikov) Hindak, 1970 * green alga | 3,10 | ES,LE | P |
| • *Monoraphidium circinale* (Nygaard) Nygaard, 1979 * green alga | 10 | ES | P |
| • *Monoraphidium contortum* (Thuret) Komarkova-Legnerova, 1969* green alga | 10 | ES | P |
| • *Monoraphidium convolutum* | | | |
| var. *convolutum* (Corda) Komarkova-Legnerova, 1969 | | | |
| [=*Ankistrodesmus convolutus* Corda, 1838] * green alga | 2 | ES | P |

| Family Oocystaceae (continued) | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| • *Monoraphidium griffithii* (Berkeley) Komarkova-Legnerova, 1969 * green alga | 10 | ES | P |
| • *Monoraphidium komarkovae* Nygaard, 1979 * green alga | 10 | ES | P |
| • *Monoraphidium mirabile* (West & West) Pankow, 1976 | 3,10 | ES | P |
| [=*Ankistrodesmus falcatus* var. *mirabilis* (West & West) West, 1904] * green alga | 2 | ES | P |
| • *Monoraphidium* sp. Komarkova-Legnerova, 1969 * green alga | 10 | ES | P |
| • *Nephrochlamys subsolitaria* (West) Korsikov, 1953 | 3,9,10 | ES | P |
| [=*Kirchneriella subsolitaria* West, 1908] * green alga | 10 | ES | P |
| • *Nephrochlamys* spp. Korsikov, 1953 * green algae | 10 | ES | P |
| • *Oocystis lacustris* Chodat, 1897 * green alga | 2,3,10 | ES,LE | P |
| • *Oocystis novae-semliae* Wille, 1879 * green alga | 10 | ES | P |
| • *Oocystis parva* West & West, 1898 * green alga | 2,3,10 | ES | P |
| • *Oocystis pusilla* Hansgirg, 1890 * green alga | 3,10 | ES | P |
| • *Oocystis* sp. Braun, 1855 * green alga | 4,10 | ES | P |
| • *Quadrigula closteroides* (Bohlin) Printz, 1915 | 10 | ES | P |
| [*Q. closterioides*, orthographic error] * green alga | 2,3 | ES | P |
| • *Quadrigula lacustris* (Chodat) Smith, 1920 * green alga | 2,3,10 | ES | P |
| • *Selenastrum capricornutum* Printz, 1914 | 10 | ES | P |
| [*S. capricornatum*, orthographic error] * green alga | 3 | ES | P |
| • *Selenastrum* sp. * green alga | 2 | ES | P |
| • *Treubaria quadrispina* (Smith) Fott & Kovacik, 1975 * green alga | 10 | ES | P |
| • *Treubaria schmidlei* (Schroder) Fott & Kovacik, 1975 * green alga | 10 | ES | P |
| • *Treubaria triappendiculata* Bernard, 1908 * green alga | 10 | ES | P |
| **Family Dictyosphaeriaceae** | | | |
| • *Dictyosphaerium puchellum* Wood, 1872 * green alga | 2,3 | ES | P |
| **Family Scenedesmaceae** | | | |
| • *Actinastrum hantzschii* Lagerheim, 1882 * green alga | 2,3 | ES | P |
| • *Coelastrum astroidenum* DeNotaris, 1867 * green alga | 10 | ES | P |
| • *Coelastrum cambricum* Archer, 1868 * green alga | 3 | ES | P |
| • *Coelastrum microporum* Nägeli, 1855 * green alga | 3 | ES | P |
| • *Coelastrum pseucomicroporum* Korsikov, 1953 * green alga | 3 | ES | P |
| • *Coelastrum* sp. Nägeli, 1849 * green alga | 4 | ES | P |
| • *Crucigenia fenestrata* (Schmidle) Schmidle, 1900 * green alga | 2,3,10 | ES | P |
| • *Crucigenia mucronata* (Smith) Komárek, 1974 * green alga | 3,10 | ES | P |
| • *Crucigenia quadrata* Morren, 1830 * green alga | 2,3,10 | ES | P |
| • *Crucigenia tetrapedia* (Kirchner) West & West, 1902 * green alga | 2,3,10 | ES | P |
| • *Crucigeniella apiculata* (Lemmermann) Komárek, 1974 * green alga | 10 | ES | P |
| • *Crucigeniella rectangularis* (Nägeli) Komárek, 1974 | 3 | ES | P |
| [=*Crucigenia rectangularis* (Nägeli) Gay, 1891] * green alga | 2,10 | ES | P |
| • *Didymocystis inconspicua* Korsikov, 1953 * green alga | 10 | ES | P |
| • *Didymocystis planctonicus* Korsikov, 1953 * green alga | 3,9,10 | ES | P |
| • *Didymocystis* sp. Korsikov, 1953 * green alga | 10 | ES | P |
| • *Didymogenes palatina* Schmidle, 1905 * green alga | 10 | ES | P |
| • *Neodesmus danubialis* Hindak, 1976 * green alga | 3,10 | ES | P |
| • *Scenedesmus acuminatus* (Lagerheim) Chodat, 1902 * green alga | 2,3,9,10 | ES | P |
| • *Scenedesmus acuminatus* var. *minor* Smith, 1916 * green alga | 2,3,10 | ES | P |
| • *Scenedesmus armatus* Chodat, 1913 * green alga | 2 | ES | P |
| • *Scenedesmus bicaudatus* Dedusenke, 1925 * green alga | 10 | ES | P |
| • *Scenedesmus bijuga* (Turpin) Lagerheim, 1893 * green alga | 2 | ES | P |
| • *Scenedesmus bijuga* var. *alternans* (Reinsch) Hansgirg, 1888 * green alga | 2,3,10 | ES | P |
| • *Scenedesmus brevispina* (Smith) Chodat, 1926 | 3 | ES | P |
| [=*S. longus* var. *brevispina* Smith, 1916] * green alga | 2 | ES | P |
| • *Scenedesmus denticulatus* Lagerheim, 1882 * green alga | 2,9,10 | ES | P |
| • *Scenedesmus dimorphus* (Turpin) Kützing, 1833 * green alga | 2,3,9,10 | CK,ES | P |
| • *Scenedesmus hystrix* Lagerheim, 1883 | 3 | ES | P |
| [*S. lystrix*, orthographic error] * green alga | 2 | ES | P |
| • *Scenedesmus longispina* Chodat, 1916 * green alga | 3 | ES | P |

| Family Scenedesmaceae (continued) | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| • *Scenedesmus opoliensis* Richter, 1896 * green alga | 2,3,10 | CK,ES | P |
| • *Scenedesmus quadricauda* (Turpin) Brébisson, 1835 * green alga | 2,3,10 | ES | P |
| • *Scenedesmus quadricauda* var. *longispina* (Chodat) Smith, 1916 * green alga | 2,5 | ES | C,P |
| • *Scenedesmus sempervirens* Chodat, 1913 * green alga | 10 | ES | P |
| • *Scenedesmus serratus* (Corda) Bohlin, 1902 * green alga | 2,3 | ES | P |
| • *Scenedesmus smithii* Teil, 1942 * green alga | 3,10 | ES | P |
| • *Scenedesmus sooi*? Hortobagyi, 1954 * green alga | 3,10 | ES | P |
| • *Scenedesmus subspicatus* Chodat, 1926 | 3 | ES | P |
| [=*S. abundans* (Kirchner) Chodat, 1913] | 2,10 | ES | P |
| [=*S. abundans* var. *longicauda* Smith, 1916] * green alga | 3,10 | ES | P |
| • *Scenedesmus verrucosus* Roll, 1925 | 10 | ES | P |
| [=*S. bijugatus* var. *granulatus* Schmidle, 1903] * green alga | 10 | ES | P |
| • *Scenedesmus* spp. Meyen, 1829 * green algae | 9,10 | CK,ES | P |
| • *Tetrastrum elegans* Playfair, 1917 * green alga | 10 | ES | P |
| • *Tetrastrum glabrum* (Roll) Ahlstrom & Tiffany, 1934 * green alga | 2,3,10 | CK,ES | P |
| • *Tetrastrum heteracanthum* (Nordstedt) Chodat, 1895 * green alga | 3 | ES | P |
| • *Tetrastrum heteracanthum* (*elegans* f.) (Nordstedt) Chodat, 1895 * green alga | 2,10 | ES | P |
| • *Tetrastrum punctatum* (Schmidle) Ahlstrom & Tiffany, 1934 * green alga | 2,3,10 | ES | P |
| • *Tetrastrum staurogeniaeforme* (Schroeder) Lemmermann, 1900 * green alga | 2,3,10 | ES | P |
| • *Willea irregularis* (Wille) Schmidle, 1900 | | | |
| [=*Crucigenia irregularis* Wille, 1898] * green alga | 10 | ES | P |
| **ORDER OEDOGONIALES** | | | |
| **Family Oedogoniaceae** | | | |
| • *Oedogonium* sp. Link, 1820 * green alga | 2,3 | ES | V |
| **ORDER CHAETOPHORALES** | | | |
| **Family Chaetophoraceae** | | | |
| • *Desmococcus olivaceus* (Persoon) Laundon, 1985 | 10 | CK | V |
| [=*Protococcus viridis* Agardh, 1824] * green alga | 2,10 | CK | V |
| • *Draparnaldia glomerata* (Vaucher) Agardh, 1812 * green alga | 10,28 | CK,ES | R |
| • *Stigeoclonium farctum* Berthold, 1878 * green alga | 10 | ES | V |
| • *Stigeoclonium tenue* (Agardh) Kützing, 1843 * green alga | 10 | ES | V |
| • *Stigeoclonium* sp. Kützing, 1843 * green alga | 2,3 | ES | V |
| **ORDER ULOTRICHALES** | | | |
| **Family Ulotrichaceae** | | | |
| • *Radiofilum conjunctivum* Schmidle, 1894 * green alga | 10 | CK | B |
| • *Ulothrix tenerrima* Kützing, 1843 * green alga | 2,3,10 | CK | R |
| • *Ulothrix tenuissima* Kützing, 1833 * green alga | 10 | CK | R |
| • *Ulothrix* sp. Kützing, 1833 * green alga | 3,10 | ES | V |
| **Family Microsporaceae** | | | |
| • *Microspora stagnorum* (Kützing) Lagerheim, 1887 * green alga | 2,3,10 | ES | V |
| • *Microspora* sp. Thuret, 1850 * green alga | 4 | ES | P |
| **ORDER CLADOPHORALES** | | | |
| **Family Cladophoraceae** | | | |
| • *Cladophora glomerata* (Linnaeus) Kützing, 1845 * green alga | 2,3,4,10 | ES,LE | B,P,R |
| • *Rhizoclonium hieroglyphicum* (Agardh) Kützing, 1845 * green alga | 10 | CK | R |
| **ORDER ZYGNEMATALES** | | | |
| **Family Zygnemataceae** | | | |
| • *Mougeotia* sp. (Agardh) Wittrock, 1872 * green alga | 2 | ES | V |
| • *Spirogyra* sp. Link, 1820 * green alga | 2,3,4,28 | CK,ES | P,R,V |
| **Family Desmidiaceae** | | | |
| • *Closterium aciculare* var. *aciculare* West, 1860 | 3 | ES | P |
| [=*C. aciculare* West, 1860] * green alga, desmid | 2 | ES | P |

| Family Desmidiaceae (continued) | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| • *Closterium acutum* var. *acutum* (Lyngbye) Brébisson, 1848 * green alga, desmid | 3,10 | ES | P |
| • *Closterium acutum* var. *variabile* (Lemmermann) Krieger, 1937 | 10 | ES | P |
| [*C. acutum* var. *variable*, orthographic error] * green alga, desmid | 3 | ES | P |
| • *Closterium gracile* var. *gracile* Brébisson, 1839 * green alga, desmid | 3,10 | ES | P |
| • *Closterium intermedium* Ralfs * green alga, desmid | 28 | CK | R |
| • *Closterium limneticum* var. *limneticum* Lemmermann, 1899 * green alga, desmid | 3,10 | ES | P |
| • *Closterium macilentum* var. *macilentum* Brébisson, 1856 * green alga, desmid | 3 | ES | P |
| • *Closterium moniliferum* var. *moniliferum* (Bory) Ehrenberg, 1838 * green alga, desmid | 3,10 | ES | P |
| • *Closterium* spp. Nitzsch, 1817 * green algae, desmids | 4,5 | ES | C,P |
| • *Cosmarium formosulum* Hoff, 1888 * green alga, desmid | 10 | ES | P |
| • *Cosmarium granatum* Brébisson, 1848 * green alga, desmid | 2 | ES | P |
| • *Cosmarium granatum* var. *granatum* Brébisson, 1848 * green alga, desmid | 3 | ES | P |
| • *Cosmarium granulatum*? West, 1889 * green alga, desmid | 5 | ES | C |
| • *Cosmarium* spp. Corda, 1835 * green algae, desmids | 2,5,9,10 | ES | C,P |
| • *Staurastrum gracile* Ralfs, 1848 | 2 | ES | P |
| [=*S. gracile* var. *gracile* Ralfs, 1848] * green alga, desmid | 3 | ES | P |

## KINGDOM FUNGI
## DIVISION MYXOMYCOTA (mucus molds)
## CLASS MYXOMYCETES (true slime molds)

### ORDER PHYSARALES (physar slimes)

| Family Physaraceae | | | |
|---|---|---|---|
| • *Badhamia affinis* Rostafinski [=*Badhamia orbiculata* Rex] * slime mold | 14,15 | RE | V |
| • *Craterium minimum* Berkeley & Curtis * slime mold | 15 | RE | V |
| • *Fuligo cinerea* (Schweinitz) Morgan * slime mold | 14 | RE | V |
| • *Fuligo violacea* Persoon * slime mold | 15 | RE | V |
| • *Physarella oblonga* (Berkeley & Curtis) Morgan * slime mold | 14,15 | RE | V |
| • *Physarum nutans* Persoon * slime mold | 14 | RE | V |
| • *Physarum vernum* Sommier * slime mold | 14 | RE | V |
| • *Physarum viride* (Bulliard) Persoon * slime mold | 14 | RE | V |
| • *Physarum viride* var. *incanum* Lister * slime mold | 14 | RE | V |
| • *Tilmadoche alba* (Bulliard) Macbride * slime mold | 14,15 | RE | V |
| **Family Didymiaceae** | | | |
| • *Diderma crustaceum* Peck * slime mold | 14,15 | RE | V |
| • *Diderma hemisphericum* (Bulliard) Hornemann * slime mold | 14 | RE | V |
| • *Diderma reticulatum* (Rostafinski) Morgan * slime mold | 15 | RE | V |
| • *Didymium crustaceum* Fries * slime mold | 14,15 | RE | V |
| • *Didymium iridis* (Ditmar) Fries [=*D. xanthopus* (Ditmar) Fries] * slime mold | 14 | RE | V |
| • *Didymium melanospermum* (Persoon) Macbride * slime mold | 15 | RE | V |
| • *Didymium squamulosum* (Albertini & Schweinitz) Fries * slime mold | 14,15 | RE | V |
| • *Mucilago spongiosa* (vonLeysser) Morgan * slime mold | 14,15 | RE | V |

### ORDER LICEALES (lice slimes)

| Family Reticulariaceae | | | |
|---|---|---|---|
| • *Lycogala epidendrum* (Buxbaum) Fries * wolf's-milk slime | 14,15 | RE | S,V |
| • *Lycogala flavo-fuscum* (Ehrenberg) Rostafinski * slime mold | 14,15 | RE | V |
| • *Reticularia splendens* Morgan [=*Enteridium rozeanum* Wingate] * slime mold | 14 | RE | V |
| • *Tubifera ferruginosa* (Batsch) Macbride * red raspberry slime | 14,15 | RE | V |
| • *Tubifera microsperma* (Berkeley & Curtis) Martin [=*T. stipitata* Berkeley & Ravenel] * slime mold | 14 | RE | V |
| **Family Cribrariaceae** | | | |
| • *Cribraria intricata* Schrader [=*C. dictydioides* Cooke & Balfour] * slime mold | 14 | RE | V |
| • *Dictydium cancellatum* (Batsch) Macbride * Japanese-lantern slime | 14,15 | RE | V |
| • *Lindbladia tubulina* Fries [=*L. effusa* (Ehrenberg) Rostafinski] * slime mold | 14,15 | RE | V |

## ORDER TRICHIALES (trichi slimes)

| | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| **Family Trichiaceae** | | | |
| • *Acryodes incarnata* (Albertini & Schweinitz) [=*Lachnobolus congestus* (Sommier) Lister] * slime mold | 14 | RE | V |
| • *Arcyria cinerea* (Bulliard) Persoon * slime mold | 14,15 | RE | V |
| • *Arcyria denudata* (Linnaeus) Sheldon * carnival candy slime | 14,15 | RE | V |
| • *Arcyria incarnata* Persoon * slime mold | 15 | RE | V |
| • *Arcyria nutans* (Bulliard) Greville * slime mold | 14,15 | RE | V |
| • *Calonema aureum* Morgan * slime mold | 14 | RE | V |
| • *Hemitrichia clavata* (Persoon) Rostafinski * yellow-fuzz cone slime | 14,15 | RE | V |
| • *Hemitrichia intorta* Lister * slime mold | 14,15 | RE | V |
| • *Hemitrichia stipitata* Massalongo * slime mold | 15 | RE | V |
| • *Hemitrichia vesparium* (Batsch) Macbride * slime mold | 15 | RE | V |
| • *Lachnobolus globosus* (Schweinitz) Rostafinski * slime mold | 14,15 | RE | V |
| • *Ophiotheca wrightii* Berkeley & Curtis * slime mold | 14,15 | RE | V |
| • *Perichæna quadrata* Macbride * slime mold | 15 | RE | V |
| • *Trichia inconspicua* Rostafinski * slime mold | 14,15 | RE | V |

## ORDER STEMONITALES (stemonit slimes)

| | | | |
|---|---|---|---|
| **Family Stemonitaceae** | | | |
| • *Comatichia laxa* Rostafinski * slime mold | 14 | RE | V |
| • *Comatichia pulchella* (Babington) Rostafinski * slime mold | 14 | RE | V |
| • *Comatricha stemonitis* (Scopoli) Sheldon * slime mold | 15 | RE | V |
| • *Diachea leucopodia* (Bulliard) Rostafinski * white-footed slime | 15 | RE | V |
| • *Lamproderma arcyrionema* Rostafinski * slime mold | 14 | RE | V |
| • *Stemonitis fenestrata* Rex * slime mold | 14,15 | RE | V |
| • *Stemonitis fusca* Roth * slime mold | 14 | RE | V |
| • *Stemonitis herbatica* Peck * slime mold | 14 | RE | V |
| • *Stemonitis maxima* Schweinitz * slime mold | 14,15 | RE | V |
| • *Stemonitis smithii* Macbride * slime mold | 14,15 | RE | V |

# DIVISION PHYCOMYCOTA (algal fungi and water molds)

# CLASS CHYTRIDIOMYCETES (chytrids or cooking pot fungi)

## ORDER CHYTRIDIALES

| | | | |
|---|---|---|---|
| **Family Olpidiaceae** | | | |
| • *Rozella allomycis* Foust * water mold | 16 | LE,RE | V |
| **Family Synchytriaceae** | | | |
| • *Synchytrium decipiens* Farley, 1885 * water mold | 15,16 | LE,RE | V |
| **Family Phlyctidiaceae** | | | |
| • *Entophlyctis aurea* Haskins * water mold | 16 | LE,RE | V |

## ORDER BLASTOCLADIALES

| | | | |
|---|---|---|---|
| **Family Blastocladiaceae** | | | |
| • *Allomyces arbuscula* Butler, 1911 (amend 1933) * water mold | 16 | LE,RE | P,V |
| • *Blastocladia globosa* Kanouse, 1927 * water mold | 16 | LE,RE | P,V |
| • *Blastocladia pringsheimii* Reinsch, 1877 * water mold | 16 | LE,RE | P,V |
| • *Blastocladia ramosa* Thaxter, 1896 * water mold | 16 | LE,RE | P,V |
| • *Blastocladia simplex* Matthews, 1937 * water mold | 16 | LE,RE | P,Z |
| • *Blastocladia tenuis* Kanouse, 1927 * water mold | 16 | LE,RE | P,V |

## ORDER MONOBLEPHARIDALES

| | | | |
|---|---|---|---|
| **Family Gonapodyaceae** | | | |
| • *Gonapodya prolifera* (Cornu) Fischer, 1892 * water mold | 16 | LE,RE | P |
| **Family Monoblepharidaceae** | | | |
| • *Monoblepharis* sp. Cornu, 1872 * water mold | 16 | LE,RE | P |

## CLASS OOMYCETES (egg fungi)

### ORDER SAPROLEGNIACEAE

| Family Saprolegniaceae | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| • *Achlya americana* Humphrey, 1893 * water mold | 16 | LE,RE | P,S,V |
| • *Achlya bisexualis* Coker & Couch, 1927 * water mold | 16 | LE,RE | P |
| • *Achlya debaryana* Humphrey, 1893 * water mold | 16 | LE,RE | P |
| • *Achlya dubia* Coker, 1923 * water mold | 16 | LE,RE | P |
| • *Achlya flagellata* Coker, 1923 * water mold | 16 | LE,RE | P,S |
| • *Achlya klebsiana* Pieters, 1915 * water mold | 16 | LE,RE | P |
| • *Achlya polyandra* Hildebrand, 1867 * water mold | 16 | LE,RE | P,S |
| • *Achlya prolifera* (Nees vonEsenbeck) DeBary, 1852 * water mold | 16 | LE,RE | P |
| • *Achlya proliferoides* Coker, 1923 * water mold | 16 | LE,RE | P |
| • *Achlya rodrigueziana* Wolf, 1941 * water mold | 16 | LE,RE | P |
| • *Achlya* sp. Nees vonEsenbeck * water mold | 16 | LE,RE | P |
| • *Aphanomyces euteiches* Drechsler, 1925 * water mold | 16 | LE,RE | P,S,V |
| • *Aphanomyces laevis* DeBary, 1860 * water mold | 16 | LE,RE | P,S,V |
| • *Aphanomyces scaber* DeBary, 1860 * water mold | 16 | LE,RE | P,S |
| • *Aphanomyces* sp. DeBary * water mold | 16 | LE,RE | P |
| • *Dictyuchus anomalus* Nagai * water mold | 16 | LE,RE | P |
| • *Dictyuchus missouriensis* Couch, 1931 * water mold | 16 | LE,RE | P,S |
| • *Dictyuchus monosporus* Leitgeb, 1869 * water mold | 16 | LE,RE | P,S |
| • *Dictyuchus pseudodictyon* Coker & Braxton, 1931 * water mold | 16 | LE,RE | P,S |
| • *Dictyuchus* sp. Leitgeb, 1868 * water mold | 16 | LE,RE | P |
| • *Geolegnia inflata* Coker & Harvey, 1925 * water mold | 16 | LE,RE | P,S |
| • *Isoachlya* sp.? Kauffman, 1921 * water mold | 16 | LE,RE | P |
| • *Leptolegnia subterranea* Coker & Harvey, 1925 * water mold | 16 | LE,RE | P,S |
| • *Protoachlya paradoxa* (Coker) Coker, 1923 * water mold | 16 | LE,RE | P,S |
| • *Saprolegnia diclina* Humphrey, 1893 * water mold | 16 | LE,RE | P |
| • *Saprolegnia ferax* (Gruithuysen) Thuret, 1850 * water mold | 16 | LE,RE | P |
| • *Saprolegnia monoica* Pringsheim, 1858 * water mold | 16 | LE,RE | P |
| • *Saprolegnia parasitica* Coker, 1923 * water mold | 16 | LE,RE | P,Z |
| • *Saprolegnia* sp. Nees vonEsenbeck, 1823 * water mold | 16 | LE,RE | P |

### ORDER LEPTOMITALES

| Family Leptomitaceae | | | |
|---|---|---|---|
| • *Apodachlya brachynema* (Hildebrand) Pringsheim, 1883 * water mold | 16 | LE,RE | P,V,Z |

### ORDER LAGENIDALES

| Family Olpidiopsidaceae | | | |
|---|---|---|---|
| • *Olpidiopsis saprolegniae* (Braun) Cornu * water mold | 16 | LE,RE | P |
| • *Olpidiopsis varians* Shanor, 1939 * water mold | 16 | LE,RE | P |

### ORDER PERONOSPORALES (downy mildews)

| Family Pythiaceae | | | |
|---|---|---|---|
| • *Phytophthora cactorum* (Lebert & Cohn) Schröt * crown rot | 28 | CK | V |
| • *Phytophthora undulatum* [?=*Pythium undulatum* Petersen] * downy mildew | 16 | LE,RE | S |
| • *Pythium aphanidermatum* (Edson) Fitzpatrick, 1923 * downy mildew | 16 | LE,RE | S |
| • *Pythium cystosiphon*? (Roze & Cornu) Lindstedti, 1872 * downy mildew | 16 | LE,RE | S |
| • *Pythium debaryanum* Hesse, 1874 * downy mildew | 16 | LE,RE | S |
| • *Pythium proliferum* Schenk, 1859 * downy mildew | 16 | LE,RE | S |
| • *Pythium pulchrum* vonMinden, 1916 * downy mildew | 16 | LE,RE | S |
| • *Pythium ultimum* Trowbridge, 1901 * downy mildew | 16 | LE,RE | S |
| • *Pythium* sp. Pringsheim * downy mildew | 16 | LE,RE | S |
| **Family Peronosporaceae** | | | |
| • *Cystopus bliti* (DeBivonona-Bernardi) Léveillé * downy mildew | 15 | RE | V |
| • *Cystopus candidus* (Persoon) Léveillé * downy mildew | 15 | RE | V |
| • *Plasmopara sordida* Berkeley * downy mildew | 15 | RE | V |

| Family Peronosporaceae (continued) | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| • *Plasmopara viticola* (Berkeley & Curtis) Berkeley & DeToni * downy mildew of grape | 15,28 | CK,ES,RE | V |
| • *Peronospora geranii* Peck * downy mildew | 15 | RE | V |
| • *Peronospora parasitica* (Peck) Tulasne * downy mildew | 15 | RE | V |

## CLASS ZYGOMYCETES (pair fungi)

### ORDER ENTOMOPHTHORALES

**Family Entomophthoraceae**

| | | | |
|---|---|---|---|
| • *Empusa grylli* (Fresenius) Nowakowski * mold | 15 | RE | V |

### ORDER MUCORALES

**Family Mucoraceae**

| | | | |
|---|---|---|---|
| • *Mucor stolonifer* Ehrenberg * mold | 15 | RE | V |
| • *Rhizopus* sp. Ehrenberg * bread mold | 28 | CK | V |

## DIVISION ASCOMYCOTA (ascomycetes or bladder fungi)

## CLASS HEMIASCOMYCETES (yeasts)

### ORDER PROTOMYCETALES

**Family Protomycetaceae**

| | | | |
|---|---|---|---|
| • *Taphrina communis* (Sadebeck) Giesenh * plum pockets | 28 | CK | V |
| • *Taphrina deformans* (Berkeley) Tulasne * peach leaf curl | 28 | CK | V |

## CLASS LOCULOASCOMYCETES (rots & scabs)

### ORDER MYRIANGIALES

**Family Elsinoëaceae**

| | | | |
|---|---|---|---|
| • *Elsinoë corni* Jenkins & Bitancourt * dogwood anthracnose | 28 | CK | V |

### ORDER DOTHIDEALES

**Family Dothioraceae**

| | | | |
|---|---|---|---|
| • *Botryosphaeria dothidea* (Moug.) Ces. & DeNotaris * white apple rot | 28 | CK | V |
| • *Botryosphaeria obtusa* (Schweinitz) Shoemaker * black apple rot | 28 | CK | V |

**Family Dothideaceae**

| | | | |
|---|---|---|---|
| • *Mycosphaerella fragariae* (Tulasne) Lindau * strawberry leaf spot | 28 | CK | V |
| • *Plowrightia morbosa* (Schweinitz) Saccardo * rot | 15 | RE | V |
| • dothidean spp. * pear sooty molds | 28 | CK | V |

### ORDER PLEOSPORALES

**Family Venturiaceae**

| | | | |
|---|---|---|---|
| • *Apiosporina morbosa* (Schweinitz) Arx* black knot | 28 | CK | V |
| • *Venturia inaequalis* (Cooke) Winter * apple scab | 28 | CK | V |
| • *Venturia pyrina* Aderhold * pear scab | 28 | CK | V |

## CLASS PLECTOMYCETES (ascomolds)

### ORDER EUROTIALES [=ASPERGILLALES]

**Family Trichocomaceae**

| | | | |
|---|---|---|---|
| • *Aspergillus herbariorum* Wiggers * mold | 15 | RE | V |
| • *Aspergillus niger* VanTieghem * mold | 15 | RE | V |
| • *Penicillium crustaceum* Linnaeus * mold | 15 | RE | V |
| • *Penicillium* sp. Link * blue mold | 28 | CK | V |

**Family Ophiostomataceae**

| | | | |
|---|---|---|---|
| • *Ophiostoma ulmi* (Buisman) Nannfeldt [=*Ceratocystis ulmi*] * Dutch elm disease | 28 | CK | V |

## CLASS PYRENOMYCETES (flask fungi)

### ORDER ERYSIPHALES (powdery mildews)

| Family Erysiphaceae | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| • *Erysiphe cichoracearum* DeCandolle * powdery mildew | 15 | RE | V |
| • *Erysiphe communis* (Wallroth) Fries * powdery mildew | 15 | RE | V |
| • *Erysiphe montagnei* Léveillé * powdery mildew | 15 | RE | V |
| • *Erysiphe polygoni* DeCandolle * black locust powdery mildew | 15 | RE | V |
| • *Microsphæra alni* (DeCandolle) Winter * lilac powdery mildew | 15,28 | CK,RE | V |
| • *Microsphæra diffusa* Curtis & Peck * powdery mildew | 15 | RE | V |
| • *Microsphæra ravenellii* Berkeley * powdery mildew | 15 | RE | V |
| • *Microsphaera viburni* (Schweinitz) Howe * powdery mildew | 28 | CK | V |
| • *Phyllactinia corylea* (Persoon) Karsten [=*P. guttata*] * tree powdery mildew | 15 | RE | V |
| • *Podosphaera leucotricha* (Ellis & Everhart) Salmon * apple powdery mildew | 28 | CK | V |
| • *Podosphæra oxyacanthæ* (DeCandolle) DeBary * powdery mildew | 15 | RE | V |
| • *Sphærotheca castagnei* Léveillé * downy mildew | 15 | RE | V |
| • *Uncinula necator* (Schweinitz) Burrill * grape powdery mildew | 28 | CK | V |

### ORDER XYLARIALES (xylari flask fungi)

| Family Xylariaceae | | | |
|---|---|---|---|
| • *Daldinia cingulata* (Léveillé) Saccardo * zoned black fungus | 15 | RE | V |
| • *Hypoxylon* sp. Fries * wood-wart | 15 | RE | V |
| • *Xylaria digitata* (Linnaeus) Greville * finger fungus | 15 | RE | V |
| • *Xylaria polymorpha* (Persoon) Greville * dead man's fingers | 15 | RE | V |

### ORDER DIAPORTHALES (diaporth flask fungi)

| Family Diaporthaceae | | | |
|---|---|---|---|
| • *Apiognomonia veneta* (Saccardo & Spegazzini) Höhn [=*Gnomonia platani* Kleb] * sycamore anthracnose | 28 | CK | v |
| • *Cryphonectria parasitica* (Murrill) Barr [=*Endothia parasitica* (Murrill) Anderson & Anderson] * chestnut blight | 28 | CK | V |
| • *Diaporthe ailanthi* Saccardo * flask fungus | 15 | RE | V |
| • *Glomerella cingulata* (Stoneman) Spaulding & Schrenk * apple bitter rot | 28 | CK | V |
| • *Guignardia bidwellii* (Ellis) Viala & Ravaz * grape black rot | 15,28 | CK,RE | V |

### ORDER HYPOCREALES

| Family Hypocreaceae | | | |
|---|---|---|---|
| • *Leucostoma* sp. (Nitschke) Höhn [=*Cytospora* sp.] * peach canker | 28 | CK | V |
| • *Nectria galligena* Bres. * nectria canker | 28 | CK | V |

### ORDER CLAVICIPITALES (clavicipit flask fungi)

| Family Clavicipitaceae | | | |
|---|---|---|---|
| • *Claviceps purpurea* (Fries) Tulasne * ergot claviceps | 15 | RE | V |
| • *Cordyceps militaris* (Linnaeus) Link * military orange caterpillar fungus | 15 | RE | Z |

## CLASS DISCOMYCETES (disc fungi)

### ORDER PHACIDIALES

| Family Rhytismataceae | | | |
|---|---|---|---|
| • *Rhytisma* sp. Fries * maple tar spot | 28 | CK | V |

### ORDER HELOTIALES (earth tongues)

| Family Dermateaceae | | | |
|---|---|---|---|
| • *Blumeriella jaapii* (Rehn) Arx [=?*Coccomyces hiemalis*] * cherry leaf spot | 28 | CK | V |
| • *Pseudopeziza medicaginis* (Libon) Saccardo * leaf spot | 15 | RE | V |
| **Family Sclerotiniaceae** | | | |
| • *Monilinia fructicola* (Winter) Honey * stone fruits brown rot | 28 | CK | V |
| • *Sclerotinia fructigena* (Persoon) Schroeter * rind rot | 15 | ES | V |

## ORDER PEZIZALES (cup fungi and allies)

| | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| **Family Pezizaceae** | | | |
| • *Lachnea scutellata* Linnaeus * patella | 15 | RE | V |
| • *Macropodia semitosta* Berkeley & Curtis [=*Paxina s.*] * paxina | 15 | RE | V |
| • *Patella setosa* (Nees vonEsenbeck) Seaver * cup fungus | 28 | CK | V |
| **Family Aleuriaceae** | | | |
| • *Aleuria aurantia* (Persoon) * orange peel fungus | 28 | CK | S,V |
| **Family Morchellaceae (morels)** | | | |
| • *Morchella esculenta* Fries * common morel | 28 | CK | S |

## DIVISION BASIDIOMYCOTA (basidomycetes or small base fungi)

## CLASS TELIOMYCETES (rust and smut fungi)

## ORDER UREDINALES (rust fungi)

| | | | |
|---|---|---|---|
| **Family Pucciniastraceae** | | | |
| • *Pucciniastrum agrimoniæ* (DeCandolle) Dietrich * rust | 15 | RE | V |
| **Family Melampsoraceae** | | | |
| • *Coleosporium sonchi-arvensis* (Peck) Léveillé * rust | 15 | RE | V |
| • *Melampsora salicis-capreæ* (Peck) Winter * melampsora rust | 15 | RE | V |
| **Family Pucciniaceae** | | | |
| • *Aecidium cimicifugatum* Schweinitz * rust | 15 | RE | V |
| • *Aecidium compositatum* Martius * rust | 15 | RE | V |
| • *Aecidium fraxini* Schweinitz * rust | 15 | RE | V |
| • *Aecidium grossulariæ* DeCandolle * rust | 15 | RE | V |
| • *Aecidium impatientis* Schweinitz * rust | 15 | RE | V |
| • *Aecidium nesææ* Gerard * rust | 15 | RE | V |
| • *Aecidium oenotheræ* Peck * rust | 15 | RE | V |
| • *Aecidium pammelii* Trelease * rust | 15 | RE | V |
| • *Aecidium pustulatum* Curtis * rust | 15 | RE | V |
| • *Allodus podophylli* (Schweinitz) Arthur * May-apple rust | 28 | CK | V |
| • *Gymnoconia peckiana* Howe * rust | 15 | RE | V |
| • *Gymnoconia* sp. Lagerheim * orange rust | 28 | CK | V |
| • *Gymnosporangium globosum* Farley * rust | 15 | RE | V |
| • *Gymnosporangium juniperi-virginianae* Schweinitz * cedar-apple rust | 28 | CK | V |
| • *Gymnosporangium nidus-avis* Thaxter [=*Aecidium nidus-avis* Thaxter] * rust | 15 | RE | V |
| • *Kunkelia nitens* (Schweinitz) Arthur * blackberry rust | 28 | CK | V |
| • *Negrido caladii* (Schweinitz) Arthur * Jack in the pulpit rust | 28 | CK | V |
| • *Phragmidium obtusum* Winter * rust | 15 | RE | V |
| • *Puccinia caricis* (Peck) Fuckel [=*P. caricina*] * current rust | 15 | RE | V |
| • *Puccinia coronata* Corda, 1837 * buckthorn crown rust | 15 | RE | V |
| • *Puccinia fraxinata* (Link) Arthur * rust | 15 | RE | V |
| • *Puccinia glechomatis* DeCandolle, 1808 * rust | 15 | RE | V |
| • *Puccinia graminis* Persoon, 1801 * grape rust | 15 | RE | V |
| • *Puccinia helianthi* Schweinitz, 1822 * rust | 15 | RE | V |
| • *Puccinia malvacearum* Montagne * rust | 15 | RE | V |
| • *Puccinia menthæ* Persoon * rust | 15 | RE | V |
| • *Puccinia osmorhizæ* * rust | 15 | RE | V |
| • *Puccinia podophylli* Schweinitz * rust | 15 | RE | V |
| • *Puccinia polygoni-amphibii* Persoon * rust | 15 | RE | V |
| • *Puccinia seymeriæ* Burlingham * rust | 15 | RE | V |
| • *Puccinia simplex* Peck * rust | 15 | RE | V |
| • *Puccinia taraxaci* Plowright * rust | 15 | RE | V |
| • *Puccinia xanthii* Schweinitz * rust | 15 | RE | V |
| • *Uromyces euphorbiæ* Curtis & Peck * rust | 15 | RE | V |
| • *Uromyces phaseoli* (Persoon) Winton * rust | 15 | RE | V |
| • *Uromyces striatus* Schroeter * rust | 15 | RE | V |
| • *Uromyces toxicodendri* Berkeley & Ravenel * rust | 15 | RE | V |
| • *Uromyces trifolii* (Hedwig) Léveillé * rust | 15 | RE | V |

## ORDER USTILAGINALES (smut fungi)

| | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| **Family Ustilaginaceae** | | | |
| • *Ustilago avenæ* (Persoon) Jensen * smut | 15 | RE | V |
| • *Ustilago hordei* (Peck) Keller & Swingle * smut | 15 | RE | V |
| • *Ustilago maydis* (DeCandolle) Corda * corn smut | 28 | CK | V |
| • *Ustilago zeæ* (Beckmann) Unger * smut | 15,28 | CK,RE | V |
| **Family Tilletiaceae** | | | |
| • *Entyloma menispermi* Farley & Trelease * smut | 15 | RE | V |

## CLASS PHRAGMOBASIDIOMYCETES (jelly and waxy fungi)

### ORDER EUTREMELLALES [=TRELLMALES] (jelly fungi)

| | | | |
|---|---|---|---|
| **Family Tremellaceae** | | | |
| • *Exidia spiculosa* (Gray) Sommier * jelly fungus | 28 | CK | V |
| • *Tremella candida* Herbert * jelly fungus | 15 | RE | V |

### ORDER METATREMELLALES (waxy fungi)

| | | | |
|---|---|---|---|
| **Family Dacrymycetaceae** | | | |
| • *Calocera cornea* Fries Batsch * clublike tuning fork | 15 | RE | V |

## CLASS HYMENOMYCETES (exposed hymenium fungi)

### ORDER AGARICALES (coral and pore fungi)

| | | | |
|---|---|---|---|
| **Family Corticiaceae** | | | |
| • *Stereum candidum* Schweinitz * sereum | 15 | RE | V |
| • *Stereum disciforme* DeCandolle * sereum | 15 | RE | V |
| • *Stereum fasciatum* Schweinitz * sereum | 15 | RE | V |
| • *Stereum frustulosum* (Persoon) Fries * false turkeytail fungus | 28 | CK | V |
| • *Stereum versicolor* (Schweinitz) Fries * sereum | 15 | RE | V |
| **Family Schizophyllaceae** | | | |
| • *Schizophyllum commune* Fries * spit-gilled bracket | 15 | RE | V |
| **Family Hydnaceae** | | | |
| • *Steccherinum ochraceum* (Persoon) Gray * hydnum tooth fungus | 28 | CK | V |
| **Family Polyporaceae** | | | |
| • *Atrichum undulatum* (Hedwig) Beauvois * wavy Catherinea mushroom | 28 | CK | V |
| • *Bjerkandera adusta* (Willdenow & Fries) Karsten, 1897 [=*Polyporus adustus* (Willdenow) Fries * pore fungus | 28 | CK | V |
| • *Daedalea confragosa* (Bolton) Fries * currycomb bracket fungus | 28 | CK | V |
| • *Daedalea quercina* (Linnaeus) Fries * oak mazegill fungus | 28 | CK | V |
| • *Favolus alveolaris* (DeCandolle) Quélet * pore fungus | 28 | CK | V |
| • *Fomes applanatus* Persoon * artist's fomes | 15 | RE | V |
| • *Fomes everhartii* (Ellis & Galloway) vonSchrenk * artist's type fungus | 28 | CK | V |
| • *Fomes ohioensis* (Berkeley) Murray * artist's type fungus | 28 | CK | V |
| • *Ganoderma applanatum* (Persoon) Patrick * artist's shelf fungus | 28 | CK | V |
| • *Hydrochaete olivacea* (Schweinitz) Banker, 1914 [=*Irpex cinnamonea* Fries, 1838] * red leather fungus | 15,28 | CK,RE | V |
| • *Irpex lacteus* Fries, 1828 * white leather fungus | 15 | RE | V |
| • *Laetiporus sulphurous* (Fries) Merrill, 1920 [=*Polyporus sulphureus* Fries, 1821] * sulfur polypore | 15 | RE | V |
| • *Lenzites betulina* (Linnaeus) Fries * birch mazegill fungus | 28 | CK | V |
| • *Lenzites sepiaria* (Wulfen) Fries * gill polypore | 15 | RE | V |
| • *Oligoporus tephroleucus* (Fries) Gilbertson & Ryvarden, 1985 [=*Polyporus tephroleucus* Fries] * pore fungus | 28 | CK | V |
| • *Phaeolus schweinitzii* (Fries) Patouillard, 1900 [=*Polyporus schweinitzii* Fries, 1821] * polypore | 15 | RE | V |
| • *Phellinus gilvus* (Schweinitz) Patouillard, 1900 [=*Polyporus gilvus* Schweinitz] * polypore | 15,28 | CK,RE | V |
| • *Polyporus arcularius* (Batsch) Fries, 1821 * polypore | 15,28 | CK,RE | V |
| • *Polyporus carneus* Nees vonEsenbeck * polypore | 15 | RE | V |
| • *Polyporus elegans* (Bulliard) Fries, 1838 * pore fungus | 28 | CK | V |

| Family Polyporaceae (continued) | SOURCE | LOCATION | HAB TAT |
|---|---|---|---|
| • *Polyporus squamosus* (Hudson) Fries, 1821 * Dryad's saddle fungus | 28 | CK | V |
| • *Pyenoporus cinnibarinus* (vonJacquin & Fries) Karsten, 1881 [=*Polystictus cinnabarinus* (vonJacquin) Fries] * cinnabar polypore | 15 | RE | V |
| • *Trametes conchifer* (Schweinitz & Fries) Pilat, 1939 [=*Polyporus conchifer* (Schweinitz) Fries, 1828] * pore fungus | 28 | CK | V |
| • *Trametes versicolor* (Linnaeus & Fries) Pilat, 1936 [=*Coriolus versicolor* (Linnaeus) Quélet] [=*Polyporus versicolor* (Linnaeus) Fries, 1821] * turkeytail or pore fungus | 28 | CK | V |
| • *Polystictus hirsutus-albiporus* Peck * polypore | 15 | RE | V |
| • *Poria unita* (Persoon) Karsten * pore fungus | 28 | CK | V |
| **Family Clavariaceae** | | | |
| • *Clavaria flaccida* Fries * soft coral fungus | 15 | RE | S |
| • *Clavaria pyxidata* Persoon * edible coral fungus | 15 | RE | S |
| • *Clavaria* sp. Linnaeus * coral mushroom | 28 | CK | S |
| **Family Tricholomataceae** | | | |
| • *Clitocybe infundibuliformis-membranacea* Fries * funnel clitocybe | 15 | RE | S |
| • *Collybia delicatella* Peck * collybia | 15 | RE | S |
| • *Collybia dryophila* (Bulliard) Fries * oak-loving collybia or russet tough-shank | 15 | RE | S |
| • *Collybia myriadophylla* Peck * conifer collybia | 15 | RE | S |
| • *Collybia platyphylla* Fries * broad-gilled collybia | 15 | RE | S |
| • *Lentinus sulcatus* Berkeley * lentinus | 15 | RE | S |
| • *Marasmius albiceps* Peck * marasmius | 15 | RE | S |
| • *Marasmius candidus* Bolton * marasmius | 15 | RE | S |
| • *Marasmius nigripes* (Schweinitz) Fries * marasmius | 15 | RE | S |
| • *Marasmius oreades* Fries * fairy-ring mushroom | 28 | CK | S |
| • *Marasmius siccus* Schweinitz * orange pin-wheel | 15 | RE | S |
| • *Marasmius trullisatipes* Peck * marasmius | 15 | RE | S |
| • *Mycena capillaris* Schumacher * bonnet mushroom | 15 | RE | S |
| • *Pleurotus sapidus* Kalchbrenner * lavender-spored pleurotus | 15,28 | CK,RE | S |
| • *Tricholoma albo-flavidum* Peck * knight-cap | 15 | RE | S |
| **Family Russulaceae** | | | |
| • *Lactarius rimosellus* Peck * milk cap | 15 | RE | S |
| • *Lactarius subdulcis* (Bulliard) Fries * dull milk cap | 15 | RE | S |
| • *Lactarius theiogalus* (Bulliard) Fries * yellow -straining milk cap | 15 | RE | S |
| • *Russula alutacea* Fries * red brittle gills | 15 | RE | S |
| • *Russula compacta* Frost * compact brittle gills | 15 | RE | S |
| • *Russula ftens* (Persoon) Fries * fetid brittle gills | 15 | RE | S |
| • *Russula pectinata* (Bulliard) Fries * brittle gills | 15 | RE | S |
| • *Russula xerampelina* Fries * crab-scented brittle gills | 15 | RE | S |
| **Family Amanitaceae** | | | |
| • *Amanita phalloides* Fries * death cup | 15 | RE | S |
| • *Amanitopsis vaginata* Bulliard * sheathed amanitopsis | 15 | RE | S |
| • *Panus rudis* Fries * rudy panus | 15 | RE | V |
| • *Panus strypticus* (Bulliard) Fries * field type mushroom | 28 | CK | S |
| **Family Rhodophyllacea** | | | |
| • *Entoloma* sp. Fries * entoloma | 15 | RE | S |
| **Family Vovlariaceae** | | | |
| • *Pluteus cervinus* (Schaeffer) Fries * fawn-colored pluteus | 15 | RE | S |
| **Family Lepiotaceae** | | | |
| • *Lepiota adirondackensis* Peck * Adirondacks lepiota | 15 | RE | S |
| • *Lepiota cristata* Albertini & Schweinitz * crested lepiota | 15 | RE | S |
| • *Lepiota erminea* Fries * ermine lepiota | 15 | RE | S |
| • *Lepiota illinita* Fries * lepiota | 15 | RE | S |
| • *Macrolepiota procera* (Scopoli) Singer * parasol mushroom [=*Lepiota procera* (Fries) Gray [=*Leucocoprinus p.* Fries] | 28 | CK | S |
| **Family Agaricaceae** | | | |
| • *Agaricus campestris* Fries * meadow mushroom | 28 | CK | S |

| Family Agaricaceae (continued) | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| • *Agaricus comtulus* Fries * agaricus | 15 | RE | S |
| • *Armillaria mellea* (Fries) Kummer * honey mushroom | 28 | CK | S |
| • *Clitopilus abortivus* Berkeley & Curtis * field type mushroom | 28 | CK | S |
| • *Crepidotus malachius* Berkeley & Curtis * spotted stumpfoot | 28 | CK | S |
| **Family Gomphidiaceae** | | | |
| • *Gomphidius* sp. Fries * gomphidius | 15 | RE | S |
| **Family Boletaceae** | | | |
| • *Boletus chrysenteron* Fries * golden-flesh or red-crack bolete | 15 | RE | S |
| • *Boletus piperatus* Bulliard * edible bolete | 15 | RE | S |
| • *Gyrodom merulioides* (Schweinitz) Singer * fleshy pore fungus or bolete | 28 | CK | S |
| • *Strobilomyces strobilaceus* (Scopoli) Berkeley * old-man-of-the-woods | 15 | RE | S |
| **Family Cortinariaceae** | | | |
| • *Galera* sp. Fries [=? *Galerina* sp.] * deadly galerina | 15 | RE | S |
| • *Inocybe* sp. Fries * fiber cap | 15 | RE | S |
| • *Pholiota unicolor* Fries * scalecap mushroom | 28 | CK | S |
| • *Psilocybe ammophila* Montagne * psilocybe | 15 | RE | S |
| **Family Coprinaceae** | | | |
| • *Coprinus fuscescens* (Schaeffer) Fries * ink-cup | 15 | RE | S |
| • *Coprinus micaceus* (Bulliard) Fries * glistening ink-cup | 15 | RE | S |

## CLASS GASTEROMYCETES (stomach fungi)

### ORDER PHALLALES

**Family Phallaceae**

| | | | |
|---|---|---|---|
| • *Mutinus caninus* Fries * dog stinkhorn | 28 | CK | S |

### ORDER LYCOPERDALES (puffballs)

**Family Lycoperdaceae**

| | | | |
|---|---|---|---|
| • *Bovista pila* Berkeley & Curtis * common puffball | 28 | CK | S |
| • *Calvatia gigantea* Persoon * giant puffball | 28 | CK | S |
| • *Geaster hygrometricus* Persoon [=*Astracus h.*] * water measuring earthstar | 15 | RE | S |
| • *Lycoperdon perlatum* Persoon * gem puffball | 28 | CK | S |
| • *Lycoperdon pusillum* Persoon * mini puffball | 15,28 | CK,RE | S |
| • *Lycoperdon pyriforme* (Schaeffer) Persoon * pear-shaped or stump puffball | 15,28 | CK,RE | S |
| • *Myriostoma coliformis* (Dickson) Corda * pepper box | 19 | RE | S |

### ORDER TULOSTOMATALES (stalked puffballs)

**Family Tulostomataceae**

| | | | |
|---|---|---|---|
| • *Tulostoma campestre* Morgan * field tylostoma | 19 | RE | S |
| • *Tulostoma fimbriatum* Fries * buried-stalk puffball | 15 | RE | S |

### ORDER SCLERODERMATALES

**Family Sclerodermataceae**

| | | | |
|---|---|---|---|
| • *Scleroderma citrinum* Persoon * common earth ball | 28 | CK | S |

### ORDER NIDULARIALES (bird's-nest fungi)

**Family Nidulariaceae**

| | | | |
|---|---|---|---|
| • *Cyathus striatus* (Hudson) Hoffmann * fluted bird's nest | 15 | RE | S |

## DIVISION DEUTEROMYCOTA (second or imperfect fungi)

## CLASS HYPOMYCETES

### ORDER HYPHOMYCETALES

**Family Moniliaceae**

| | | | |
|---|---|---|---|
| • *Botrytis cinerea* Persoon * raspberry mold | 28 | CK | V |
| • *Cladosporium carpophilum* Theum. * peach scab | 28 | CK | V |
| • *Didymaria ungeri* Corda * imperfect fungus | 15 | RE | V |
| • *Ovularia obliqua* Oudemans * imperfect fungus | 15 | RE | V |
| • *Ramularia arvensis* Saccardo * imperfect fungus | 15 | RE | V |
| • *Ramularia celastiri* Ellis & Martin * imperfect fungus | 15 | RE | V |

| | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| **Family Moniliaceae (continued)** | | | |
| • *Ramularia variabilis* Fuckel * imperfect fungus | 15 | RE | V |
| • *Rhinotrichum curtisii* Berkeley * imperfect fungus | 15 | RE | V |
| **Family Dematiaceae** | | | |
| • *Cercospora chenopodii* Fresenius * imperfect fungus | 15 | RE | V |
| • *Cercospora clavata* (Gerard) Cooke * imperfect fungus | 15 | RE | V |
| • *Cercospora helianthi* Ellis & Everhart * imperfect fungus | 15 | RE | V |
| • *Cercospora maianthemi* Fuckel * imperfect fungus | 15 | RE | V |
| • *Cercospora monoica* Ellis & Holwick * imperfect fungus | 15 | RE | V |
| • *Cercospora osmorhizæ* Ellis & Everhart * imperfect fungus | 15 | RE | V |
| • *Cercospora oxybaphi* Ellis & Halsted * imperfect fungus | 15 | RE | V |
| • *Cercospora tuberosa* Ellis & Keller * imperfect fungus | 15 | RE | V |
| • *Drechslera teres* (Saccardo) Shoemaker [=*Helminthosporium teres* Saccardo] * imperfect fungus | 15 | RE | V |
| • *Macrosporium saponariæ* Peck * imperfect fungus | 15 | RE | V |
| • *Macrosporium solani* Ellis & Martin * imperfect fungus | 15 | RE | V |
| **ORDER TUBERCULARIALES** | | | |
| **Family Tuberculariaceae** | | | |
| • Tuberculina persicina (Ditmar) Saccardo [=*Tubercularia persicina* Ditmar] * imperfect fungus | 15 | RE | V |
| **CLASS COELOMYCETES** | | | |
| **ORDER MELANCONIALES** | | | |
| **Family Melanconiaceae** | | | |
| • *Cylindrosporium padi* Karsten * imperfect fungus | 15 | RE | V |
| • *Gleosporium irregulare* Peck * imperfect fungus | 15 | RE | V |
| • *Gleosporium nervisequum* (Fuckel) Saccardo * imperfect fungus | 15 | RE | V |
| • *Gleosporium septorioides* Saccardo * imperfect fungus | 15 | RE | V |
| • *Marsonia toxicodendri* (Ellis & Martin) Saccardo * imperfect fungus | 15 | RE | V |
| **ORDER SPHAEROPSIDALES** | | | |
| **Family Sphaeropsidaceae [=Phomaceae]** | | | |
| • *Cicinnobolus cesatii* DeBary * imperfect fungus | 15 | RE | V |
| • *Coniothyrium* sp. Corda * raspberry cane blight | 28 | CK | V |
| • *Diplodia maydis* (Berkeley) Saccardo [=*Diplopocila maydis*] * corn ear rot | 28 | CK | V |
| • *Phoma uvicola* Berkeley & Curtis * imperfect fungus | 15 | RE | V |
| • *Phyllosticta cruenta* (Fries) Kicks * imperfect fungus | 15 | RE | V |
| • *Phyllosticta iridis* Ellis & Everhart * imperfect fungus | 15 | RE | V |
| • *Phyllosticta palustri* Ellis & Keller * imperfect fungus | 15 | RE | V |
| • *Phyllosticta phaseolina* Saccardo * imperfect fungus | 15 | RE | V |
| • *Septoria ægopodii* Desmazieres * imperfect fungus | 15 | RE | V |
| • *Septoria aquilegiæ* Ellis & Keller * imperfect fungus | 15 | RE | V |
| • *Septoria erigerontis* Peck * imperfect fungus | 15 | RE | V |
| • *Septoria lactucicola* Ellis & Martin * imperfect fungus | 15 | RE | V |
| • *Septoria littorea* Saccardo * imperfect fungus | 15 | RE | V |
| • *Septoria lophanthi* Winton * imperfect fungus | 15 | RE | V |
| • *Septoria musiva* Peck * imperfect fungus | 15 | RE | V |
| • *Septoria ochroleuca* Berkeley & Curtis * imperfect fungus | 15 | RE | V |
| • *Septoria oenotheræ* Westend * imperfect fungus | 15 | RE | V |
| • *Septoria palustris* Diéd [=*Septoria violæ* Westend] * imperfect fungus | 15 | RE | V |
| • *Septoria podophyllina* Peck * imperfect fungus | 15 | RE | V |
| • *Septoria polygonorum* Desmazieres * imperfect fungus | 15 | RE | V |
| • *Septoria rubi* Westend * imperfect fungus | 15 | RE | V |
| • *Septoria scrophulariæ* Peck * imperfect fungus | 15 | RE | V |
| **Family Leptostromataceae** | | | |
| • *Peltaster fructicola* * apple sooty blotch mold | 28 | CK | V |
| • *Zygophiala jamaicensis* Mason * apple flyspeck | 28 | CK | V |

## DIVISION MYCOPHYCOPHYTA (lichens or fungus algae)

## CLASS ASCOLICHENES (ascomycote lichens)

| | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| **ORDER PYRENULALES** | | | |
| **Family Verrucariaceae** | | | |
| • *Verrucaria muralis* Acharius [=*V. rupestris* Schrader, 1794] * pitted lichen | 11 | RE | R |
| **Family Pyrenulaceae** | | | |
| • *Arthopyrenia alba* (Schrader) Zahlbruckner, 1922 * lichen | 11 | RE | V |
| • *Microthelia micula* Koerber, 1855 * lichen | 11 | RE | V |
| • *Pyrenula leucoplaca* (Wallroth) Koerber [=*P. farrea* (Acharius) Branth & Rostrup, 1869] * lichen | 11 | RE | V |
| **Family Trypetheliaceae** | | | |
| • *Trypethelium virens* Tuckerman, 1853 * lichen | 11 | RE | V |
| **ORDER CALICIALES** | | | |
| **Family Caliciaceae** | | | |
| • *Coniocybe furfuracea* (Linnaeus) Acharius, 1816 * lichen | 11 | RE | V |
| **ORDER HYSTERIALES** | | | |
| **Family Arthoniaceae** | | | |
| • *Arthonia punctiformis* Acharius, 1810 * lichen | 11,13 | RE | V |
| • *Arthonia radiata* (Persoon) Acharius, 1808 [=*A. r. swartziana* (Acharius) Willey] * lichen | 11,13 | RE | V |
| • *Arthothelium spectabile* Massalongo, 1852 * lichen | 11 | RE | V |
| **Family Graphidaceae** | | | |
| • *Graphis scripta* (Linnaeus) Acharius, 1809 * script lichen | 11 | RE | V |
| • *Opegrapha lichenoides* Persoon, 1794 * lichen | 11 | RE | V |
| • *Opegrapha pulicaris* (Hoffmann) Schrader [=*O. varia* Persoon, 1794] * lichen | 11 | RE | V |
| • *Opegrapha viridis* Persoon, 1803 * lichen | 11 | RE | V |
| **ORDER LECANORALES** | | | |
| **Family Diploschistaceae** | | | |
| • *Conotrema urceolatum* (Acharius) Tuckerman, 1848 * lichen | 11 | RE | V |
| **Family Collemataceae** | | | |
| • *Collema subfurvum* (Müller-Argoviensis) Degelius, 1954 * lichen | 12 | RE | R,V |
| • *Leptogium lichenoides* (Linnaeus) Zahlbruckner, 1924 * lichen | 11 | RE | V |
| • *Leptogium tenuissimum* (Dickson) Fries, 1835 * lichen | 11 | RE | V |
| • *Leptogium tremelloides* (Linnaeus) Gray, 1821 * lichen | 11 | RE | V |
| **Family Pannariaceae** | | | |
| • *Placynthium nigrum* (Hudson) Gray, 1821 * lichen | 11 | RE | R |
| **Family Stictaceae** | | | |
| • *Sticta pulmonaria* (Linnaeus) Biroli, 1808 [=*Lobaria p.* (Linnaeus) Hoffmann] * leather lichen | 11,12 | RE | R,V |
| **Family Peltigeraceae** | | | |
| • *Peltigera aphthosa* (Linnaeus) Hoffmann, 1787 * lichen | 11 | RE | R,S,V |
| • *Peltigera canina* (Linnaeus) Willdenow, 1787 * dog lichen | 11,12 | RE | R,S,V |
| • *Peltigera canina spuria* (Acharius) Tuckerman * lichen | 13 | RE | S,V |
| • *Peltigera horizontalis* (Linnaeus) Hoffmann, 1790 * lichen | 11 | RE | R,S,V |
| • *Peltigera spuria* (Acharius) DeCandolle, 1815 * lichen | 11 | RE | V |
| **Family Lecideaceae** | | | |
| • *Bacidia fuscorubella* (Hoffmann) Bausch, 1869 * lichen | 11 | RE | V |
| • *Bacidia schweinitzii* (Tuckerman) Schneider, 1898 * lichen | 11 | RE | V |
| • *Bilimbia sabuletorum* (Schreber) Arnott, 1869 [=*Bacidia s.* (Schreber) Lettau] * lichen | 11 | RE | V |
| • *Bilimbia trachona* (Acharius) Trevis, 1856 [=*Bacidia t.* (Acharius) Lettau] * lichen | 11,18 | RE | R,S |
| • *Lecidea albocaerulescens* (Wulfen) Acharius, 1803 * whitewash lichen | 11 | RE | R |
| • *Lecidea myriocarpoides* Nylander, 1865 * whitewash lichen | 11 | RE | V |

| Family Lecideaceae (continued) | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| • *Lecidea parasema* Acharius, 1803 [=*L. enteroleuca* Acharius] * whitewash lichen | 11 | RE | R,V |
| • *Lecidea viridescens* (Schrader) Acharius, 1803 * whitewash lichen | 11 | RE | V |
| **Family Cladoniaceae** | | | |
| • *Cladonia arbuscula* (Wallroth) Rabenhorst [=*C. sylvatica* (Linnaeus) Hoffmann, 1795; *C. silvatica*] * lichen | 11,13 | RE | S,V |
| • *Cladonia bacillaris* (Acharius) Nylander, 1866 * lichen | 12 | RE | S,V |
| • *Cladonia caespiticia* (Persoon) Flœrke, 1828 * lichen | 12 | RE | S,V |
| • *Cladonia capitata* (Michaux) Sprengel * lichen | 12 | RE | R,S,V |
| • *Cladonia coniocraea* (Flœrke) Sprengel * lichen | 12 | RE | S,V |
| • *Cladonia conista* (Acharius) Robbins * lichen | 12 | RE | S,V |
| • *Cladonia cristatella* Tuckerman, 1858 * British soldiers or red crest lichen | 11,12,13 | RE | R,S,V |
| • *Cladonia cryptochlorophaea* Asahina * lichen | 12 | RE | S,V |
| • *Cladonia fimbriata* (Linnaeus) Fries, 1831 * lichen | 11 | RE | S |
| • *Cladonia furcata* (Hudson) Schrader, 1794 * lichen | 11,12 | RE | R,S,V |
| • *Cladonia gracilis* (Linnaeus) Willdenow, 1787 * spoon lichen | 11,13 | RE | V |
| • *Cladonia grayi* Sandsted * lichen | 12 | RE | S,V |
| • *Cladonia nemoxyna* (Acharius) Nylander * lichen | 12 | RE | S |
| • *Cladonia parasitica* (Hoffmann) Hoffm. [=*C. delicata* (Ehrhart) Flœrke, 1828] * lichen | 11,12,13 | RE | V |
| • *Cladonia pyxidata* (Linnaeus) Hoffmann, 1795 * pixie cup lichen | 11,13 | RE | S,V |
| • *Cladonia rangiferina* (Linnaeus) Weber, 1780 * reindeer lichen | 11,13 | RE | S,V |
| • *Cladonia squamosa* (Scopoli) Hoffmann, 1796* lichen | 11 | RE | S,V |
| • *Cladonia subcariosa* Nylander, 1876* lichen | 12 | RE | S,V |
| • *Cladonia verticillata* (Hoffmann) Schaerer, 1796 * ladder lichen | 11,12 | RE | S,V |
| • *Cladonia* sp. Hill, 1780 * reindeer moss | 28 | CK | S |
| **Family Acarosporaceae** | | | |
| • *Sarcogyne simplex* (Davies) Nylander [=*Biatorella s.* (Davies) Braun & Rostrup, 1869] * lichen | 11 | RE | R |
| **Family Pertusariaceae** | | | |
| • *Pertusaria leioplaca* (Acharius) Lamarck & DeCandolle, 1815 * lichen | 11,13 | RE | V |
| • *Pertusaria multipuncta* (Turner) Nylander, 1861 * lichen | 11,13 | RE | V |
| • *Pertusaria pertusa* (Linnaeus) Tuckerman, 1845 * lichen | 11 | RE | R,V |
| • *Pertusaria pustulata* (Acharius) Nylander, 1830 * lichen | 11 | RE | V |
| **Family Lecanoraceae** | | | |
| • *Lecanora dispersa* (Persoon) Röhling, 1813 * lichen | 11,13 | RE | R,V |
| • *Lecanora pallida* (Schreber) Rabenhorst, 1845 * lichen | 11,13 | RE | V |
| • *Lecanora subfusca* (Linnaeus) Acharius, 1810 [=*L. s. allophana* Acharius] * lichen | 11,13 | RE | R,V |
| • *Lecanora varia* (Hoffmann) Acharius, 1810 * lichen | 11,13 | RE | V |
| • *Ochrolechia tartarea* (Linnaeus) Massalongo, 1852 * lichen | 11 | RE | R |
| **Family Parmeliaceae** | | | |
| • *Candelaria concolor* (Dickson) Stein, 1879 [=*Teloschistes concolor* (Dickson) Tuckerman] * lichen | 11,12,13 | RE | R,V |
| • *Candelaria fibrosa* (Fries) Müller-Argoviensis, 1887 * lichen | 12 | RE | R,V |
| • *Cetraria ciliaris* Acharius, 1810 * shield lichen | 11 | RE | V |
| • *Cetraria ericetorum* Opiz * shield lichen | 12 | RE | S |
| • *Parmelia aspera* Massalongo [=*P. olivacea* (Linnaeus) Acharius] * boulder lichen | 11,12,13 | RE | V |
| • *Parmelia aurulenta* Tuckerman, 1858 * boulder lichen | 12 | RE | R,V |
| • *Parmelia borreri* Trundle [=*P. bolliana* Müller-Argoviensis] * boulder lichen | 12 | RE | R,V |
| • *Parmelia caperata* (Linnaeus) Acharius, 1803 * boulder lichen | 11,12 | RE | R,V |
| • *Parmelia crozalsiana* DeLesdain * boulder lichen | 12 | RE | V |
| • *Parmelia flaventior* Stirton * boulder lichen | 12 | RE | R,V |
| • *Parmelia livida* Taylor [=*P. quercina* (Willdenow) Vainio, 1899] * boulder lichen | 11 | RE | V |
| • *Parmelia margaritata* Hue * boulder lichen | 12 | RE | V |
| • *Parmelia perlata* (Linnaeus) Acharius, 1803 * boulder lichen | 11,13 | RE | R,V |

| | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| **Family Parmeliaceae (continued)** | | | |
| • *Parmelia rudecta* Acharius, 1814 [=*P. borreri rudecta* (Acharius) Tuckerman] * boulder lichen | 11,12,13 | RE | R,V |
| • *Parmelia saxatilis* (Linnaeus) Acharius, 1803 * boulder lichen | 11 | RE | R,V |
| • *Parmelia sulcata* Taylor, 1856 * boulder lichen | 12 | RE | R,V |
| • *Parmelia ulophyllodes* (Vainio) Savicz * boulder lichen | 12 | RE | V |
| **Family Usneaceae [=Ramalinaceae]** | | | |
| • *Alectoria nidulifera* Norrlin, 1831 [=*A. chalybeiformis* (Linnaeus) Röhling] * lichen | 11 | RE | V |
| • *Ramalina farinacea* (Linnaeus) Acharius, 1810 * dotted twig lichen [Ohio endangered species] | 11,12 | RE | R,V |
| • *Ramalina sinensis* Jaffa [=*R. calicaris* (Linnaeus) Röhling, 1813; *R. calicaris fraxinea* (Linnaeus) Fries; *R. fraxinea* (L.) Acharius] * twig lichen | 11,13 | RE | V |
| • *Usnea strigosa* (Acharius) Eaton [=*U. barbata* (Linnaeus) Wiggers, 1780] * lichen | 11 | RE | V |
| **Family Caloplacaceae** | | | |
| • *Caloplaca aurantiaca* (Lightfoot) Fries, 1861 [=*Placodium aurantiacum* (Lightfoot) Hepp] * lichen | 11,13 | RE | R,V |
| • *Caloplaca cerina* (Ehrhart) Fries, 1861 [=*Placodium cernum* (Hoffmann) Hepp] * lichen | 11,13 | RE | V |
| **Family Teloschistaceae** | | | |
| • *Teloschistes chrysophthalmus* (Linnaeus) Fries, 1858 * lichen | 11,12,13 | RE | V |
| • *Xanthoria candelaria* (Linnaeus) Fries [=*Teloschistes candelarius* (Linnaeus) Fink; *T. lychenus* (Acharius) Fries] * lichen | 11,13 | RE | V |
| • *Xanthoria fallax* (Hepp) Arnold * lichen | 12 | RE | R,V |
| • *Xanthoria polycarpa* (Hoffmann) Rieber [=*Teloschistes polycarpus* (Ehrhart) Tuckerman, 1882] * lichen | 11,12 | RE | V |
| **Family Buelliaceae** | | | |
| • *Buellia parasema* (Acharius) DeNotaris, 1846 [=*B. disciformis* (Fries) Mudd] * lichen | 11,13 | RE | V |
| • *Rinodina tephraspis* (Tuckerman) Herre, 1910 [=*R. sophodes* (Acharius) Massalongo, 1852] * lichen | 11,13 | RE | R,V |
| **Family Physciaceae** | | | |
| • *Anaptychia echinata* (Taylor) Kurokawa * lichen | 12 | RE | V |
| • *Anaptychia hypoleuca* (Muhlenberg) Massalongo * lichen | 11 | RE | V |
| • *Anaptychia leucomelaena* Vainio * lichen | 11 | RE | R,V |
| • *Anaptychia palmulata* (Michaux) Vainio [=*A. aquila* (Acharius) Massalongo, 1853] * lichen | 11 | RE | R,V |
| • *Anaptychia speciosa* (Wulfen) Massalongo, 1853 [=*Physcia s.* (Wulfen) Nylander] * lichen | 13 | RE | R,V |
| • *Physcia adscendens* (Fries) Olivier * lichen | 12 | RE | R,V |
| • *Physcia aguila detonsa* (Fries) Tuckerman * lichen | 13 | RE | V |
| • *Physcia aipolia* (Ehrhart) Hampe * lichen | 12 | RE | R,V |
| • *Physcia ciliata* (Hoffmann) Du Reitz [=*P. obscura* (Ehrhart) Hampe] * lichen | 11 | RE | R,V |
| • *Physcia elaeina* (Smith) Smith [=*P. adglutinata* (Flœrke) Nylander] * lichen | 11 | RE | V |
| • *Physcia grisea* (Lamarck) Zahlbruckner * lichen | 12 | RE | R,V |
| • *Physcia hypoleuca* (Acharius) Tuckerman * lichen | 13 | RE | V |
| • *Physcia millegrana* Degelius [=*P. tribacia* (Acharius) Nylander] * lichen | 11,12 | RE | R,V |
| • *Physcia orbicularis* (Necker) Poetsch * lichen | 12 | RE | R,V |
| • *Physcia stellaris* (Linnaeus) Nylander, 1858 * lichen | 11,12,13 | RE | R,V |
| • *Physcia syncolla* Tuckerman * lichen | 12 | RE | V |
| • *Physcia tribacia* (Acharius) Nylander, 1874 * lichen | 13 | RE | V |
| • *Physcia tribacoides* Nylander * lichen | 12 | RE | R,V |
| **Family Leprariaceae** | | | |
| • *Lepraria* sp. Acharius [=*Amphiloma lanuginosum* (Hoffmann) Nylander, 1856] * lichen | 11 | RE | R,V |

## KINGDOM PLANTAE
## DIVISION BRYOPHYTA (mosses and liverworts)

### CLASS HEPATICOPSIDA (liverworts)

| | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| **ORDER JUNGERMANNIALES** | | | |
| **Family Lophocoleaceae** | | | |
| • *Lophocolea heterophylla* (Schrader) Dumortier * liverwort | 28 | CK | R |
| **ORDER MARCHANTIALES (typical liverworts)** | | | |
| **Family Conocephalaceae** | | | |
| • *Conocephalum conicum* (Linnaeus) Wiggers * common liverwort | 28 | CK | R |
| **Family Ricciaceae (liverworts)** | | | |
| • *Riccia fluitans* Linnaeus * slender riccia | 25 | ES | P |
| • *Ricciocarpus natans* (Linnaeus) Corda * purple-fringed riccia | 25 | ES | P |

### CLASS SPHAGNOPSIDA (peat mosses)

| | | | |
|---|---|---|---|
| **ORDER SPHAGNALES** | | | |
| **Family Sphagnaceae** | | | |
| • *Sphagnum compactum* Lamarck & DeCandolle, 1805 * sphagnum | 17 | RE | B,P |
| • *Sphagnum lescurii* Sullivant & Lesquereux 1856 * sphagnum | 17 | RE | B,P |
| • *Sphagnum magellanicum* Bridel, 1798 * sphagnum | 17 | RE | B,P |
| • *Sphagnum palustre* Linnaeus, 1753 * boat-leaved sphagnum | 17 | RE | B,P |
| • *Sphagnum russowii* Warnstorf, 1886 * sphagnum | 17 | RE | B,P |
| • *Sphagnum* sp. Linnaeus, 1753 * bog moss | 28 | CK | B,P |

### CLASS BRYOPSIDA (mosses)

| | | | |
|---|---|---|---|
| **ORDER POLYTRICHALES** | | | |
| **Family Polytrichaceae** | | | |
| • *Atrichum altecristatum* (Renauld & Cardot) Ireland, 1969 * spineleaf moss | 17 | RE | S |
| • *Atrichum angustatum* (Bridel) Bruch & Schimper, 1844 * slender Catherinea | 17 | RE | S |
| • *Atrichum undulatum* (Hedwig) Beauvois, 1805 * spineleaf moss | 17 | RE | S |
| • *Pogonatum pensilvanicum* (Bartram) Beauvois, 1823 * false hair-cap moss | 17 | RE | S |
| • *Polytrichum commune* Hedwig, 1801 * common hair-cap moss | 17,28 | CK,RE | S |
| • *Polytrichum ohioense* Renauld & Cardot, 1885 * hair-cap moss | 17,28 | CK,RE | S,V |
| • *Polytrichum piliferum* Hedwig, 1801 * hair-cap moss | 17 | RE | S |
| **ORDER TETRAPHALES** | | | |
| **Family Tetraphidaceae** | | | |
| • *Tetraphis pellucida* Hedwig, 1801 * four-tooth moss | 17 | RE | V |
| **ORDER FUNARIALES** | | | |
| **Family Funariaceae** | | | |
| • *Funaria hygrometrica* Hedwig, 1801 * cord moss | 17,28 | CK,RE | S |
| • *Physcomitrium pyriforme* (Hedwig) Hampe, 1837 * urn moss | 17 | RE | S |
| **Family Disceliaceae** | | | |
| • *Discelium nudum* (Dickson) Bridel, 1826 * moss | 17 | RE | S |
| **ORDER ORTHOTRICHALES** | | | |
| **Family Orthotrichaceae** | | | |
| • *Drummondia prorepens* (Hedwig) Britton, 1894 * moss | 17 | RE | V |
| • *Orthotrichum anomalum* Hedwig, 1801 * moss | 17 | RE | R |
| • *Orthotrichum pumilum* Swartz, 1801 * moss | 17 | RE | V |
| • *Orthotrichum pusillum* Mitten, 1864 * moss | 17 | RE | S |
| • *Orthotrichum strangulatum* Beauvois, 1805 * moss | 17 | RE | R |
| • *Ulota crispa* (Hedwig) Bridel, 1819 * moss | 17 | RE | V |

## ORDER BRYALES [=EUBRYALES]

| | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| **Family Bryaceae** | | | |
| • *Bryum argenteum* Hedwig, 1801 * silvery moss | 17 | RE | S |
| • *Bryum caespiticium* Hedwig, 1801 * silvery moss | 17 | RE | S |
| • *Bryum capillare* Hedwig, 1801 * silvery moss | 17 | RE | V |
| • *Bryum lisae* var. *cuspidatum* (Bruch & Schimper) Margadant, 1972 * silvery moss | 17 | RE | S |
| • *Bryum pseudotriquetrum* (Hedwig) Gärtner, Meyer, & Scherbius, 1802 * silvery moss | 17 | RE | S |
| • *Leptobryum pyriforme* (Hedwig) Wilson, 1855 * moss | 17 | RE | R,S |
| • *Pohlia nutans* (Hedwig) Lindberg, 1879 * moss | 17 | RE | V |
| • *Rhodobryum roseum* (Hedwig) Limpricht, 1892 * rose moss | 17 | RE | R,S,V |
| **Family Mniaceae** | | | |
| • *Mnium cuspidatum* Hedwig, 1801 * woodsy mnium moss | 28 | CK | S |
| • *Mnium stellare* Reichard, 1801 * star moss | 17 | RE | S,V |
| • *Plagiomnium ciliare* (Müller) Koponen, 1968 * moss | 17 | RE | S |
| • *Plagiomnium cuspidatum* (Hedwig) Koponen, 1968 * moss | 17 | RE | S |
| • *Plagiomnium medium* (Bruch & Schimper) Koponen, 1968 * moss | 17 | RE | S |
| • *Rhizomnium punctatum* (Hedwig) Koponen, 1968 * moss | 17 | RE | S |
| **Family Bartramiaceae** | | | |
| • *Bartramia pomiformis* Hedwig, 1801 * apple moss | 17 | RE | R,S |
| • *Philonotis fontana* (Hedwig) Bridel, 1827 * moss | 17 | RE | S |
| **Family Aulacomniaceae** | | | |
| • *Aulacomnium heterostichum* (Hedwig) Bruch & Schimper, 1841 * moss | 17 | RE | S |
| • *Aulacomnium palustre* (Hedwig) Schwägrichen, 1827 * moss | 17 | RE | S |

## ORDER HYPNOBRYALES [=HYPNALES]

| | | | |
|---|---|---|---|
| **Family Thuidiaceae** | | | |
| • *Cyrto-hypnum minutulum* (Hedwig) Buck & Crum, 1990 * moss | 17 | RE | S |
| • *Helodium blandowii* (Weber & Mohr) Warnstorf, 1905 * moss | 17 | RE | S |
| • *Helodium paludosum* (Austin) Brotherus, 1908 * moss | 17 | RE | S |
| • *Rauiella scita* (Beauvois) Reimers, 1937 * moss | 17 | RE | S |
| • *Thuidium delicatulum* (Hedwig) Schimper, 1852 * common fern moss | 17,28 | CK,RE | V |
| • *Thuidium recognitum* (Hedwig) Lindberg, 1874 * fern moss | 17 | RE | V |
| **Family Amblystegiaceae** | | | |
| • *Amblystegium serpens* (Hedwig) Schimper, 1853 * moss | 17 | RE | R,S,V |
| • *Amblystegium serpens* var. *juratzkanum* (Schimper) Rau & Hervey, 1880 * moss | 17 | RE | R,S,V |
| • *Amblystegium varium* (Hedwig) Lindberg, 1879 * moss | 17,28 | CK,RE | R,S,V |
| • *Calliergon stramineum* (Dickson) Kindberg, 1894 * moss | 17 | RE | S |
| • *Calliergon trifarium* (Weber & Mohr) Kindberg, 1894 * moss | 17 | RE | S |
| • *Calliergonella cuspidata* (Hedwig) Loeske, 1911 * moss | 17 | RE | V |
| • *Campylium chrysophyllum* (Bridel) Lange, 1887 * moss | 17 | RE | S,V |
| • *Campylium hispidulum* (Bridel) Mitten, 1869 * moss | 17 | RE | R,S,V |
| • *Campylium polygamum* (Schimper) Jensen, 1887 * moss | 17 | RE | S |
| • *Campylium stellatum* (Hedwig) Jensen, 1887 * moss | 17 | RE | S |
| • *Drepanocladus aduncus* var. *aduncus* (Hedwig) Warnstorf, 1903 * moss | 17 | RE | S |
| • *Drepanocladus aduncus* var. *kneiffii* (Schimper) Mönkemeyer, 1927 * moss | 17 | RE | S |
| • *Hygroamblystegium fluviatile* (Hedwig) Loeske, 1903 * moss | 17 | RE | R,S |
| • *Hygroamblystegium tenax* (Hedwig) Jennings, 1913 * moss | 17 | RE | R,S,V |
| • *Hygrohypnum luridum* (Hedwig) Jennings, 1913 * moss | 17 | RE | R,V |
| • *Leptodictyum humile* (Beauvois) Ochyra, 1981 * moss | 17 | RE | S |
| • *Leptodictyum riparium* (Hedwig) Warnstorf, 1906 * moss | 17 | RE | R,S |
| • *Limprichtia revolvens* (Swartz) Loeske, 1907 * moss | 17 | RE | S |
| **Family Brachytheciaceae** | | | |
| • *Brachythecium acuminatum* (Hedwig) Austin, 1870 * moss | 17 | RE | R,S |
| • *Brachythecium campestre* (Müller) Schimper, 1853 * moss | 17 | RE | R,S |
| • *Brachythecium oxycladon* (Bridel) Jaeger, 1878 * moss | 17 | RE | R,S,V |

| | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| **Family Brachytheciaceae (continued)** | | | |
| • *Brachythecium rivulare* Schimper, 1853 * rivulet brachythecium | 17 | RE | R,S |
| • *Brachythecium rutabulum* (Hedwig) Schimper, 1853 * moss | 17 | RE | R,S,V |
| • *Brachythecium salebrosum* (Hoffmann) Schimper, 1853 * moss | 17 | RE | R,S,V |
| • *Bryhnia graminicolor* (Bridel) Grout, 1898 * moss | 17 | RE | R,S |
| • *Bryhnia novae-angliae* (Sullivant & Lesquereux) Grout, 1898 * moss | 17 | RE | R,S,V |
| • *Bryoandersonia illecebra* (Hedwig) Robinson, 1962 * moss | 17 | RE | S |
| • *Eurhynchium hians* (Hedwig) Lacoste, 1866 * moss | 17 | RE | S |
| • *Eurhynchium pulchellum* (Hedwig) Jennings, 1913 * moss | 17 | RE | S,V |
| • *Eurhynchium serrulatum* (Hedwig) Kindberg, 1870 * moss | 28 | CK | S |
| • *Steerecleus serrulatus* (Hedwig) Robinson, 1987 * moss | 17 | RE | S |
| **Family Plagiotheciaceae** | | | |
| • *Plagiothecium cavifolium* (Bridel) Iwatsuki, 1970 * slender moss | 17 | RE | S |
| • *Plagiothecium denticulatum* (Hedwig) Schimper, 1851 * slender moss | 17 | RE | R,S,V |
| • *Plagiothecium* sp. Bruch & Schimper, 1852 * moss | 28 | CK | S |
| **Family Hypnaceae** | | | |
| • *Callicladium haldanianum* (Greville) Crum, 1971 * moss | 17 | RE | S |
| • *Herzogiella turfacea* (Lindberg) Iwatsuki, 1970 * moss | 17 | RE | S |
| • *Homomallium adnatum* (Hedwig) Brotherus, 1908 * moss | 17 | RE | R,V |
| • *Hypnum cupressiforme* Hedwig, 1801 * moss | 17 | RE | R,S |
| • *Hypnum curvifolium* Hedwig, 1801 * feather moss | 17,28 | CK,RE | R,S,V |
| • *Hypnum imponens* Hedwig, 1801 * moss | 17 | RE | S |
| • *Hypnum lindbergii* Mitten, 1864 * moss | 17 | RE | S |
| • *Isopterygiopsis muelleriana* (Schimper) Iwatsuki, 1970 * moss | 17 | RE | R,S |
| • *Platydictya confervoides* (Bridel) Crum, 1964 * moss | 17 | RE | S |
| • *Platygyrium repens* (Bridel) Schimper, 1851 * moss | 17 | RE | R,V |
| • *Pylaisiella intricata* (Hedwig) Grout, 1886 * moss | 17 | RE | V |
| • *Pylaisiella selwynii* (Kindberg) Crum, Steere, & Anderson, 1964 * moss | 17 | RE | V |
| • *Taxiphyllum taxirameum* (Mitten) Fleischer, 1923 * moss | 17 | RE | S |
| **Family Hylocomiaceae** | | | |
| • *Pleurozium schreberi* (Willdenow) Mitten, 1869 * moss | 17 | RE | S |
| **Family Rhytidiaceae** | | | |
| • *Rhytidium rugosum* (Ehrhart) Kindberg, 1883 * moss | 17 | RE | R,S |
| **Family Entodontaceae** | | | |
| • *Entodon cladorrhizans* (Hedwig) Müller, 1845 * moss | 17 | RE | V |
| • *Entodon seductrix* (Hedwig) Müller, 1846 * moss | 17 | RE | V |
| **Family Sematophyllaceae** | | | |
| • *Sematophyllum demissum* (Wilson) Mitten, 1864 * moss | 17 | RE | S |
| **ORDER ISOBRYALES** | | | |
| **Family Fontinaliaceae** | | | |
| • *Fontinalis dalecarlica* Bruch & Schimper, 1846 * common water moss | 17 | RE | B,S |
| • *Fontinalis hypnoides* Hartman, 1843 * water moss | 17 | RE | B,S |
| • *Fontinalis hypnoides* var. *duriaei* (Schimper) Husnot, 1892 * water moss | 17 | RE | B,S |
| **Family Climaciaceae** | | | |
| • *Climacium americanum* Bridel, 1812 * tree moss | 17,28 | CK,RE | S,V |
| • *Climacium kindbergii* (Renauld & Cardot) Grout, 1901 * tree-flooded moss | 17,28 | CK,RE | V |
| **Family Leskeaceae** | | | |
| • *Anomodon attenuatus* (Hedwig) Hübener, 1833 * moss | 17 | RE | R,V |
| • *Anomodon minor* (Hedwig) Fürnrohr, 1829 * moss | 17 | RE | R,V |
| • *Anomodon rostratus* (Hedwig) Schimper, 1860 * moss | 17 | RE | R |
| • *Anomodon rugelii* (Müller) Keissler, 1900 * moss | 17 | RE | R,V |
| • *Leskea gracilescens* Hedwig, 1801 * moss | 17 | RE | S |
| • *Leskea obscura* Hedwig, 1801 * moss | 17 | RE | R,S,V |
| • *Thelia asprella* (Schimp) Sullivant, 1856 * moss | 17 | RE | V |
| • *Thelia hirtella* (Hedwig) Sullivant, 1856 * moss | 17 | RE | S |
| **Family Fabroniaceae** | | | |
| • *Anacamptodon splachnoides* (Fröelich) Bridel, 1819 * moss | 17 | RE | V |

| | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| **Family Leucodontaceae** | | | |
| • *Leucodon julaceus* (Hedwig) Sullivant, 1846 * moss | 17 | RE | S |
| **Family Hedwigiaceae** | | | |
| • *Hedwigia ciliata* (Hedwig) Beauvois, 1805 * white-tipped moss | 17 | RE | R |
| **ORDER POTTIALES** | | | |
| **Family Pottiaceae** | | | |
| • *Barbula convoluta* Hedwig, 1801 * moss | 17 | RE | S |
| • *Barbula indica* var. *indica* (Hooker) Sprengel, 1824 * twisted teeth moss [Ohio rare species] | 17 | RE | S |
| • *Barbula unguiculata* Hedwig, 1801 * moss | 17 | RE | S |
| • *Bryoerythrophyllum recurvirostre* (Hedwig) Chen, 1941 * moss | 17 | RE | S |
| • *Desmatodon obtusifolius* (Schwägrichen) Schimper, 1860 * moss | 17 | RE | R |
| • *Desmatodon porteri* James, 1870 * moss | 17 | RE | S |
| • *Didymodon fallax* (Hedwig) Zander, 1978 * moss | 17 | RE | S |
| • *Didymodon rigidulus* Hedwig, 1801 * moss | 17 | RE | R,S |
| • *Gymnostomum aeruginosum* Smith, 1804 * moss | 17 | RE | R |
| • *Hymenostylium recurvirostre* (Hedwig) Dixon, 1933 * moss | 17 | RE | R |
| • *Hyophila involuta* (Hooker) Jaeger, 1873 * moss | 17 | RE | S |
| • *Phascum cuspidatum* Hedwig, 1801 * moss | 17 | RE | S |
| • *Tortella humilis* (Hedwig) Jennings, 1913 * twisted moss | 17 | RE | S,V |
| • *Tortella tortuosa* (Hedwig) Limpricht, 1888 * twisted moss | 17 | RE | R,S |
| • *Tortula ruralis* (Hedwig) Gärtner, Meyer, & Scherbius, 1802 * wall moss | 17 | RE | R,S |
| • *Weissia controversa* Hedwig, 1801 * moss | 17 | RE | S |
| **ORDER DICRANALES** | | | |
| **Family Dicranaceae** | | | |
| • *Dicranella cerviculata* (Hedwig) Schimper, 1856 * fork moss | 17 | RE | S |
| • *Dicranella heteromalla* (Hedwig) Schimper, 1856 * silky fork moss | 17 | RE | V |
| • *Dicranella varia* (Hedwig) Schimper, 1856 * fork moss | 17 | RE | S |
| • *Dicranum flagellare* Hedwig, 1801 * broom moss | 17 | RE | S |
| • *Dicranum scoparium* Hedwig, 1801 * broom moss | 17 | RE | R,S,V |
| • *Dicranum viride* (Sullivant & Lesquereux) Lindberg, 1863 * broom moss | 17 | RE | V |
| **Family Leucobryaceae** | | | |
| • *Leucobryum glaucum* (Hedwig) Ångström, 1845 * white pin-cushion moss | 17 | RE | S,V |
| **Family Ditrichaceae** | | | |
| • *Bruchia flexuosa* (Swartz) Müller, 1847 * moss | 17 | RE | S |
| • *Ceratodon purpureus* (Hedwig) Bridel, 1826 * purple horn-tooth moss | 17 | RE | S |
| • *Ditrichum lineare* (Swartz) Lindberg, 1872 * moss | 17 | RE | S |
| • *Pleuridium subulatum* (Hedwig) Rabenhorst, 1848 * moss | 17 | RE | S |
| **ORDER FISSIDENTALES** | | | |
| **Family Fissidentaceae** | | | |
| • *Fissidens adianthoides* Hedwig, 1801 * moss | 17 | RE | S,V |
| • *Fissidens bryoides* Hedwig, 1801 * moss | 17 | RE | S,V |
| • *Fissidens obtusifolius* Wilson, 1845 * moss | 17 | RE | R |
| • *Fissidens taxifolius* Hedwig, 1801 * moss | 17,28 | CK,RE | S |
| **ORDER SELIGERIALES** | | | |
| **Family Seligeriaceae** | | | |
| • *Seligeria calcarea* (Hedwig) Bruch & Schimper, 1849 * moss | 17 | RE | R |
| • *Seligeria campylopoda* Kindberg, 1892 * moss | 17 | RE | R |
| • *Seligeria pusilla* (Hedwig) Bruch & Schimper, 1846 * moss | 17 | RE | R |
| **ORDER GRIMMIALES** | | | |
| **Family Grimmiaceae** | | | |
| • *Grimmia pulvinata* (Hedwig) Smith, 1807 * moss | 17 | RE | S |
| • *Schistidium apocarpum* (Hedwig) Bruch & Schimper, 1845 * moss | 17 | RE | S |
| • *Schistidium rivulare* (Bridel) Podpera, 1911 * moss | 17 | RE | S |

## DIVISION LYCOPODIOPHYTA (clubmosses)

## CLASS LYCOPODIOPSIDA (clubmosses)

### ORDER LYCOPODIALES

| | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| **Family Lycopodiaceae (clubmosses)** | | | |
| • *Lycopodium dendroideum* Michaux * tree-like clubmoss | 20 | CK | S |
| • *Lycopodium obscurum* Linnaeus * tree clubmoss | 27 | CK | S |

## DIVISION EQUISETOPHYTA (horsetails and scouring rushes)

## CLASS EQUISETOPSIDA (horsetails)

### ORDER EQUISETALES

| | SOURCE | LOCATION | HABITAT |
|---|---|---|---|
| **Family Equisetaceae (horsetails)** | | | |
| • *Equisetum arvense* Linnaeus * field or common horsetail | 21-23,25,28 | CK,ES | S |
| • *Equisetum hyemale* Linnaeus * rough horsetail, scouring rush | 28 | CK | S |

## DIVISION FILICOPHYTA [=POLYPODIOPHYTA] (ferns)

## CLASS FILICOPSIDA [=POLYPODIOPSIDA] (ferns)

### ORDER OPHIOGLOSSALES

| | | | |
|---|---|---|---|
| **Family Ophioglossaceae (adder's tongues)** | | | |
| • *Botrychium dissectum* Sprengel * cut-leaf grapefern | 27,28 | CK | S |
| • *Botrychium rugulosum* Wagner * leathery grapefern [= *B. ternatum* Swartz] | 20 | CK | S |
| • *Botrychium virginianum* (Linnaeus) Swartz * rattlesnake fern | 23,24,28 | CK,ES | S |

### ORDER POLYPODIALES

| | | | |
|---|---|---|---|
| **Family Osmundaceae (royal ferns)** | | | |
| • *Osmunda cinnamomea* Linnaeus * cinnamon fern | 21,23,24 | ES | S |
| • *Osmunda claytoniana* Linnaeus * interrupted fern | 23,28 | CK,ES | S |
| **Family Polypodiaceae (polypodies)** | | | |
| • *Polypodium virginianum* Linnaeus * common polypody [= *P. vulgare* Linnaeus] | 27 | CK | S |
| **Family Adiantaceae (maidenhair ferns)** | | | |
| • *Adiantum pedatum* Linnaeus * northern maidenhair fern | 23,28 | CK,ES | S |
| **Family Aspleniaceae [= Woodsiaceae] (spleenworts)** | | | |
| • *Athyrium filix-femina* (Linnaeus) Roth * subarctic lady fern | 23,25,28 | CK,ES | S |
| • *Cystopteris bulbifera* (Linnaeus) Bernhardi * bulblet fern | 28 | CK | S |
| • *Cystopteris tenuis* (Michaux) Desvaux * fragile fern | 28 | CK | S |
| • *Dryopteris carthusiana* (Villars) Fuchs * spinulose woodfern [= *D. austriaca* (Jacquin) Woynar var. *spinulosa* (Müller) Fischer] | 23,25,28 | CK,ES | S |
| • *Dryopteris intermedia* (Muhlenberg) Gray * evergreen woodfern [= *D. austriaca* var. *intermedia* (Muhlenberg) Morton] | 27 | CK | S |
| • *Dryopteris marginalis* (Linnaeus) Gray * marginal shield-fern or woodfern | 27,28 | CK | S |
| • *Dryopteris* sp. Adanson * woodfern | 24 | ES | S |
| • *Gymnocarpium dryopteris* (Linnaeus) Newman * oak-fern | 26 | CK | S |
| • *Phegopteris hexagonoptera* (Michaux) Fée * broad beech-fern | 20 | CK | S |
| • *Polystichum acrostichoides* (Michaux) Schott * Christmas fern | 23,28 | CK,ES | S |
| **Family Onocleaceae (sensitive ferns)** | | | |
| • *Onoclea sensibilis* Linnaeus * sensitive fern | 21-23,25,27 | CK,ES | S |

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## LOCATION CODES:

CK – Old Woman Creek watershed upstream of the estuary

ES – Old Woman Creek estuary (including watershed within boundaries of NERR)

LE – Lake Erie, principally nearshore waters of Erie County and western Lorain County, Ohio

RE – Regional occurrence, principally Lake Erie watersheds of eastern Erie County and western Lorain County, Ohio

## HABITAT CODES:

A – Attached to hard surface (artificial substrate sample)

B – Benthic (bottom association)

C – Epipelic (on or in soft sediment; core sample)

P – Planktonic or nektonic (within water column; water sample)

R – Epilithic (on rock)

S – Soil (on or in soil; soil sample)

V – Epiphytic (on vegetation)

Z – Epizooic (on animals)

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# Appendix B

## Checklist of Algal Flora and Lower Plants of Old Woman Creek Estuary, Watershed, and Adjacent Waters of Lake Erie

# CHECKLIST OF ALGAL FLORA AND LOWER PLANTS OF OLD WOMAN CREEK ESTUARY, WATERSHED, AND ADJACENT WATERS OF LAKE ERIE

## KINGDOM MONERA

**DIVISION CYANOPHYTA (blue-green algae)**
**CLASS CYANOPHYCEAE**

| | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| **Order Chroococcales** | | | |
| ☐ *Aphanocapsa delicatissima* | blue-green | Chroococcaceae | ES |
| ☐ *Aphanocapsa elachista* | blue-green | Chroococcaceae | ES |
| ☐ *Aphanocapsa incerta* | blue-green | Chroococcaceae | CK |
| ☐ *Aphanothece saxicola* | blue-green | Chroococcaceae | ES |
| ☐ *Chroococcus dispersus* | blue-green | Chroococcaceae | CK,ES |
| ☐ *Chroococcus minor* | blue-green | Chroococcaceae | CK |
| ☐ *Chroococcus minutus* | blue-green | Chroococcaceae | CK,LE |
| ☐ *Chroococcus planctonicus* | blue-green | Chroococcaceae | ES |
| ☐ *Chroococcus* spp. | blue-greens | Chroococcaceae | CK,ES |
| ☐ *Coelosphaerium naegelianum* | blue-green | Chroococcaceae | ES |
| ☐ *Coelosphaerium pallidum* | blue-green | Chroococcaceae | ES |
| ☐ *Dactylococcopsis irregularis* | blue-green | Chroococcaceae | ES |
| ☐ *Gloeocapsa aeruginosa* | blue-green | Chroococcaceae | CK |
| ☐ *Gloeocapsa* sp. | blue-green | Chroococcaceae | ES |
| ☐ *Gomphosphaeria lacustris* | blue-green | Chroococcaceae | ES |
| ☐ *Merismopedia glauca* | blue-green | Chroococcaceae | ES |
| ☐ *Merismopedia minima* | blue-green | Chroococcaceae | CK,ES |
| ☐ *Merismopedia tenuissima* | blue-green | Chroococcaceae | ES |
| ☐ *Microcystis aeruginosa* | blue-green | Chroococcaceae | ES |
| ☐ *Microcystis minutissima* | blue-green | Chroococcaceae | ES |
| ☐ *Microcystis* sp. | blue-green | Chroococcaceae | ES |
| ☐ *Rhabdoderma minima* | blue-green | Chroococcaceae | ES |
| ☐ *Rhabdoderma* sp. | blue-green | Chroococcaceae | ES |
| ☐ *Synechococcus leopoliensis* | blue-green | Chroococcaceae | ES |
| ☐ *Synechococcus* sp. | blue-green | Chroococcaceae | ES |
| **Order Oscillatoriales** | | | |
| ☐ *Anabaena circinalis* | blue-green | Nostocaceae | ES |
| ☐ *Anabaena spiroides* | blue-green | Nostocaceae | LE |
| ☐ *Anabaena spiroides* var. *crassa* | blue-green | Nostocaceae | LE |
| ☐ *Anabaena variabilis* | blue-green | Nostocaceae | ES |
| ☐ *Anabaena* spp. | blue-greens | Nostocaceae | ES,LE |
| ☐ *Aphanizomenon flos-aquae* | blue-green | Nostocaceae | ES,LE |
| ☐ *Calothrix fusca* | blue-green | Rivulariaceae | CK |
| ☐ *Calothrix* spp. | blue-greens | Rivulariaceae | CK |
| ☐ *Lyngbya* sp. | blue-green | Oscillatoriaceae | CK,ES |
| ☐ *Microcoleus lyngbyaceus* | blue-green | Oscillatoriaceae | CK |
| ☐ *Oscillatoria agardhii* | blue-green | Oscillatoriaceae | ES,LE |
| ☐ *Oscillatoria amphibia* | blue-green | Oscillatoriaceae | ES |
| ☐ *Oscillatoria chlorina* | blue-green | Oscillatoriaceae | LE |
| ☐ *Oscillatoria granulata* | blue-green | Oscillatoriaceae | ES |
| ☐ *Oscillatoria hamelii* | blue-green | Oscillatoriaceae | ES,LE |
| ☐ *Oscillatoria limosa* | blue-green | Oscillatoriaceae | CK,ES |
| ☐ *Oscillatoria prolifica* | blue-green | Oscillatoriaceae | LE |
| ☐ *Oscillatoria* spp. | blue-greens | Oscillatoriaceae | ES LE |
| ☐ *Oscillatoria subbrevis* | blue-green | Oscillatoriaceae | CK,ES |
| ☐ *Oscillatoria tenuis* | blue-green | Oscillatoriaceae | CK,ES |
| ☐ *Phormidium tenue* | blue-green | Oscillatoriaceae | ES |
| ☐ *Raphidiopsis mediterranea* | blue-green | Rivulariaceae | LE |
| ☐ *Schizothrix calcicola* | blue-green | Oscillatoriaceae | CK,ES |
| ☐ *Spirulina* sp. | blue-green | Rivulariaceae | ES |

## KINGDOM PROTISTA

| | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| **DIVISION RHODOPHYTA (red algae)** | | | |
| **CLASS RHODOPHYCEAE** | | | |
| **Order Bangiales** | | | |
| ☐ *Bangia atropurpurea* | red alga | Bangiaceae | LE |
| **DIVISION CHRYSOPHYTA (golden & yellow-green algae)** | | | |
| **CLASS CHRYSOPHYCEAE (chrysophycean algae)** | | | |
| **Order Ochromonadales** | | | |
| ☐ *Anthophysa steinii* | golden-brown alga | Mallomonadaceae | ES |
| ☐ *Anthophysa vegetans* | golden-brown alga | Mallomonadaceae | ES |
| ☐ *Chrysococcus biporus* | golden-brown alga | Ochromonadaceae | ES |
| ☐ *Chrysococcus minutus* | golden-brown alga | Ochromonadaceae | ES |
| ☐ *Chrysococcus rufescens* var. *tripora* | golden-brown alga | Ochromonadaceae | ES |
| ☐ *Chrysococcus triporus* | golden-brown alga | Ochromonadaceae | ES |
| ☐ *Chrysococcus* spp. | golden-brown algae | Ochromonadaceae | ES |
| ☐ *Dinobryon bavaricum* | golden-brown alga | Dinobryacae | ES |
| ☐ *Dinobryon divergens* | golden-brown alga | Dinobryacae | ES |
| ☐ *Dinobryon sertularia* | golden-brown alga | Dinobryacae | ES |
| ☐ *Dinobryon sociale* | golden-brown alga | Dinobryacae | ES |
| ☐ *Dinobryon* sp. | golden-brown alga | Dinobryacae | ES |
| ☐ *Epipyxis tabellariae* | golden-brown alga | Dinobryacae | ES |
| ☐ *Kephryion ovale* | golden-brown alga | Ochromonadaceae | ES |
| ☐ *Kephryion spirale* | golden-brown alga | Ochromonadaceae | LE |
| ☐ *Kephryion* spp. | golden-brown algae | Ochromonadaceae | ES |
| ☐ *Mallomonas acaroides* | golden-brown alga | Mallomonadaceae | ES |
| ☐ *Mallomonas elegans* | golden-brown alga | Mallomonadaceae | ES |
| ☐ *Mallomonas intermedia* | golden-brown alga | Mallomonadaceae | ES |
| ☐ *Microglena* sp. | golden-brown alga | Ochromonadaceae | ES |
| ☐ *Monas guttula* | golden-brown alga | Ochromonadaceae | ES |
| ☐ *Monas socialis* | golden-brown alga | Ochromonadaceae | ES |
| ☐ *Monas* sp. | golden-brown alga | Ochromonadaceae | ES |
| ☐ *Ochromonas ludibunda* | golden-brown alga | Ochromonadaceae | ES |
| ☐ *Ochromonas nana* | golden-brown alga | Ochromonadaceae | ES |
| ☐ *Ochromonas* sp. | golden-brown alga | Ochromonadaceae | ES |
| ☐ *Physomonas vestita* | golden-brown alga | Ochromonadaceae | ES |
| ☐ *Pseudokephyrion cylindricum* | golden-brown alga | Dinobryacae | ES |
| ☐ *Pseudokephyrion entzii* f. *granulata* | golden-brown alga | Dinobryacae | ES |
| ☐ *Spumella* sp. | golden-brown alga | Ochromonadaceae | ES |
| ☐ *Stokesiella* sp. | golden-brown alga | Dinobryacae | ES |
| ☐ *Synura uvella* | golden-brown alga | Mallomonadaceae | ES |
| **CLASS XANTHOPHYCEAE (yellow-green algae)** | | | |
| **Order Rhizochloridaceae** | | | |
| ☐ *Stipitococcus vasiformis* | yellow-green alga | Stipitociccaceae | ES |
| **Order Mischococcales** | | | |
| ☐ *Centritractus ellipsoideus* | yellow-green alga | Centritractaceae | ES |
| ☐ *Goniochloris fallax* | yellow-green alga | Pleurochloridaceae | ES |
| ☐ *Ophiocytium capitatum* var. *longispina* | yellow-green alga | Ophiocytaceae | ES |
| ☐ *Pseudostaurastrum hastatum* | yellow-green alga | Pleurochloridaceae | ES |
| **Order Vaucheriales** | | | |
| ☐ *Vaucheria* sp. | yellow-green alga | Vaucheriaceae | ES |

| CLASS BACILLARIOPHYCEAE (diatoms)<br>Order Centrales (centric diatoms) | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| ☐ *Acanthoceras zachariasii* | centric diatom | Rhizosoleniaceae | ES |
| ☐ *Actinocyclus normanii* | centric diatom | Coscinodiscaceae | ES |
| ☐ *Aulacoseira alpigena* | centric diatom | Melosiraceae | ES |
| ☐ *Aulacoseira ambigua* | centric diatom | Melosiraceae | ES |
| ☐ *Aulacoseira crassipunctata* | centric diatom | Melosiraceae | ES |
| ☐ *Aulacoseira granulata* | centric diatom | Melosiraceae | ES |
| ☐ *Aulacoseira granulata* var. *angustissima* | centric diatom | Melosiraceae | ES,LE |
| ☐ *Aulacoseira islandica* | centric diatom | Melosiraceae | ES |
| ☐ *Aulacoseira italica* | centric diatom | Melosiraceae | ES |
| ☐ *Aulacoseira* spp. | centric diatoms | Melosiraceae | ES |
| ☐ *Coscinodiscus* sp. | centric diatom | Coscinodiscaceae | ES |
| ☐ *Cyclostephanos invisitatus* | centric diatom | Thalassiosiraceae | ES |
| ☐ *Cyclostephanos tholiformis* | centric diatom | Thalassiosiraceae | ES |
| ☐ *Cyclotella atomus* | centric diatom | Thalassiosiraceae | ES |
| ☐ *Cyclotella atomus* var. 1 | centric diatom | Thalassiosiraceae | ES |
| ☐ *Cyclotella meneghiniana* | centric diatom | Thalassiosiraceae | ES |
| ☐ *Cyclotella meneghiniana* var. 1 | centric diatom | Thalassiosiraceae | ES |
| ☐ *Cyclotella pseudostelligera* | centric diatom | Thalassiosiraceae | ES |
| ☐ *Cyclotella radiosa* | centric diatom | Thalassiosiraceae | ES |
| ☐ *Cyclotella stelligera* | centric diatom | Thalassiosiraceae | ES |
| ☐ *Cyclotella* spp. | centric diatoms | Thalassiosiraceae | ES |
| ☐ *Melosira varians* | centric diatom | Melosiraceae | ES |
| ☐ *Rhizosolenia eriensis* | centric diatom | Rhizosoleniaceae | ES |
| ☐ *Skeletonema potamos* | centric diatom | Thalassiosiraceae | ES |
| ☐ *Stephanodiscus alpinus* | centric diatom | Coscinodiscaceae | ES |
| ☐ *Stephanodiscus binderanus* | centric diatom | Coscinodiscaceae | ES LE |
| ☐ *Stephanodiscus hantzschii* | centric diatom | Coscinodiscaceae | ES |
| ☐ *Stephanodiscus minutulus* | centric diatom | Coscinodiscaceae | ES |
| ☐ *Stephanodiscus nipigonensis* | centric diatom | Coscinodiscaceae | ES |
| ☐ *Stephanodiscus parvus* | centric diatom | Coscinodiscaceae | ES |
| ☐ *Stephanodiscus rotula* | centric diatom | Coscinodiscaceae | CK,ES,LE |
| ☐ *Stephanodiscus subtilis* | centric diatom | Coscinodiscaceae | ES |
| ☐ *Stephanodiscus* sp. | centric diatom | Coscinodiscaceae | ES |
| ☐ *Thalassiosira pseudonana* | centric diatom | Thalassiosiraceae | ES |
| ☐ *Thalassiosira weissflogii* | centric diatom | Thalassiosiraceae | ES |
| **Order Pennales (pennate diatoms)** | | | |
| ☐ *Achnanthes biasolettiana* | pennate diatom | Achnanthaceae | ES |
| ☐ *Achnanthes clevei* | pennate diatom | Achnanthaceae | ES |
| ☐ *Achnanthes conspicua* | pennate diatom | Achnanthaceae | CK |
| ☐ *Achnanthes grischuna* | pennate diatom | Achnanthaceae | ES |
| ☐ *Achnanthes hungarica* | pennate diatom | Achnanthaceae | ES |
| ☐ *Achnanthes lanceolata* | pennate diatom | Achnanthaceae | CK,ES |
| ☐ *Achnanthes lanceolata* ssp. *dubia* | pennate diatom | Achnanthaceae | CK,ES |
| ☐ *Achnanthes lanceolata* ssp. *lanceolata* | pennate diatom | Achnanthaceae | CK,ES |
| ☐ *Achnanthes lanceolata* ssp. *l.* var. *boyei* | pennate diatom | Achnanthaceae | ES |
| ☐ *Achnanthes laurenburgiana* | pennate diatom | Achnanthaceae | ES |
| ☐ *Achnanthes minutissima* | pennate diatom | Achnanthaceae | CK,ES |
| ☐ *Achnanthes minutissima* var. *gracillima* | pennate diatom | Achnanthaceae | ES |
| ☐ *Achnanthes minutissima* var. *minutissima* | pennate diatom | Achnanthaceae | CK |
| ☐ *Achnanthes minutissima* var. *saprophila* | pennate diatom | Achnanthaceae | ES |
| ☐ *Achnanthes minutissima* var. 2 | pennate diatom | Achnanthaceae | ES |
| ☐ *Achnanthes* sp. | pennate diatom | Achnanthaceae | CK,ES |
| ☐ *Amphilpleura pellucida* | pennate diatom | Naviculaceae | CK,ES |
| ☐ *Amphora montana* | pennate diatom | Cymbellaceae | ES |
| ☐ *Amphora ovalis* | pennate diatom | Cymbellaceae | ES |

| Order Pennales (continued) | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| ☐ *Amphora pediculus* | pennate diatom | Cymbellaceae | CK,ES |
| ☐ *Amphora* sp. | pennate diatom | Cymbellaceae | ES |
| ☐ *Anomoeoneis brachysira* | pennate diatom | Naviculaceae | ES |
| ☐ *Anomoeoneis sphaerophora* | pennate diatom | Naviculaceae | ES |
| ☐ *Asterionella formosa* | pennate diatom | Fragilariaceae | ES,LE |
| ☐ *Caloneis amphisbaena* | pennate diatom | Naviculaceae | CK,ES |
| ☐ *Caloneis bacillum* | pennate diatom | Naviculaceae | CK,ES |
| ☐ *Caloneis clevei* | pennate diatom | Naviculaceae | ES |
| ☐ *Caloneis molaris* | pennate diatom | Naviculaceae | ES |
| ☐ *Caloneis schumanniana* | pennate diatom | Naviculaceae | ES |
| ☐ *Caloneis thermalis* | pennate diatom | Naviculaceae | ES |
| ☐ *Cocconeis pediculus* | pennate diatom | Achnanthaceae | ES |
| ☐ *Cocconeis placentula* | pennate diatom | Achnanthaceae | CK,ES |
| ☐ *Cocconeis placentula* var. *euglypta* | pennate diatom | Achnanthaceae | ES |
| ☐ *Cocconeis placentula* var. *lineata* | pennate diatom | Achnanthaceae | ES |
| ☐ *Cylindrotheca gracilis* | pennate diatom | Nitzschiacea | ES |
| ☐ *Cymatopleura elliptica* | pennate diatom | Surirellacea | CK |
| ☐ *Cymatopleura solea* | pennate diatom | Surirellacea | ES |
| ☐ *Cymbella affinis* | pennate diatom | Cymbellaceae | ES |
| ☐ *Cymbella caespitosa* | pennate diatom | Cymbellaceae | ES |
| ☐ *Cymbella microcephala* | pennate diatom | Cymbellaceae | ES |
| ☐ *Cymbella minuta* | pennate diatom | Cymbellaceae | CK,ES |
| ☐ *Cymbella naviculiformis* | pennate diatom | Cymbellaceae | ES |
| ☐ *Cymbella prostrata* | pennate diatom | Cymbellaceae | CK |
| ☐ *Cymbella silesiaca* | pennate diatom | Cymbellaceae | CK,ES |
| ☐ *Cymbella triangulum* | pennate diatom | Cymbellaceae | LE |
| ☐ *Cymbella tumida* | pennate diatom | Cymbellaceae | CK,ES |
| ☐ *Cymbella tumidula* | pennate diatom | Cymbellaceae | CK,ES |
| ☐ *Cymbella turgidula* | pennate diatom | Cymbellaceae | CK,ES |
| ☐ *Denticula kuetzingii* | pennate diatom | Epithemiacea | ES |
| ☐ *Diatoma vulgaris* var. *distorta* | pennate diatom | Fragilariaceae | ES |
| ☐ *Diatoma mesodon* | pennate diatom | Fragilariaceae | ES |
| ☐ *Diatoma tenuis* | pennate diatom | Fragilariaceae | ES |
| ☐ *Diatoma vulgaris* | pennate diatom | Fragilariaceae | ES |
| ☐ *Entomoneis ornata* | pennate diatom | Naviculaceae | LE |
| ☐ *Epithemia adnata* | pennate diatom | Epithemiacea | ES |
| ☐ *Epithemia turgida* | pennate diatom | Epithemiacea | ES |
| ☐ *Eunotia arcus* var. *bidens* | pennate diatom | Eunotiaceae | ES |
| ☐ *Eunotia bilunaris* var. *bilunaris* | pennate diatom | Eunotiaceae | ES |
| ☐ *Eunotia bilunarius* var. *mucophila* | pennate diatom | Eunotiaceae | ES |
| ☐ *Eunotia denticulata* | pennate diatom | Eunotiaceae | ES |
| ☐ *Eunotia diodon* | pennate diatom | Eunotiaceae | ES |
| ☐ *Eunotia exigua* | pennate diatom | Eunotiaceae | ES |
| ☐ *Eunotia formica* | pennate diatom | Eunotiaceae | ES |
| ☐ *Eunotia pectinalis* | pennate diatom | Eunotiaceae | ES |
| ☐ *Eunotia* sp. | pennate diatom | Eunotiaceae | ES |
| ☐ *Fragilaria capucina* | pennate diatom | Fragilariaceae | CK,ES,LE |
| ☐ *Fragilaria capucina* var. *gracilis* | pennate diatom | Fragilariaceae | ES |
| ☐ *Fragilaria capucina* var. *radians* | pennate diatom | Fragilariaceae | ES |
| ☐ *Fragilaria capucina* var. *rumpens* | pennate diatom | Fragilariaceae | CK,ES |
| ☐ *Fragilaria capucina* var. *vaucheriae* | pennate diatom | Fragilariaceae | CK,ES |
| ☐ *Fragilaria construens* | pennate diatom | Fragilariaceae | ES |
| ☐ *Fragilaria construens* f. *venter* | pennate diatom | Fragilariaceae | CK,ES |
| ☐ *Fragilaria crotonensis* | pennate diatom | Fragilariaceae | ES,LE |
| ☐ *Fragilaria fasciculata* | pennate diatom | Fragilariaceae | CK,ES |
| ☐ *Fragilaria leptostauron* var. *martyi* | pennate diatom | Fragilariaceae | ES |
| ☐ *Fragilaria parasitica* var. *subconstricta* | pennate diatom | Fragilariaceae | ES |

| Order Pennales (continued) | COMMON NAME | FAMILY | LOCAT ON |
|---|---|---|---|
| ☐ *Fragilaria pulchella* | pennate diatom | Fragilariaceae | ES |
| ☐ *Fragilaria tenera* | pennate diatom | Fragilariaceae | ES |
| ☐ *Fragilaria ulna* | pennate diatom | Fragilariaceae | CK,ES |
| ☐ *Fragilaria ulna* var. *acus* | pennate diatom | Fragilariaceae | ES |
| ☐ *Fragilaria ulna* var. *danica* | pennate diatom | Fragilariaceae | ES |
| ☐ *Fragilaria ulna* var. *obtusa* | pennate diatom | Fragilariaceae | CK |
| ☐ *Fragilaria ulna* var. *oxyrhynchus* | pennate diatom | Fragilariaceae | CK |
| ☐ *Fragilaria ulna* var. 1 | pennate diatom | Fragilariaceae | ES |
| ☐ *Fragilaria virescens* | pennate diatom | Fragilariaceae | CK,ES |
| ☐ *Frustulia rhomboides* | pennate diatom | Naviculaceae | ES |
| ☐ *Frustulia vulgaris* | pennate diatom | Naviculaceae | ES |
| ☐ *Gomphonema acuminatum* | pennate diatom | Cymbellaceae | ES |
| ☐ *Gomphonema affine* | pennate diatom | Cymbellaceae | CK,ES |
| ☐ *Gomphonema affine* var. *elongatum* | pennate diatom | Cymbellaceae | ES |
| ☐ *Gomphonema amoenum* | pennate diatom | Cymbellaceae | ES |
| ☐ *Gomphonema angustatum* | pennate diatom | Cymbellaceae | CK,ES |
| ☐ *Gomphonema angustatum* var. *citera* | pennate diatom | Cymbellaceae | CK |
| ☐ *Gomphonema a.* var. *sarcophogus* | pennate diatom | Cymbellaceae | ES |
| ☐ *Gomphonema angustum* | pennate diatom | Cymbellaceae | CK,ES |
| ☐ *Gomphonema augar* var. *spaerophorum* | pennate diatom | Cymbellaceae | CK |
| ☐ *Gomphonema augur* | pennate diatom | Cymbellaceae | CK,ES |
| ☐ *Gomphonema clavatum* | pennate diatom | Cymbellaceae | ES |
| ☐ *Gomphonema clevei* | pennate diatom | Cymbellaceae | ES |
| ☐ *Gomphonema dichotomum* | pennate diatom | Cymbellaceae | ES |
| ☐ *Gomphonema gracile* | pennate diatom | Cymbellaceae | ES |
| ☐ *Gomphonema minutum* | pennate diatom | Cymbellaceae | ES |
| ☐ *Gomphonema minutum* f. *lamanense* | pennate diatom | Cymbellaceae | ES |
| ☐ *Gomphonema olivaceum* | pennate diatom | Cymbellaceae | CK,ES |
| ☐ *Gomphonema parvulum* | pennate diatom | Cymbellaceae | CK,ES |
| ☐ *Gomphonema truncatum* | pennate diatom | Cymbellaceae | ES |
| ☐ *Gomphonema truncatum* var. *elongata* | pennate diatom | Cymbellaceae | ES |
| ☐ *Gomphonema* sp. | pennate diatom | Cymbellaceae | ES |
| ☐ *Gyrosigma acuminatum* | pennate diatom | Naviculaceae | CK |
| ☐ *Gyrosigma attenuatum* | pennate diatom | Naviculaceae | ES |
| ☐ *Gyrosigma exilis* | pennate diatom | Naviculaceae | ES |
| ☐ *Gyrosigma scalproides* | pennate diatom | Naviculaceae | ES |
| ☐ *Gyrosigma* sp. | pennate diatom | Naviculaceae | ES |
| ☐ *Hantzschia amphioxys* | pennate diatom | Nitzschiacea | ES |
| ☐ *Meridion circulare* | pennate diatom | Fragilariaceae | CK,ES |
| ☐ *Meridion circulare* var. *constrictum* | pennate diatom | Fragilariaceae | ES |
| ☐ *Navicula absoluta* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula agnita* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula arvensis* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula atomus* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula atomus* var. *permitis* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula bacillum* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula bahusiensis* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula capitata* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula capitata* var. *capitata* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula capitatoradiata* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula cincta* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula confervacea* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula contenta* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula cryptocephala* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula cryptotenella* | pennate diatom | Naviculaceae | CK,ES |
| ☐ *Navicula cuspidata* | pennate diatom | Naviculaceae | CK,ES |
| ☐ *Navicula decussis* | pennate diatom | Naviculaceae | CK,ES |

| Order Pennales (continued) | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| ☐ *Navicula elginensis* | pennate diatom | Naviculaceae | CK,ES |
| ☐ *Navicula erifuga* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula goeppertiana* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula goeppertiana* var. *goeppertiana* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula goeppertiana* var. *monita* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula gregaria* | pennate diatom | Naviculaceae | CK,ES |
| ☐ *Navicula grunowii* var. 1 | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula halophila* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula heimansii* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula hustedtii* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula ingenua* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula insocibilis* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula integra* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula lanceolata* | pennate diatom | Naviculaceae | CK,ES |
| ☐ *Navicula menisculus* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula menisculus* var. *grunowii* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula menisculus* var. *upsaliensis* | pennate diatom | Naviculaceae | CK,ES |
| ☐ *Navicula minima* | pennate diatom | Naviculaceae | CK,ES |
| ☐ *Navicula minima* var. *pseudofossalis* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula minusculoides* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula molestiformis* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula monoculata* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula mutica* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula mutica* var. *ventricosa* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula pelliculosa* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula praeterita* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula pseudolanceolata* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula pupula* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula pupula* var. *aquaeductae* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula pupula* var. *rectangularis* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula pygmaea* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula radiosa* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula recens* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula rhynchocephala* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula salinarum* | pennate diatom | Naviculaceae | CK,ES |
| ☐ *Navicula saprophila* | pennate diatom | Naviculaceae | CK,ES |
| ☐ *Navicula schroeterii* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula seminulum* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula similis* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula splendicula* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula subminuscula* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula submolesta* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula tenelloides* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula tenera* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula tripunctata* | pennate diatom | Naviculaceae | CK,ES |
| ☐ *Navicula tripunctata* var. *schizonemoides* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula trivialis* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula vaucherie* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula veneta* | pennate diatom | Naviculaceae | CK,ES |
| ☐ *Navicula viridula* | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula viridula* var. *germainii* | pennate diatom | Naviculaceae | CK,ES |
| ☐ *Navicula viridula* var. *rostellata* | pennate diatom | Naviculaceae | CK,ES |
| ☐ *Navicula viridula* var. 1 | pennate diatom | Naviculaceae | ES |
| ☐ *Navicula* spp. | pennate diatoms | Naviculaceae | ES |
| ☐ *Nedium affine* | pennate diatom | Naviculaceae | ES |
| ☐ *Nedium dubium* | pennate diatom | Naviculaceae | ES |
| ☐ *Nitzschia acicularis* | pennate diatom | Nitzschiacea | ES |

| Order Pennales (continued) | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| ☐ *Nitzschia acidoclinata* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia acuminata* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia admissoides* | pennate diatom | Nitzschiacea | CK |
| ☐ *Nitzschia agnita* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia amphibia* | pennate diatom | Nitzschiacea | CK,ES |
| ☐ *Nitzschia angustata* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia angustatula* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia angustiforaminata* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia bita*? | pennate diatom | Nitzschiacea | CK |
| ☐ *Nitzschia brevissima* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia capitellata* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia clausii* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia closterium* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia communis* | pennate diatom | Nitzschiacea | CK,ES |
| ☐ *Nitzschia commutatoides* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia compressa* var. *vexans* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia constricta* | pennate diatom | Nitzschiacea | CK |
| ☐ *Nitzschia dissipata* | pennate diatom | Nitzschiacea | CK,ES |
| ☐ *Nitzschia dissipata* var. *media* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia dubia* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia filiformis* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia fonticola* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia frustulum* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia frustulum* var. *perpusilla* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia fruticosa* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia gracilis* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia hantzschiana* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia hungarica* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia inconspicua* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia intermedia* | pennate diatom | Nitzschiacea | CK,ES |
| ☐ *Nitzschia levidensis* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia linearis* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia linearis* var. *subtilis* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia littoralis* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia microcephala* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia nereidis* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia palea* | pennate diatom | Nitzschiacea | CK,ES |
| ☐ *Nitzschia palea* var. *minuta* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia paleacea* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia parvula* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia perspicua* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia plana* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia pusilla* | pennate diatom | Nitzschiacea | CK,ES |
| ☐ *Nitzschia recta* | pennate diatom | Nitzschiacea | CK,ES |
| ☐ *Nitzschia reversa* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia sigma* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia sigmoidea* | pennate diatom | Nitzschiacea | CK,ES |
| ☐ *Nitzschia sinuata* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia sinuata* var. *tabellaria* | pennate diatom | Nitzschiacea | CK,ES |
| ☐ *Nitzschia sociabilis* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia solita* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia spiculum* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia stricta* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia subacicularis* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia supralitorea* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia tropica* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia tryblionella* | pennate diatom | Nitzschiacea | ES |

| Order Pennales (continued) | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| ☐ *Nitzschia tubicola* | pennate diatom | Nitzschiacea | ES |
| ☐ *Nitzschia valga* | pennate diatom | Nitzschiacea | ES |
| ☐ *Pinnularia abaujensis* var. *rostrata* | pennate diatom | Naviculaceae | ES |
| ☐ *Pinnularia borealis* | pennate diatom | Naviculaceae | LE |
| ☐ *Pinnularia intermedia* | pennate diatom | Naviculaceae | ES |
| ☐ *Pinnularia microstauron* | pennate diatom | Naviculaceae | ES |
| ☐ *Pinnularia microstauron* var. *brebissonii* | pennate diatom | Naviculaceae | ES |
| ☐ *Pinnularia microstauron* var. *b.* f. *diminuta* | pennate diatom | Naviculaceae | ES |
| ☐ *Pinnularia nodosa* | pennate diatom | Naviculaceae | ES |
| ☐ *Pinnularia obscura* | pennate diatom | Naviculaceae | ES |
| ☐ *Pinnularia stomatophora* | pennate diatom | Naviculaceae | ES |
| ☐ *Pinnularia viridis* | pennate diatom | Naviculaceae | ES |
| ☐ *Pinnularia* sp. | pennate diatom | Naviculaceae | ES |
| ☐ *Plagiotropis lepidoptera* var. *probosidea* | pennate diatom | Naviculaceae | ES |
| ☐ *Pleurosigma delicatulum* | pennate diatom | Naviculaceae | CK |
| ☐ *Reimeria sinuata* | pennate diatom | Cymbellaceae | CK,ES |
| ☐ *Rhoicosphenia abbreviata* | pennate diatom | Achnanthaceae | CK,ES |
| ☐ *Stauroneis anceps* | pennate diatom | Naviculaceae | ES |
| ☐ *Stauroneis kriegeri* | pennate diatom | Naviculaceae | ES |
| ☐ *Stauroneis phoenicenteron* | pennate diatom | Naviculaceae | ES |
| ☐ *Stauroneis smithii* | pennate diatom | Naviculaceae | ES |
| ☐ *Stauroneis thermicola* | pennate diatom | Naviculaceae | ES |
| ☐ *Surirella angusta* | pennate diatom | Surirellacea | ES |
| ☐ *Surirella brebissonii* var. *kuetzingii* | pennate diatom | Surirellacea | ES |
| ☐ *Surirella minuta* | pennate diatom | Surirellacea | CK,ES |
| ☐ *Surirella ovalis* | pennate diatom | Surirellacea | ES |
| ☐ *Surirella suecica* | pennate diatom | Surirellacea | ES |
| ☐ *Surirella tenera* | pennate diatom | Surirellacea | ES |
| ☐ *Surirella turgida* | pennate diatom | Surirellacea | ES |
| ☐ *Tabellaria fenestrata* | pennate diatom | Fragilariaceae | ES |
| ☐ *Tabellaria* sp. | pennate diatom | Fragilariaceae | ES |
| **DIVISION PYRRHOPHYTA (fire algae)** | | | |
| **CLASS DINOPHYCEAE (dinoflagellates)** | | | |
| **Order Gymnodiniales** | | | |
| ☐ *Gymnodinium aeruginosun* | dinoflagellate | Gymnodiniaceae | ES |
| ☐ *Gymnodinium helveticum* | dinoflagellate | Gymnodiniaceae | ES |
| ☐ *Gymnodinium palustre* | dinoflagellate | Gymnodiniaceae | ES |
| ☐ *Gymnodinium* spp. | dinoflagellates | Gymnodiniaceae | CK,ES |
| ☐ *Katodinium fungiforme* | dinoflagellate | Gymnodiniaceae | ES |
| **Order Peridiniales** | | | |
| ☐ *Ceratium hirundinella* | dinoflagellate | Ceratiaceae | ES,LE |
| ☐ *Ceratium* sp. | dinoflagellate | Ceratiaceae | ES |
| ☐ *Glenodinium* sp. | dinoflagellate | Peridiniaceae | ES |
| ☐ *Perdiniopsis quadridens* | dinoflagellate | Peridiniaceae | ES |
| ☐ *Woloszynskia coronata* | dinoflagellate | Lophodiniaceae | ES |
| **DIVISION CRYPTOPHYTA (cryptomonads)** | | | |
| **CLASS CRYPTOPHYCEAE** | | | |
| **Order Cryptomonadales** | | | |
| ☐ *Chilomonas* sp. | cryptomonad | Cryptomonadaceae | ES |
| ☐ *Chroomonas norstedtii* | cryptomonad | Cryptomonadaceae | ES |
| ☐ *Chroomonas* sp. | cryptomonad | Cryptomonadaceae | ES |
| ☐ *Cryptomonas compressa* | cryptomonad | Cryptomonadaceae | ES |
| ☐ *Cryptomonas erosa* | cryptomonad | Cryptomonadaceae | ES |
| ☐ *Cryptomonas erosa* var. *reflexa* | cryptomonad | Cryptomonadaceae | CK |
| ☐ *Cryptomonas marssonii* | cryptomonad | Cryptomonadaceae | ES |
| ☐ *Cryptomonas obovata* | cryptomonad | Cryptomonadaceae | ES |
| ☐ *Cryptomonas ovata* | cryptomonad | Cryptomonadaceae | ES |

| Order Cryptomonadales (continued) | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| ☐ *Cryptomonas reflexa* | cryptomonad | Cryptomonadaceae | ES |
| ☐ *Cryptomonas tenuis* | cryptomonad | Cryptomonadaceae | ES |
| ☐ *Cryptomonas tetrapyrenoidosa* | cryptomonad | Cryptomonadaceae | ES |
| ☐ *Cryptomonas* spp. | cryptomonads | Cryptomonadaceae | ES |
| ☐ *Cyathomonas truncata* | cryptomonad | Cyathomonadaceae | ES |
| ☐ *Cyathomonas* sp. | cryptomonad | Cyathomonadaceae | ES |
| ☐ *Planonephros parvula* | cryptomonad | Hemiselmidaceae | ES |
| ☐ *Rhodomonas lacustris* | cryptomonad | Cryptomonadaceae | ES |
| ☐ *Rhodomonas lens* | cryptomonad | Cryptomonadaceae | ES |
| ☐ *Rhodomonas minuta* | cryptomonad | Cryptomonadaceae | ES |
| ☐ *Rhodomonas m.* var. *nannoplanctonica* | cryptomonad | Cryptomonadaceae | ES,LE |
| ☐ *Rhodomonas* spp. | cryptomonads | Cryptomonadaceae | CK,ES |
| **DIVISION EUGLENOPHYTA (euglenoids)** | | | |
| **CLASS EUGLENOPHYCEAE** | | | |
| **Order Euglenales (green euglenas)** | | | |
| ☐ *Ascoglena vaginicola* | euglenoid | Euglenaceae | ES |
| ☐ *Ascoglena* sp. | euglenoid | Euglenaceae | ES |
| ☐ *Astasia klebsii* | euglenoid | Astaciaceae | ES |
| ☐ *Astasia* spp. | euglenoids | Astaciaceae | ES |
| ☐ *Euglena acus* | euglenoid | Euglenaceae | ES |
| ☐ *Euglena bellovacensis* | euglenoid | Euglenaceae | ES |
| ☐ *Euglena deses* | euglenoid | Euglenaceae | ES |
| ☐ *Euglena ehrenbergii* | euglenoid | Euglenaceae | ES |
| ☐ *Euglena elastica* | euglenoid | Euglenaceae | ES |
| ☐ *Euglena fronsundulata* | euglenoid | Euglenaceae | ES |
| ☐ *Euglena gasterosteus* | euglenoid | Euglenaceae | CK,ES |
| ☐ *Euglena gracilis* | euglenoid | Euglenaceae | ES |
| ☐ *Euglena ignobilis* | euglenoid | Euglenaceae | ES |
| ☐ *Euglena minima* | euglenoid | Euglenaceae | ES |
| ☐ *Euglena oxyuris* | euglenoid | Euglenaceae | ES |
| ☐ *Euglena oxyuris* var. *minima* | euglenoid | Euglenaceae | ES |
| ☐ *Euglena oxyuris* var. *minor* | euglenoid | Euglenaceae | ES |
| ☐ *Euglena pisciformis* | euglenoid | Euglenaceae | ES |
| ☐ *Euglena proxima* | euglenoid | Euglenaceae | ES |
| ☐ *Euglena spathirhyncha* | euglenoid | Euglenaceae | ES |
| ☐ *Euglena spirogyra* | euglenoid | Euglenaceae | ES |
| ☐ *Euglena tripteris* | euglenoid | Euglenaceae | ES |
| ☐ *Euglena vermiforis* | euglenoid | Euglenaceae | ES |
| ☐ *Euglena* spp. | euglenoids | Euglenaceae | CK,ES |
| ☐ *Lepocinclis ovum* | euglenoid | Euglenaceae | ES |
| ☐ *Lepocinclis ovum* f. *typica* | euglenoid | Euglenaceae | ES |
| ☐ *Lepocinclis ovum* var. *deflandriana* | euglenoid | Euglenaceae | ES |
| ☐ *Lepocinclis ovum* var. *dimidio-minor* | euglenoid | Euglenaceae | ES |
| ☐ *Lepocinclis ovum* var. *ovata* f. *ecaudata* | euglenoid | Euglenaceae | ES |
| ☐ *Lepocinclis texta* f. *minor* | euglenoid | Euglenaceae | ES |
| ☐ *Lepocinclis* spp. | euglenoids | Euglenaceae | CK,ES |
| ☐ *Phacus acuminatus* | euglenoid | Euglenaceae | CK,ES |
| ☐ *Phacus arnoldi* | euglenoid | Euglenaceae | ES |
| ☐ *Phacus caudatus* | euglenoid | Euglenaceae | ES |
| ☐ *Phacus contortus* | euglenoid | Euglenaceae | ES |
| ☐ *Phacus curvicauda* | euglenoid | Euglenaceae | ES |
| ☐ *Phacus helikoides* | euglenoid | Euglenaceae | ES |
| ☐ *Phacus longicauda* | euglenoid | Euglenaceae | ES |
| ☐ *Phacus obicularis* | euglenoid | Euglenaceae | ES |
| ☐ *Phacus pleuronectes* | euglenoid | Euglenaceae | ES |
| ☐ *Phacus pseudonordstedii* | euglenoid | Euglenaceae | ES |

| Order Euglenales (continued) | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| ☐ *Phacus rudicula* | euglenoid | Euglenaceae | ES |
| ☐ *Phacus tortus* | euglenoid | Euglenaceae | ES |
| ☐ *Phacus triqueter* | euglenoid | Euglenaceae | ES |
| ☐ *Phacus* sp. | euglenoid | Euglenaceae | ES |
| ☐ *Scytomonas* sp. | euglenoid | Astaciaceae | ES |
| ☐ *Strombomonas acuminata* | euglenoid | Euglenaceae | ES |
| ☐ *Strombomonas fluviatilis* | euglenoid | Euglenaceae | ES |
| ☐ *Strombomonas gibberosa* | euglenoid | Euglenaceae | ES |
| ☐ *Strombomonas longicauda* | euglenoid | Euglenaceae | ES |
| ☐ *Strombomonas schauinslandii* | euglenoid | Euglenaceae | ES |
| ☐ *Strombomonas verrucosa* var. *zmiewika* | euglenoid | Euglenaceae | ES |
| ☐ *Strombomonas* sp. | euglenoid | Euglenaceae | ES |
| ☐ *Trachelomonas abrupta* var. *minor* | euglenoid | Euglenaceae | ES |
| ☐ *Trachelomonas armata* | euglenoid | Euglenaceae | ES |
| ☐ *Trachelomonas bulla* | euglenoid | Euglenaceae | ES |
| ☐ *Trachelomonas crebea* | euglenoid | Euglenaceae | ES |
| ☐ *Trachelomonas granulosa* | euglenoid | Euglenaceae | ES |
| ☐ *Trachelomonas hispida* | euglenoid | Euglenaceae | ES |
| ☐ *Trachelomonas horrida* | euglenoid | Euglenaceae | ES |
| ☐ *Trachelomonas lacustris* | euglenoid | Euglenaceae | ES |
| ☐ *Trachelomonas oblonga* | euglenoid | Euglenaceae | ES |
| ☐ *Trachelomonas oblonga* var. *attenuata* | euglenoid | Euglenaceae | ES |
| ☐ *Trachelomonas oblonga* var. *truncata* | euglenoid | Euglenaceae | ES |
| ☐ *Trachelomonas o.* var. *umbilicophora* | euglenoid | Euglenaceae | ES |
| ☐ *Trachelomonas planctonica* | euglenoid | Euglenaceae | ES |
| ☐ *Trachelomonas scabra* | euglenoid | Euglenaceae | ES |
| ☐ *Trachelomonas spiralis* | euglenoid | Euglenaceae | ES |
| ☐ *Trachelomonas superba* | euglenoid | Euglenaceae | ES |
| ☐ *Trachelomonas varians* | euglenoid | Euglenaceae | ES |
| ☐ *Trachelomonas volvocina* | euglenoid | Euglenaceae | ES |
| ☐ *Trachelomonas volvocina* var. *minuta* | euglenoid | Euglenaceae | ES |
| ☐ *Trachelomonas* spp. | euglenoids | Euglenaceae | ES |
| ☐ *Urceolus ovatus* | euglenoid | Astaciaceae | ES |
| ☐ *Urceolus sabulosus* | euglenoid | Astaciaceae | ES |
| **Order Rhabdomonadales** | | | |
| ☐ *Menoidium gibbum* | euglenoid | Rhabdomonaceae | ES |
| ☐ *Rhabdomonas* sp. | euglenoid | Rhabdomonaceae | ES |
| **DIVISION CHLOROPHYTA (green algae)** | | | |
| **CLASS CHLOROPHYCEAE** | | | |
| **Order Volvocales** | | | |
| ☐ *Carteria bourrellyi* | green alga | Chlamydomonadaceae | ES |
| ☐ *Carteria globosa* | green alga | Chlamydomonadaceae | ES |
| ☐ *Carteria wisconsinensis* | green alga | Chlamydomonadaceae | CK,ES |
| ☐ *Carteria* sp. | green alga | Chlamydomonadaceae | ES |
| ☐ *Chlamydomonas globosa* | green alga | Chlamydomonadaceae | CK,ES |
| ☐ *Chlamydomonas gracilis* | green alga | Chlamydomonadaceae | ES |
| ☐ *Chlamydomonas monadina* | green alga | Chlamydomonadaceae | ES |
| ☐ *Chlamydomonas reinhardtii* | green alga | Chlamydomonadaceae | ES |
| ☐ *Chlamydomonas subasymmetrica* | green alga | Chlamydomonadaceae | ES |
| ☐ *Chlamydomonas* spp. | green algae | Chlamydomonadaceae | CK,ES,LE |
| ☐ *Chlamydonephris excavata* | green alga | Chlamydomonadaceae | ES |
| ☐ *Chlorogonium elongatum* | green alga | Chlamydomonadaceae | ES |
| ☐ *Chlorogonium euchlorum* | green alga | Chlamydomonadaceae | ES |
| ☐ *Chlorogonium hyalinum* | green alga | Chlamydomonadaceae | ES |
| ☐ *Eudorina elegans* | green alga | Volvocaceae | LE |
| ☐ *Haematococcus pluvialis* | green alga | Chlamydomonadaceae | ES |
| ☐ *Pandorinamorum* | green alga | Volvocaceae | ES |

| Order Volvocales (continued) | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| ☐ *Pandorina* sp. | green alga | Volvocaceae | ES |
| ☐ *Pedinopera* sp. | green alga | Phacotaceae | ES |
| ☐ *Phacotus lenticularis* | green alga | Phacotaceae | ES |
| ☐ *Phacotus* sp. | green alga | Phacotaceae | ES |
| ☐ *Pteromonas angulosa* | green alga | Phacotaceae | ES |
| ☐ *Pteromonas* sp. | green alga | Phacotaceae | ES |
| ☐ *Sphaerellopsis* spp. | green algae | Chlamydomonadaceae | ES |
| ☐ *Volvox* sp. | green alga | Volvocaceae | ES |
| **Order Tetrasporales** | | | |
| ☐ *Chlamydocapsa ampla* | green alga | Palmellaceae | CK,ES |
| ☐ *Chlamydocapsa planctonica* | green alga | Palmellaceae | ES |
| ☐ *Chlamydocapsa* sp. | green alga | Palmellaceae | ES |
| ☐ *Gloeocystis vesiculosa* | green alga | Palmellaceae | CK,ES |
| ☐ *Pseudosphaerocystis lacustris* | green alga | Palmellaceae | CK,ES |
| **Order Chlorococcales** | | | |
| ☐ *Actinastrum hantzschii* | green alga | Scenedesmaceae | ES |
| ☐ *Ankistrodesmus falcatus* | green alga | Oocystaceae | ES |
| ☐ *Ankistrodesmus stipitatus* | green alga | Oocystaceae | ES |
| ☐ *Ankyra judayi* | green alga | Chlorococcaceae | ES |
| ☐ *Characium curvatum* | green alga | Chlorococcaceae | ES |
| ☐ *Characium* sp. | green alga | Chlorococcaceae | ES |
| ☐ *Chlorococcum* sp. | green alga | Chlorococcaceae | ES |
| ☐ *Closteriopsis acicularis* | green alga | Oocystaceae | ES |
| ☐ *Coelastrum astroidenum* | green alga | Scenedesmaceae | ES |
| ☐ *Coelastrum cambricum* | green alga | Scenedesmaceae | ES |
| ☐ *Coelastrum microporum* | green alga | Scenedesmaceae | ES |
| ☐ *Coelastrum pseucomicroporum* | green alga | Scenedesmaceae | ES |
| ☐ *Coelastrum* sp. | green alga | Scenedesmaceae | ES |
| ☐ *Crucigenia fenestrata* | green alga | Scenedesmaceae | ES |
| ☐ *Crucigenia mucronata* | green alga | Scenedesmaceae | ES |
| ☐ *Crucigenia quadrata* | green alga | Scenedesmaceae | ES |
| ☐ *Crucigenia tetrapedia* | green alga | Scenedesmaceae | ES |
| ☐ *Crucigeniella apiculata* | green alga | Scenedesmaceae | ES |
| ☐ *Crucigeniella rectangularis* | green alga | Scenedesmaceae | ES |
| ☐ *Dictyosphaerium puchellum* | green alga | Dictyosphaeriaceae | ES |
| ☐ *Didymocystis inconspicua* | green alga | Scenedesmaceae | ES |
| ☐ *Didymocystis planctonicus* | green alga | Scenedesmaceae | ES |
| ☐ *Didymocystis* sp. | green alga | Scenedesmaceae | ES |
| ☐ *Didymogenes palatina* | green alga | Scenedesmaceae | ES |
| ☐ *Franceia droescheri* | green alga | Oocystaceae | ES |
| ☐ *Golenkinia radiata* | green alga | Micractiniaceae | ES |
| ☐ *Golenkiniopsis* sp. | green alga | Micractiniaceae | ES |
| ☐ *Kirchneriella contorta* var. *contorta* | green alga | Oocystaceae | ES |
| ☐ *Kirchneriella contorta* var. *elegans* | green alga | Oocystaceae | ES |
| ☐ *Kirchneriella lunaris* | green alga | Oocystaceae | ES |
| ☐ *Kirchneriella* sp. | green alga | Oocystaceae | ES |
| ☐ *Korshikoviella limnetica* | green alga | Chlorococcaceae | ES |
| ☐ *Lagerheimia balatonica* | green alga | Oocystaceae | ES |
| ☐ *Lagerheimia ciliata* | green alga | Oocystaceae | ES |
| ☐ *Lagerheimia citriformis* | green alga | Oocystaceae | ES |
| ☐ *Lagerheimia genevensis* | green alga | Oocystaceae | ES |
| ☐ *Lagerheimia marssonii* | green alga | Oocystaceae | ES |
| ☐ *Lagerheimia subsalsa* | green alga | Oocystaceae | ES |
| ☐ *Lagerheimia wratislawiensis* | green alga | Oocystaceae | ES |
| ☐ *Micractinium pusillum* | green alga | Micractiniaceae | ES |
| ☐ *Monoraphidium arcuatum* | green alga | Oocystaceae | ES,LE |
| ☐ *Monoraphidium circinale* | green alga | Oocystaceae | ES |

| Order Chlorococcales (continued) | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| ☐ *Monoraphidium contortum* | green alga | Oocystaceae | ES |
| ☐ *Monoraphidium c.* var. *convolutum* | green alga | Oocystaceae | ES |
| ☐ *Monoraphidium griffithii* | green alga | Oocystaceae | ES |
| ☐ *Monoraphidium komarkovae* | green alga | Oocystaceae | ES |
| ☐ *Monoraphidium mirabile* | green alga | Oocystaceae | ES |
| ☐ *Monoraphidium* sp. | green alga | Oocystaceae | ES |
| ☐ *Neodesmus danubialis* | green alga | Scenedesmaceae | ES |
| ☐ *Nephrochlamys subsolitaria* | green alga | Oocystaceae | ES |
| ☐ *Nephrochlamys* spp. | green algae | Oocystaceae | ES |
| ☐ *Oocystis lacustris* | green alga | Oocystaceae | ES LE |
| ☐ *Oocystis novae-semliae* | green alga | Oocystaceae | ES |
| ☐ *Oocystis parva* | green alga | Oocystaceae | ES |
| ☐ *Oocystis pusilla* | green alga | Oocystaceae | ES |
| ☐ *Oocystis* sp. | green alga | Oocystaceae | ES |
| ☐ *Pediastrum boryanum* | green alga | Hydrodictyaceae | ES |
| ☐ *Pediastrum duplex* | green alga | Hydrodictyaceae | ES |
| ☐ *Pediastrum duplex* var. *duplex* | green alga | Hydrodictyaceae | ES |
| ☐ *Pediastrum duplex* var. *reticulatum* | green alga | Hydrodictyaceae | ES |
| ☐ *Pediastrum simplex* | green alga | Hydrodictyaceae | ES |
| ☐ *Pediastrum simplex* var. *biwaense* | green alga | Hydrodictyaceae | ES |
| ☐ *Pediastrum simplex* var. *echinulatum* | green alga | Hydrodictyaceae | ES |
| ☐ *Pediastrum simplex* var. *sturmii* | green alga | Hydrodictyaceae | ES |
| ☐ *Pediastrum tetras* | green alga | Hydrodictyaceae | ES |
| ☐ *Pediastrum tetras* var. *tetraodon* | green alga | Hydrodictyaceae | ES |
| ☐ *Pediastrum* sp. | green alga | Hydrodictyaceae | ES |
| ☐ *Quadrigula closteroides* | green alga | Oocystaceae | ES |
| ☐ *Quadrigula lacustris* | green alga | Oocystaceae | ES |
| ☐ *Scenedesmus acuminatus* | green alga | Scenedesmaceae | ES |
| ☐ *Scenedesmus acuminatus* var. *minor* | green alga | Scenedesmaceae | ES |
| ☐ *Scenedesmus armatus* | green alga | Scenedesmaceae | ES |
| ☐ *Scenedesmus bicaudatus* | green alga | Scenedesmaceae | ES |
| ☐ *Scenedesmus bijuga* | green alga | Scenedesmaceae | ES |
| ☐ *Scenedesmus bijuga* var. *alternans* | green alga | Scenedesmaceae | ES |
| ☐ *Scenedesmus brevispina* | green alga | Scenedesmaceae | ES |
| ☐ *Scenedesmus denticulatus* | green alga | Scenedesmaceae | ES |
| ☐ *Scenedesmus dimorphus* | green alga | Scenedesmaceae | CK,ES |
| ☐ *Scenedesmus hystrix* | green alga | Scenedesmaceae | ES |
| ☐ *Scenedesmus longispina* | green alga | Scenedesmaceae | ES |
| ☐ *Scenedesmus opoliensis* | green alga | Scenedesmaceae | CK,ES |
| ☐ *Scenedesmus quadricauda* | green alga | Scenedesmaceae | ES |
| ☐ *Scenedesmus quadricauda* var. *longispina* | green alga | Scenedesmaceae | ES |
| ☐ *Scenedesmus sempervirens* | green alga | Scenedesmaceae | ES |
| ☐ *Scenedesmus serratus* | green alga | Scenedesmaceae | ES |
| ☐ *Scenedesmus smithii* | green alga | Scenedesmaceae | ES |
| ☐ *Scenedesmus sooi?* | green alga | Scenedesmaceae | ES |
| ☐ *Scenedesmus subspicatus* | green alga | Scenedesmaceae | ES |
| ☐ *Scenedesmus verrucosus* | green alga | Scenedesmaceae | ES |
| ☐ *Scenedesmus* spp. | green algae | Scenedesmaceae | CK,ES |
| ☐ *Schroederia indica* | green alga | Chlorococcaceae | LE |
| ☐ *Schroederia robusta* | green alga | Chlorococcaceae | ES |
| ☐ *Schroederia setigera* | green alga | Chlorococcaceae | ES |
| ☐ *Schroederia spiralis* | green alga | Chlorococcaceae | ES |
| ☐ *Selenastrum capricornutum* | green alga | Oocystaceae | ES |
| ☐ *Selenastrum* sp. | green alga | Oocystaceae | ES |
| ☐ *Tetraedron caudatum* | green alga | Chlorococcaceae | ES |
| ☐ *Tetraedron incus* | green alga | Chlorococcaceae | ES |
| ☐ *Tetraedron minimum* | green alga | Chlorococcaceae | CK,ES |

| Order Chlorococcales (continued) | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| ☐ *Tetraedron muticum* | green alga | Chlorococcaceae | ES |
| ☐ *Tetraedron regulare* | green alga | Chlorococcaceae | ES |
| ☐ *Tetraedron trigonum* var. *gracile* | green alga | Chlorococcaceae | ES |
| ☐ *Tetrastrum elegans* | green alga | Scenedesmaceae | ES |
| ☐ *Tetrastrum glabrum* | green alga | Scenedesmaceae | CK,ES |
| ☐ *Tetrastrum heteracanthum* | green alga | Scenedesmaceae | ES |
| ☐ *Tetrastrum heteracanthum* (*elegans* f.) | green alga | Scenedesmaceae | ES |
| ☐ *Tetrastrum punctatum* | green alga | Scenedesmaceae | ES |
| ☐ *Tetrastrum staurogeniaeforme* | green alga | Scenedesmaceae | ES |
| ☐ *Treubaria quadrispina* | green alga | Oocystaceae | ES |
| ☐ *Treubaria schmidlei* | green alga | Oocystaceae | ES |
| ☐ *Treubaria triappendiculata* | green alga | Oocystaceae | ES |
| ☐ *Willea irregularis* | green alga | Scenedesmaceae | ES |
| **Order Oedogoniales** | | | |
| ☐ *Oedogonium* sp. | green alga | Oedogoniaceae | ES |
| **Order Chaetophorales** | | | |
| ☐ *Desmococcus olivaceus* | green alga | Chaetophoraceae | CK |
| ☐ *Draparnaldia glomerata* | green alga | Chaetophoraceae | CK,ES |
| ☐ *Stigeoclonium farctum* | green alga | Chaetophoraceae | ES |
| ☐ *Stigeoclonium* sp. | green alga | Chaetophoraceae | ES |
| ☐ *Stigeoclonium tenue* | green alga | Chaetophoraceae | ES |
| **Order Ulotrichales** | | | |
| ☐ *Microspora* sp. | green alga | Microsporaceae | ES |
| ☐ *Microspora stagnorum* | green alga | Microsporaceae | ES |
| ☐ *Radiofilum conjunctivum* | green alga | Ulotrichaceae | CK |
| ☐ *Ulothrix* sp. | green alga | Ulotrichaceae | ES |
| ☐ *Ulothrix tenerrima* | green alga | Ulotrichaceae | CK |
| ☐ *Ulothrix tenuissima* | green alga | Ulotrichaceae | CK |
| **Order Cladophorales** | | | |
| ☐ *Cladophora glomerata* | green alga | Cladophoraceae | ES,LE |
| ☐ *Rhizoclonium hieroglyphicum* | green alga | Cladophoraceae | CK |
| **Order Zygnematales** | | | |
| ☐ *Closterium aciculare* var. *aciculare* | green alga, desmid | Desmidiaceae | ES |
| ☐ *Closterium acutum* var. *acutum* | green alga, desmid | Desmidiaceae | ES |
| ☐ *Closterium acutum* var. *variabile* | green alga, desmid | Desmidiaceae | ES |
| ☐ *Closterium gracile* var. *gracile* | green alga, desmid | Desmidiaceae | ES |
| ☐ *Closterium intermedium* | green alga, desmid | Desmidiaceae | CK |
| ☐ *Closterium limneticum* var. *limneticum* | green alga, desmid | Desmidiaceae | ES |
| ☐ *Closterium macilentum* var. *macilentum* | green alga, desmid | Desmidiaceae | ES |
| ☐ *Closterium moniliferum* var. *moniliferum* | green alga, desmid | Desmidiaceae | ES |
| ☐ *Closterium* spp. | green algae, desmids | Desmidiaceae | ES |
| ☐ *Cosmarium formosulum* | green alga, desmid | Desmidiaceae | ES |
| ☐ *Cosmarium granatum* | green alga, desmid | Desmidiaceae | ES |
| ☐ *Cosmarium granatum* var. *granatum* | green alga, desmid | Desmidiaceae | ES |
| ☐ *Cosmarium granulatum*? | green alga, desmid | Desmidiaceae | ES |
| ☐ *Cosmarium* spp. | green algae, desmids | Desmidiaceae | ES |
| ☐ *Mougeotia* sp. | green alga | Zygnemataceae | ES |
| ☐ *Spirogyra* sp. | green alga | Zygnemataceae | CK,ES |
| ☐ *Staurastrum gracile* | green alga, desmid | Desmidiaceae | ES |

**DIVISION MYXOMYCOTA (mucus molds)**
**CLASS MYXOMYCETES (true slime molds)**

| | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| **Order Physarales (physar slimes)** | | | |
| ☐ *Badhamia affinis* | slime mold | Physaraceae | RE |
| ☐ *Craterium minimum* | slime mold | Physaraceae | RE |
| ☐ *Diderma crustaceum* | slime mold | Didymiaceae | RE |
| ☐ *Diderma hemisphericum* | slime mold | Didymiaceae | RE |
| ☐ *Diderma reticulatum* | slime mold | Didymiaceae | RE |
| ☐ *Didymium crustaceum* | slime mold | Didymiaceae | RE |
| ☐ *Didymium iridis* | slime mold | Didymiaceae | RE |
| ☐ *Didymium melanospermum* | slime mold | Didymiaceae | RE |
| ☐ *Didymium squamulosum* | slime mold | Didymiaceae | RE |
| ☐ *Fuligo cinerea* | slime mold | Physaraceae | RE |
| ☐ *Fuligo violacea* | slime mold | Physaraceae | RE |
| ☐ *Mucilago spongiosa* | slime mold | Didymiaceae | RE |
| ☐ *Physarella oblonga* | slime mold | Physaraceae | RE |
| ☐ *Physarum nutans* | slime mold | Physaraceae | RE |
| ☐ *Physarum vern* | slime mold | Physaraceae | RE |
| ☐ *Physarum virid* | slime mold | Physaraceae | RE |
| ☐ *Physarum viride* var. *incanum* | slime mold | Physaraceae | RE |
| ☐ *Tilmadoche alba* | slime mold | Physaraceae | RE |
| **Order Liceales (lice slimes)** | | | |
| ☐ *Cribraria intricata* | slime mold | Cribrariaceae | RE |
| ☐ *Dictydium cancellatum* | Japanese-lantern slime | Cribrariaceae | RE |
| ☐ *Lindbladia tubulina* | slime mold | Cribrariaceae | RE |
| ☐ *Lycogala epidendrum* | wolf's-milk slime | Reticulariaceae | RE |
| ☐ *Lycogala flavo-fuscum* | slime mold | Reticulariaceae | RE |
| ☐ *Reticularia splendens* | slime mold | Reticulariaceae | RE |
| ☐ *Tubifera ferruginosa* | red raspberry slime | Reticulariaceae | RE |
| ☐ *Tubifera microsperma* | slime mold | Reticulariaceae | RE |
| **Order Trichiales (trichi slimes)** | | | |
| ☐ *Acryodes incarnata* | slime mold | Trichiaceae | RE |
| ☐ *Arcyria cinerea* | slime mold | Trichiaceae | RE |
| ☐ *Arcyria denudata* | carnival candy slime | Trichiaceae | RE |
| ☐ *Arcyria incarnata* | slime mold | Trichiaceae | RE |
| ☐ *Arcyria nutans* | slime mold | Trichiaceae | RE |
| ☐ *Calonema aureum* | slime mold | Trichiaceae | RE |
| ☐ *Hemitrichia clavata* | yellow-fuzz cone slime | Trichiaceae | RE |
| ☐ *Hemitrichia intorta* | slime mold | Trichiaceae | RE |
| ☐ *Hemitrichia stipitata* | slime mold | Trichiaceae | RE |
| ☐ *Hemitrichia vesparium* | slime mold | Trichiaceae | RE |
| ☐ *Lachnobolus globosus* | slime mold | Trichiaceae | RE |
| ☐ *Ophiotheca wrightii* | slime mold | Trichiaceae | RE |
| ☐ *Perichæna quadrata* | slime mold | Trichiaceae | RE |
| ☐ *Trichia inconspicua* | slime mold | Trichiaceae | RE |
| **Order Stemonitales (stemonit slimes)** | | | |
| ☐ *Comatichia laxa* | slime mold | Stemonitaceae | RE |
| ☐ *Comatichia pulchella* | slime mold | Stemonitaceae | RE |
| ☐ *Comatricha stemonitis* | slime mold | Stemonitaceae | RE |
| ☐ *Diachea leucopodia* | white-footed slime | Stemonitaceae | RE |
| ☐ *Lamproderma arcyrionema* | slime mold | Stemonitaceae | RE |
| ☐ *Stemonitis fenestrata* | slime mold | Stemonitaceae | RE |
| ☐ *Stemonitis fusca* | slime mold | Stemonitaceae | RE |
| ☐ *Stemonitis herbatica* | slime mold | Stemonitaceae | RE |
| ☐ *Stemonitis maxima* | slime mold | Stemonitaceae | RE |
| ☐ *Stemonitis smithii* | slime mold | Stemonitaceae | RE |

**DIVISION PHYCOMYCOTA (algal fungi)**
**CLASS CHYTRIDIOMYCETES (chytrids)**

| | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| **Order Chytridiales** | | | |
| ☐ *Entophlyctis aurea* | water mold | Phlyctidiaceae | LE,RE |
| ☐ *Rozella allomycis* | water mold | Olpidiaceae | LE,RE |
| ☐ *Synchytrium decipiens* | water mold | Synchytriaceae | LE,RE |
| **Order Blastocladiales** | | | |
| ☐ *Allomyces arbuscula* | water mold | Blastocladiaceae | LE,RE |
| ☐ *Blastocladia globosa* | water mold | Blastocladiaceae | LE,RE |
| ☐ *Blastocladia pringsheimii* | water mold | Blastocladiaceae | LE,RE |
| ☐ *Blastocladia ramosa* | water mold | Blastocladiaceae | LE,RE |
| ☐ *Blastocladia simplex* | water mold | Blastocladiaceae | LE,RE |
| ☐ *Blastocladia tenuis* | water mold | Blastocladiaceae | LE,RE |
| **Order Monoblepharidales** | | | |
| ☐ *Gonapodya prolifera* | water mold | Gonapodyaceae | LE,RE |
| ☐ *Monoblepharis* sp. | water mold | Monoblepharidaceae | LE,RE |

**CLASS OOMYCETES (egg fungi)**

| | | | |
|---|---|---|---|
| **Order Saprolegniaceae** | | | |
| ☐ *Achlya americana* | water mold | Saprolegniaceae | LE,RE |
| ☐ *Achlya bisexualis* | water mold | Saprolegniaceae | LE,RE |
| ☐ *Achlya debaryana* | water mold | Saprolegniaceae | LE,RE |
| ☐ *Achlya dubia* | water mold | Saprolegniaceae | LE,RE |
| ☐ *Achlya flagellata* | water mold | Saprolegniaceae | LE,RE |
| ☐ *Achlya klebsiana* | water mold | Saprolegniaceae | LE,RE |
| ☐ *Achlya polyandra* | water mold | Saprolegniaceae | LE,RE |
| ☐ *Achlya prolifera* | water mold | Saprolegniaceae | LE,RE |
| ☐ *Achlya proliferoides* | water mold | Saprolegniaceae | LE,RE |
| ☐ *Achlya rodrigueziana* | water mold | Saprolegniaceae | LE,RE |
| ☐ *Achlya* sp. | water mold | Saprolegniaceae | LE,RE |
| ☐ *Aphanomyces euteiches* | water mold | Saprolegniaceae | LE,RE |
| ☐ *Aphanomyces laevis* | water mold | Saprolegniaceae | LE,RE |
| ☐ *Aphanomyces scaber* | water mold | Saprolegniaceae | LE,RE |
| ☐ *Aphanomyces* sp. | water mold | Saprolegniaceae | LE,RE |
| ☐ *Dictyuchus anomalus* | water mold | Saprolegniaceae | LE,RE |
| ☐ *Dictyuchus missouriensis* | water mold | Saprolegniaceae | LE,RE |
| ☐ *Dictyuchus monosporus* | water mold | Saprolegniaceae | LE,RE |
| ☐ *Dictyuchus pseudodictyon* | water mold | Saprolegniaceae | LE,RE |
| ☐ *Dictyuchus* sp. | water mold | Saprolegniaceae | LE,RE |
| ☐ *Geolegnia inflata* | water mold | Saprolegniaceae | LE,RE |
| ☐ *Isoachlya* sp.? | water mold | Saprolegniaceae | LE,RE |
| ☐ *Leptolegnia subterranea* | water mold | Saprolegniaceae | LE,RE |
| ☐ *Protoachlya paradoxa* | water mold | Saprolegniaceae | LE,RE |
| ☐ *Saprolegnia diclina* | water mold | Saprolegniaceae | LE,RE |
| ☐ *Saprolegnia ferax* | water mold | Saprolegniaceae | LE,RE |
| ☐ *Saprolegnia monoica* | water mold | Saprolegniaceae | LE,RE |
| ☐ *Saprolegnia parasitica* | water mold | Saprolegniaceae | LE,RE |
| ☐ *Saprolegnia* sp. | water mold | Saprolegniaceae | LE,RE |
| **Order Leptomitales** | | | |
| ☐ *Apodachlya brachynema* | water mold | Leptomitaceae | LE,RE |
| **Order Lagenidales** | | | |
| ☐ *Olpidiopsis saprolegniae* | water mold | Olpidiopsidaceae | LE,RE |
| ☐ *Olpidiopsis varians* | water mold | Olpidiopsidaceae | LE,RE |
| **Order Peronosporales (downy mildews)** | | | |
| ☐ *Cystopus bliti* | downy mildew | Peronosporaceae | RE |
| ☐ *Cystopus candidus* | downy mildew | Peronosporaceae | RE |
| ☐ *Peronospora geranii* | downy mildew | Peronosporaceae | RE |
| ☐ *Peronospora parasitica* | downy mildew | Peronosporaceae | RE |
| ☐ *Phytophthora cactorum* | crown rot | Pythiaceae | CK |

| Order Peronosporales (continued) | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| ☐ *Phytophthora undulatum* | downy mildew | Pythiaceae | LE,RE |
| ☐ *Plasmopara sordida* | downy mildew | Peronosporaceae | RE |
| ☐ *Plasmopara viticola* | downy mildew of grape | Peronosporaceae | CK,ES,RE |
| ☐ *Pythium aphanidermatum* | downy mildew | Pythiaceae | LE,RE |
| ☐ *Pythium cystosiphon?* | downy mildew | Pythiaceae | LE,RE |
| ☐ *Pythium debaryanum* | downy mildew | Pythiaceae | LE,RE |
| ☐ *Pythium proliferum* | downy mildew | Pythiaceae | LE,RE |
| ☐ *Pythium pulchrum* | downy mildew | Pythiaceae | LE,RE |
| ☐ *Pythium* sp. | downy mildew | Pythiaceae | LE,RE |
| ☐ *Pythium ultimum* | downy mildew | Pythiaceae | LE,RE |
| **CLASS ZYGOMYCETES (pair fungi)** | | | |
| **Order Entomophthorales** | | | |
| ☐ *Empusa grylli* | mold | Entomophthoraceae | RE |
| **Order Mucorales** | | | |
| ☐ *Mucor stolonifer* | mold | Mucoraceae | RE |
| ☐ *Rhizopus* sp. | bread mold | Mucoraceae | CK |
| **DIVISION ASCOMYCOTA (ascomycetes or bladder fungi)** | | | |
| **CLASS HEMIASCOMYCETES (yeasts)** | | | |
| **Order Protomycetales** | | | |
| ☐ *Taphrina communis* | plum pockets | Protomycetaceae | CK |
| ☐ *Taphrina deformans* | peach leaf curl | Protomycetaceae | CK |
| **CLASS LOCULOASCOMYCETES (rots & scabs)** | | | |
| **Order Myriangiales** | | | |
| ☐ *Elsinoë corni* | dogwood anthracnose | Elsinoëaceae | CK |
| **Order Dothideales** | | | |
| ☐ *Botryosphaeria dothidea* | white apple rot | Dothioraceae | CK |
| ☐ *Botryosphaeria obtusa* | black apple rot | Dothioraceae | CK |
| ☐ dothidean spp. | pear sooty molds | Dothideaceae | CK |
| ☐ *Mycosphaerella fragariae* | strawberry leaf spot | Dothideaceae | CK |
| ☐ *Plowrightia morbosa* | rot | Dothideaceae | RE |
| **Order Pleosporales** | | | |
| ☐ *Apiosporina morbosa* | black knot | Venturiaceae | CK |
| ☐ *Venturia crataegi* | apple scab | Venturiaceae | CK |
| ☐ *Venturia pyrina* | pear scab | Venturiaceae | CK |
| **CLASS PLECTOMYCETES (ascomolds)** | | | |
| **Order Eurotiales** | | | |
| ☐ *Aspergillus herbariorum* | mold | Trichocomaceae | RE |
| ☐ *Aspergillus niger* | mold | Trichocomaceae | RE |
| ☐ *Ophiostoma ulmi* | Dutch elm disease | Ophiostomataceae | CK |
| ☐ *Penicillium crustaceum* | mold | Trichocomaceae | RE |
| ☐ *Penicillium* sp. | blue mold | Trichocomaceae | CK |
| **CLASS PYRENOMYCETES (flask fungi)** | | | |
| **Order Erysiphales (Powdery Mildews)** | | | |
| ☐ *Erysiphe cichoracearum* | powdery mildew | Erysiphaceae | RE |
| ☐ *Erysiphe communis* | powdery mildew | Erysiphaceae | RE |
| ☐ *Erysiphe montagnei* | powdery mildew | Erysiphaceae | RE |
| ☐ *Erysiphe polygoni* | black locust powdery mildew | Erysiphaceae | RE |
| ☐ *Microsphæra alni* | lilac powdery mildew | Erysiphaceae | CK,RE |
| ☐ *Microsphæra diffusa* | powdery mildew | Erysiphaceae | RE |
| ☐ *Microsphæra ravenellii* | powdery mildew | Erysiphaceae | RE |
| ☐ *Microsphaera viburni* | powdery mildew | Erysiphaceae | CK |
| ☐ *Phyllactinia corylea* | tree powdery mildew | Erysiphaceae | RE |
| ☐ *Podosphaera leucotricha* | apple powdery mildew | Erysiphaceae | CK |
| ☐ *Podosphæra oxyacanthæ* | powdery mildew | Erysiphaceae | RE |
| ☐ *Sphærotheca castagnei* | downy mildew | Erysiphaceae | RE |
| ☐ *Uncinula necator* | grape powdery mildew | Erysiphaceae | CK |

| | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| **Order Xylariales (flask fungi)** | | | |
| ☐ *Daldinia cingulata* | zoned black fungus | Xylariaceae | RE |
| ☐ *Hypoxylon* sp. | wood-wart | Xylariaceae | RE |
| ☐ *Xylaria digitata* | finger fungus | Xylariaceae | RE |
| ☐ *Xylaria polymorpha* | dead man's fingers | Xylariaceae | RE |
| **Order Diaporthales (flask fungi)** | | | |
| ☐ *Apiognomonia veneta* | sycamore anthracnose | Diaporthaceae | CK |
| ☐ *Cryphonectria parasitica* | chestnut blight | Diaporthaceae | CK |
| ☐ *Diaporthe ailanthi* | flask fungus | Diaporthaceae | RE |
| ☐ *Glomerella cingulata* | apple bitter rot | Diaporthaceae | CK |
| ☐ *Guignardia bidwellii* | grape black rot | Diaporthaceae | CK,RE |
| **Order Hypocreales** | | | |
| ☐ *Leucostoma* sp. | peach canker | Hypocreaceae | CK |
| ☐ *Nectria galligena* | nectria canker | Hypocreaceae | CK |
| **Order Clavicipitales (flask fungi)** | | | |
| ☐ *Claviceps purpurea* | ergot claviceps | Clavicipitaceae | RE |
| ☐ *Cordyceps militaris* | military orange caterpillar fungus | Clavicipitaceae | RE |
| **CLASS DISCOMYCETES (disc fungi)** | | | |
| **Order Phacidiales** | | | |
| ☐ *Rhytisma* sp. | maple tar spot | Rhytismataceae | CK |
| **Order Helotiales (earth tongues)** | | | |
| ☐ *Blumeriella jaapii* | cherry leaf spot | Dermateaceae | CK |
| ☐ *Monilinia fructicola* | stone fruits brown rot | Sclerotiniaceae | CK |
| ☐ *Pseudopeziza medicaginis* | leaf spot | Dermateaceae | RE |
| ☐ *Sclerotinia fructigena* | rind rot | Sclerotiniaceae | ES |
| **Order Pezizales (cup fungi and allies)** | | | |
| ☐ *Aleuria aurantia* | orange peel fungus | Aleuriaceae | CK |
| ☐ *Lachnea scutellata* | patella | Pezizaceae | RE |
| ☐ *Macropodia semitosta* | paxina | Pezizaceae | RE |
| ☐ *Morchella esculenta* | common morel | Morchellaceae | CK |
| ☐ *Patella setosa* | cup fungus | Pezizaceae | CK |
| **DIVISION BASIDIOMYCOTA (basidomycetes or small base fungi)** | | | |
| **CLASS TELIOMYCETES (rust and smut fungi)** | | | |
| **Order Uredinales (rust fungi)** | | | |
| ☐ *Aecidium cimicifugatum* | rust | Pucciniaceae | RE |
| ☐ *Aecidium compositatum* | rust | Pucciniaceae | RE |
| ☐ *Aecidium fraxini* | rust | Pucciniaceae | RE |
| ☐ *Aecidium grossulariæ* | rust | Pucciniaceae | RE |
| ☐ *Aecidium impatientis* | rust | Pucciniaceae | RE |
| ☐ *Aecidium nesææ* | rust | Pucciniaceae | RE |
| ☐ *Aecidium oenotheræ* | rust | Pucciniaceae | RE |
| ☐ *Aecidium pammelii* | rust | Pucciniaceae | RE |
| ☐ *Aecidium pustulatum* | rust | Pucciniaceae | RE |
| ☐ *Allodus podophylli* | May-apple rust | Pucciniaceae | CK |
| ☐ *Coleosporium sonchi-arvensis* | rust | Melampsoraceae | RE |
| ☐ *Gymnoconia peckiana* | rust | Pucciniaceae | RE |
| ☐ *Gymnoconia* sp. | orange rust | Pucciniaceae | CK |
| ☐ *Gymnosporangium globosum* | rust | Pucciniaceae | RE |
| ☐ *Gymnosporangium juniperi-virginianae* | cedar-apple rust | Pucciniaceae | CK |
| ☐ *Gymnosporangium nidus-avis* | rust | Pucciniaceae | RE |
| ☐ *Kunkelia nitens* | blackberry rust | Pucciniaceae | CK |
| ☐ *Melampsora salicis-capreæ* | melampsora rust | Melampsoraceae | RE |
| ☐ *Negrido caladii* | Jack in the pulpit rust | Pucciniaceae | CK |
| ☐ *Phragmidium obtusum* | rust | Pucciniaceae | RE |
| ☐ *Puccinia caricis* | current rust | Pucciniaceae | RE |
| ☐ *Puccinia coronata* | buckthorn crown rust | Pucciniaceae | RE |
| ☐ *Puccinia fraxinata* | rust | Pucciniaceae | RE |

| Order Uredinales (continued) | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| ☐ *Puccinia glechomatis* | rust | Pucciniaceae | RE |
| ☐ *Puccinia graminis* | grape rust | Pucciniaceae | RE |
| ☐ *Puccinia helianthi* | rust | Pucciniaceae | RE |
| ☐ *Puccinia malvacearum* | rust | Pucciniaceae | RE |
| ☐ *Puccinia menthæ* | rust | Pucciniaceae | RE |
| ☐ *Puccinia osmorhizæ* | rust | Pucciniaceae | RE |
| ☐ *Puccinia podophylli* | rust | Pucciniaceae | RE |
| ☐ *Puccinia polygoni-amphibii* | rust | Pucciniaceae | RE |
| ☐ *Puccinia seymeriæ* | rust | Pucciniaceae | RE |
| ☐ *Puccinia simplex* | rust | Pucciniaceae | RE |
| ☐ *Puccinia taraxaci* | rust | Pucciniaceae | RE |
| ☐ *Puccinia xanthii* | rust | Pucciniaceae | RE |
| ☐ *Pucciniastrum agrimoniæ* | rust | Pucciniastraceae | RE |
| ☐ *Uromyces euphorbiæ* | rust | Pucciniaceae | RE |
| ☐ *Uromyces phaseoli* | rust | Pucciniaceae | RE |
| ☐ *Uromyces striatus* | rust | Pucciniaceae | RE |
| ☐ *Uromyces toxicodendri* | rust | Pucciniaceae | RE |
| ☐ *Uromyces trifolii* | rust | Pucciniaceae | RE |
| **Order Ustilaginales (smut fungi)** | | | |
| ☐ *Entyloma menispermi* | smut | Tilletiaceae | RE |
| ☐ *Ustilago avenæ* | smut | Ustilaginaceae | RE |
| ☐ *Ustilago hordei* | smut | Ustilaginaceae | RE |
| ☐ *Ustilago maydis* | corn smut | Ustilaginaceae | CK |
| ☐ *Ustilago zeæ* | smut | Ustilaginaceae | CK, RE |
| **CLASS PHRAGMOBASIDIOMYCETES (jelly and waxy fungi)** | | | |
| **Order Eutremellales (jelly fungi)** | | | |
| ☐ *Exidia spiculosa* | jelly fungus | Tremellaceae | CK |
| ☐ *Tremella candida* | jelly fungus | Tremellaceae | RE |
| **Order Metatremellales (waxy fungi)** | | | |
| ☐ *Calocera cornea* | clublike tuning fork | Dacrymycetaceae | RE |
| **CLASS HYMENOMYCETES (exposed hymenium fungi)** | | | |
| **Order Agaricales (coral and pore fungi)** | | | |
| ☐ *Agaricus campestris* | meadow mushroom | Agaricaceae | CK |
| ☐ *Agaricus comtulus* | agaricus | Agaricaceae | RE |
| ☐ *Amanita phalloides* | death cup | Amanitaceae | RE |
| ☐ *Amanitopsis vaginata* | sheathed amanitopsis | Amanitaceae | RE |
| ☐ *Armillaria mellea* | honey mushroom | Agaricaceae | CK |
| ☐ *Atrichum undulatum* | wavy Catherinea mushroom | Polyporaceae | CK |
| ☐ *Bjerkandera adusta* | pore fungus | Polyporaceae | CK |
| ☐ *Boletus chrysenteron* | golden-flesh or red-crack bolete | Boletaceae | RE |
| ☐ *Boletus piperatus* | edible bolete | Boletaceae | RE |
| ☐ *Clavaria flaccida* | soft coral fungus | Clavariaceae | RE |
| ☐ *Clavaria pyxidata* | edible coral fungus | Clavariaceae | RE |
| ☐ *Clavaria* sp. | coral mushroom | Clavariaceae | CK |
| ☐ *Clitocybe infundibuliformis-membranacea* | funnel clitocybe | Tricholomataceae | RE |
| ☐ *Clitopilus abortivus* | field type mushroom | Agaricaceae | CK |
| ☐ *Collybia delicatella* | collybia | Tricholomataceae | RE |
| ☐ *Collybia dryophila* | oak-loving collybia | Tricholomataceae | RE |
| ☐ *Collybia myriadophylla* | conifer collybia | Tricholomataceae | RE |
| ☐ *Collybia platyphylla* | broad-gilled collybia | Tricholomataceae | RE |
| ☐ *Coprinus fuscescens* | ink-cup | Coprinaceae | RE |
| ☐ *Coprinus micaceus* | glistening ink-cup | Coprinaceae | RE |
| ☐ *Crepidotus malachius* | spotted stumpfoot | Agaricaceae | CK |
| ☐ *Daedalea confragosa* | currycomb bracket fungus | Polyporaceae | CK |
| ☐ *Daedalea quercina* | oak mazegill fungus | Polyporaceae | CK |
| ☐ *Entoloma* sp. | entoloma | Rhodophyllaceae | RE |

| Order Agaricales (continued) | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| ☐ *Favolus alveolaris* | pore fungus | Polyporaceae | CK |
| ☐ *Fomes applanatus* | artist's fomes | Polyporaceae | RE |
| ☐ *Fomes everhartii* | artist's type fungus | Polyporaceae | CK |
| ☐ *Fomes ohioensis* | artist's type fungus | Polyporaceae | CK |
| ☐ *Galera* sp. | deadly galerina | Cortinariaceae | RE |
| ☐ *Ganoderma applanatum* | artist's shelf fungus | Polyporaceae | CK |
| ☐ *Gomphidius* sp. | gomphidius | Gomphidiaceae | RE |
| ☐ *Gyrodom merulioides* | fleshy pore fungus or bolete | Boletaceae | CK |
| ☐ *Hydrochaete olivacea* | red leather fungus | Polyporaceae | CK,FE |
| ☐ *Inocybe* sp. | fiber cap | Cortinariaceae | RE |
| ☐ *Irpex lacteus* | white leather fungus | Polyporaceae | RE |
| ☐ *Lactarius rimosellus* | milk cap | Russulaceae | RE |
| ☐ *Lactarius subdulcis* | dull milk cap | Russulaceae | RE |
| ☐ *Lactarius theiogalus* | yellow -straining milk cap | Russulaceae | RE |
| ☐ *Laetiporus sulphurous* | sulfur polypore | Polyporaceae | RE |
| ☐ *Lentinus sulcatus* | lentinus | Tricholomataceae | RE |
| ☐ *Lenzites betulina* | birch mazegill fungus | Polyporaceae | CK |
| ☐ *Lenzites sepiaria* | gill polypore | Polyporaceae | RE |
| ☐ *Lepiota adirondackensis* | Adirondacks lepiota | Lepiotaceae | RE |
| ☐ *Lepiota cristata* | crested lepiota | Lepiotaceae | RE |
| ☐ *Lepiota erminea* | ermine lepiota | Lepiotaceae | RE |
| ☐ *Lepiota illinita* | lepiota | Lepiotaceae | RE |
| ☐ *Macrolepiota procera* | parasol mushroom | Lepiotaceae | CK |
| ☐ *Marasmius albiceps* | marasmius | Tricholomataceae | RE |
| ☐ *Marasmius candidus* | marasmius | Tricholomataceae | RE |
| ☐ *Marasmius nigripes* | marasmius | Tricholomataceae | RE |
| ☐ *Marasmius oreades* | fairy-ring mushroom | Tricholomataceae | CK |
| ☐ *Marasmius siccus* | orange pin-wheel | Tricholomataceae | RE |
| ☐ *Marasmius trullisatipes* | marasmius | Tricholomataceae | RE |
| ☐ *Mycena capillaris* | bonnet mushroom | Tricholomataceae | RE |
| ☐ *Oligoporus tephroleucus* | pore fungus | Polyporaceae | CK |
| ☐ *Panus rudis* | rudy panus | Amanitaceae | RE |
| ☐ *Panus strypticus* | field type mushroom | Amanitaceae | CK |
| ☐ *Phaeolus schweinitzii* | polypore | Polyporaceae | RE |
| ☐ *Phellinus gilvus* | polypore | Polyporaceae | CK,FE |
| ☐ *Pholiota unicolor* | scalecap mushroom | Cortinariaceae | CK |
| ☐ *Pleurotus sapidus* | lavender-spored pleurotus | Tricholomataceae | CK,FE |
| ☐ *Pluteus cervinus* | fawn-colored pluteus | Vovlariaceae | RE |
| ☐ *Polyporus arcularius* | polypore | Polyporaceae | CK,FE |
| ☐ *Polyporus carneus* | polypore | Polyporaceae | RE |
| ☐ *Polyporus elegans* | pore fungus | Polyporaceae | CK |
| ☐ *Polyporus squamosus* | Dryad's saddle fungus | Polyporaceae | CK |
| ☐ *Polystictus hirsutus-albiporus* | polypore | Polyporaceae | RE |
| ☐ *Poria unita* | pore fungus | Polyporaceae | CK |
| ☐ *Psilocybe ammophila* | psilocybe | Cortinariaceae | RE |
| ☐ *Pyenoporus cinnibarinus* | cinnabar polypore | Polyporaceae | RE |
| ☐ *Russula alutacea* | red brittle gills | Russulaceae | RE |
| ☐ *Russula compacta* | compact brittle gills | Russulaceae | RE |
| ☐ *Russula ftens* | fetid brittle gills | Russulaceae | RE |
| ☐ *Russula pectinata* | brittle gills | Russulaceae | RE |
| ☐ *Russula xerampelina* | crab-scented brittle gills | Russulaceae | RE |
| ☐ *Schizophyllum commune* | spit-gilled bracket | Schizophyllaceae | RE |
| ☐ *Steccherinum ochraceum* | hydnum tooth fungus | Hydnaceae | CK |
| ☐ *Stereum candidum* | sereum | Corticiaceae | RE |
| ☐ *Stereum disciforme* | sereum | Corticiaceae | RE |
| ☐ *Stereum fasciatum* | sereum | Corticiaceae | RE |
| ☐ *Stereum frustulosum* | false turkeytail fungus | Corticiaceae | CK |

| Order Agaricales (continued) | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| ☐ *Stereum versicolor* | sereum | Corticiaceae | RE |
| ☐ *Strobilomyces strobilaceus* | old-man-of-the-woods | Boletaceae | RE |
| ☐ *Trametes conchifer* | pore fungus | Polyporaceae | CK |
| ☐ *Trametes versicolor* | turkeytail or pore fungus | Polyporaceae | CK |
| ☐ *Tricholoma albo-flavidum* | knight-cap | Tricholomataceae | RE |
| **CLASS GASTEROMYCETES (stomach fungi)** | | | |
| **Order Phallales** | | | |
| ☐ *Mutinus caninus* | dog stinkhorn | Phallaceae | CK |
| **Order Lycoperdales (puffballs)** | | | |
| ☐ *Bovista pila* | common puffball | Lycoperdaceae | CK |
| ☐ *Calvatia gigantea* | giant puffball | Lycoperdaceae | CK |
| ☐ *Geaster hygrometricus* | water measuring earthstar | Lycoperdaceae | RE |
| ☐ *Lycoperdon perlatum* | gem puffball | Lycoperdaceae | CK |
| ☐ *Lycoperdon pusillum* | mini puffball | Lycoperdaceae | CK,RE |
| ☐ *Lycoperdon pyriforme* | pear-shaped or stump puffball | Lycoperdaceae | CK,RE |
| ☐ *Myriostoma coliformis* | pepper box | Lycoperdaceae | RE |
| **Order Tulostomatales (stalked puffballs)** | | | |
| ☐ *Tulostoma campestre* | field tylostoma | Tulostomataceae | RE |
| ☐ *Tulostoma fimbriatum* | buried-stalk puffball | Tulostomataceae | RE |
| **Order Sclerodermatales** | | | |
| ☐ *Scleroderma citrinum* | common earth ball | Sclerodermataceae | CK |
| **Order Nidulariales (bird's-nest fungi)** | | | |
| ☐ *Cyathus striatus* | fluted bird's nest | Nidulariaceae | RE |
| **DIVISION DEUTEROMYCOTA (second or imperfect fungi)** | | | |
| **CLASS HYPOMYCETES** | | | |
| **Order Hyphomycetales** | | | |
| ☐ *Botrytis cinerea* | raspberry mold | Moniliaceae | CK |
| ☐ *Cercospora chenopodii* | imperfect fungus | Dematiaceae | RE |
| ☐ *Cercospora clavata* | imperfect fungus | Dematiaceae | RE |
| ☐ *Cercospora helianthi* | imperfect fungus | Dematiaceae | RE |
| ☐ *Cercospora maianthemi* | imperfect fungus | Dematiaceae | RE |
| ☐ *Cercospora monoica* | imperfect fungus | Dematiaceae | RE |
| ☐ *Cercospora osmorhizæ* | imperfect fungus | Dematiaceae | RE |
| ☐ *Cercospora oxybaphi* | imperfect fungus | Dematiaceae | RE |
| ☐ *Cercospora tuberosa* | imperfect fungus | Dematiaceae | RE |
| ☐ *Cladosporium carpophilum* | peach scab | Moniliaceae | CK |
| ☐ *Didymaria ungeri* | imperfect fungus | Moniliaceae | RE |
| ☐ *Drechslera teres* | imperfect fungus | Dematiaceae | RE |
| ☐ *Macrosporium saponariæ* | imperfect fungus | Dematiaceae | RE |
| ☐ *Macrosporium solani* | imperfect fungus | Dematiaceae | RE |
| ☐ *Ovularia obliqua* | imperfect fungus | Moniliaceae | RE |
| ☐ *Ramularia arvensis* | imperfect fungus | Moniliaceae | RE |
| ☐ *Ramularia celastiri* | imperfect fungus | Moniliaceae | RE |
| ☐ *Ramularia variabilis* | imperfect fungus | Moniliaceae | RE |
| ☐ *Rhinotrichum curtisii* | imperfect fungus | Moniliaceae | RE |
| **Order Tuberculariales** | | | |
| ☐ *Tuberculina persicina* | imperfect fungus | Tuberculariaceae | RE |
| **CLASS COELOMYCETES** | | | |
| **Order Melanconiales** | | | |
| ☐ *Cylindrosporium padi* | imperfect fungus | Melanconiaceae | RE |
| ☐ *Gleosporium irregulare* | imperfect fungus | Melanconiaceae | RE |
| ☐ *Gleosporium nervisequum* | imperfect fungus | Melanconiaceae | RE |
| ☐ *Gleosporium septorioides* | imperfect fungus | Melanconiaceae | RE |
| ☐ *Marsonia toxicodendri* | imperfect fungus | Melanconiaceae | RE |

| Order Sphaeropsidales | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| ☐ *Cicinnobolus cesatii* | imperfect fungus | Sphaeropsidaceae | RE |
| ☐ *Coniothyrium* sp. | raspberry cane blight | Sphaeropsidaceae | CK |
| ☐ *Diplodia maydis* | corn ear rot | Sphaeropsidaceae | CK |
| ☐ *Peltaster fructicola* | apple sooty blotch mold | Leptostromataceae | CK |
| ☐ *Phoma uvicola* | imperfect fungus | Sphaeropsidaceae | RE |
| ☐ *Phyllosticta cruenta* | imperfect fungus | Sphaeropsidaceae | RE |
| ☐ *Phyllosticta iridis* | imperfect fungus | Sphaeropsidaceae | RE |
| ☐ *Phyllosticta palustri* | imperfect fungus | Sphaeropsidaceae | RE |
| ☐ *Phyllosticta phaseolina* | imperfect fungus | Sphaeropsidaceae | RE |
| ☐ *Septoria ægopodii* | imperfect fungus | Sphaeropsidaceae | RE |
| ☐ *Septoria aquilegiæ* | imperfect fungus | Sphaeropsidaceae | RE |
| ☐ *Septoria erigerontis* | imperfect fungus | Sphaeropsidaceae | RE |
| ☐ *Septoria lactucicola* | imperfect fungus | Sphaeropsidaceae | RE |
| ☐ *Septoria littorea* | imperfect fungus | Sphaeropsidaceae | RE |
| ☐ *Septoria lophanthi* | imperfect fungus | Sphaeropsidaceae | RE |
| ☐ *Septoria musiva* | imperfect fungus | Sphaeropsidaceae | RE |
| ☐ *Septoria ochroleuca* | imperfect fungus | Sphaeropsidaceae | RE |
| ☐ *Septoria oenotheræ* | imperfect fungus | Sphaeropsidaceae | RE |
| ☐ *Septoria podophyllina* | imperfect fungus | Sphaeropsidaceae | RE |
| ☐ *Septoria polygonorum* | imperfect fungus | Sphaeropsidaceae | RE |
| ☐ *Septoria rubi* | imperfect fungus | Sphaeropsidaceae | RE |
| ☐ *Septoria scrophulariæ* | imperfect fungus | Sphaeropsidaceae | RE |
| ☐ *Septoria violæ-palustris* | imperfect fungus | Sphaeropsidaceae | RE |
| ☐ *Zygophiala jamaicensis* | apple flyspeck | Leptostromataceae | CK |
| **DIVISION MYCOPHYCOPHYTA (lichens or fungus algae)** | | | |
| **CLASS ASCOLICHENES (ascomycote lichens)** | | | |
| **Order Pyrenulales** | | | |
| ☐ *Arthopyrenia alba* | lichen | Pyrenulaceae | RE |
| ☐ *Microthelia micula* | lichen | Pyrenulaceae | RE |
| ☐ *Pyrenula leucoplaca* | lichen | Pyrenulaceae | RE |
| ☐ *Trypethelium virens* | lichen | Trypetheliaceae | RE |
| ☐ *Verrucaria muralis* | pitted lichen | Verrucariaceae | RE |
| **Order Caliciales** | | | |
| ☐ *Coniocybe furfuracea* | lichen | Caliciaceae | RE |
| **Order Hysteriales** | | | |
| ☐ *Arthonia punctiformis* | lichen | Arthoniaceae | RE |
| ☐ *Arthonia radiata* | lichen | Arthoniaceae | RE |
| ☐ *Arthothelium spectabile* | lichen | Arthoniaceae | RE |
| ☐ *Graphis scripta* | script lichen | Graphidaceae | RE |
| ☐ *Opegrapha lichenoides* | lichen | Graphidaceae | RE |
| ☐ *Opegrapha pulicaris* | lichen | Graphidaceae | RE |
| ☐ *Opegrapha viridis* | lichen | Graphidaceae | RE |
| **Order Lecanorales** | | | |
| ☐ *Alectoria nidulifera* | lichen | Usneaceae | RE |
| ☐ *Anaptychia echinata* | lichen | Physciaceae | RE |
| ☐ *Anaptychia hypoleuca* | lichen | Physciaceae | RE |
| ☐ *Anaptychia leucomelaena* | lichen | Physciaceae | RE |
| ☐ *Anaptychia palmulata* | lichen | Physciaceae | RE |
| ☐ *Anaptychia speciosa* | lichen | Physciaceae | RE |
| ☐ *Bacidia fuscorubella* | lichen | Lecideaceae | RE |
| ☐ *Bacidia schweinitzii* | lichen | Lecideaceae | RE |
| ☐ *Bilimbia sabuletorum* | lichen | Lecideaceae | RE |
| ☐ *Bilimbia trachona* | lichen | Lecideaceae | RE |
| ☐ *Buellia parasema* | lichen | Buelliaceae | RE |
| ☐ *Caloplaca aurantiaca* | lichen | Caloplacaceae | RE |
| ☐ *Caloplaca cerina* | lichen | Caloplacaceae | RE |
| ☐ *Candelaria concolor* | lichen | Parmeliaceae | RE |

| Order Lecanorales (continued) | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| ☐ *Candelaria fibrosa* | lichen | Parmeliaceae | RE |
| ☐ *Cetraria ciliaris* | shield lichen | Parmeliaceae | RE |
| ☐ *Cetraria ericetorum* | shield lichen | Parmeliaceae | RE |
| ☐ *Cladonia arbuscula* | lichen | Cladoniaceae | RE |
| ☐ *Cladonia bacillaris* | lichen | Cladoniaceae | RE |
| ☐ *Cladonia caespiticia* | lichen | Cladoniaceae | RE |
| ☐ *Cladonia capitata* | lichen | Cladoniaceae | RE |
| ☐ *Cladonia coniocraea* | lichen | Cladoniaceae | RE |
| ☐ *Cladonia conista* | lichen | Cladoniaceae | RE |
| ☐ *Cladonia cristatella* | British soldiers or red crest lichen | Cladoniaceae | RE |
| ☐ *Cladonia cryptochlorophaea* | lichen | Cladoniaceae | RE |
| ☐ *Cladonia fimbriata* | lichen | Cladoniaceae | RE |
| ☐ *Cladonia furcata* | lichen | Cladoniaceae | RE |
| ☐ *Cladonia gracilis* | spoon lichen | Cladoniaceae | RE |
| ☐ *Cladonia grayi* | lichen | Cladoniaceae | RE |
| ☐ *Cladonia nemoxyna* | lichen | Cladoniaceae | RE |
| ☐ *Cladonia parasitica* | lichen | Cladoniaceae | RE |
| ☐ *Cladonia pyxidata* | pixie cup lichen | Cladoniaceae | RE |
| ☐ *Cladonia rangiferina* | reindeer lichen | Cladoniaceae | RE |
| ☐ *Cladonia* sp. | reindeer moss | Cladoniaceae | CK |
| ☐ *Cladonia squamosa* | lichen | Cladoniaceae | RE |
| ☐ *Cladonia subcariosa* | lichen | Cladoniaceae | RE |
| ☐ *Cladonia verticillata* | ladder lichen | Cladoniaceae | RE |
| ☐ *Collema subfurvum* | lichen | Collemaceae | RE |
| ☐ *Conotrema urceolatum* | lichen | Diploschistaceae | RE |
| ☐ *Lecanora dispersa* | lichen | Lecanoraceae | RE |
| ☐ *Lecanora pallida* | lichen | Lecanoraceae | RE |
| ☐ *Lecanora subfusca* | lichen | Lecanoraceae | RE |
| ☐ *Lecanora varia* | lichen | Lecanoraceae | RE |
| ☐ *Lecidea albocaerulescens* | whitewash lichen | Lecideaceae | RE |
| ☐ *Lecidea myriocarpoides* | whitewash lichen | Lecideaceae | RE |
| ☐ *Lecidea parasema* | whitewash lichen | Lecideaceae | RE |
| ☐ *Lecidea viridescens* | whitewash lichen | Lecideaceae | RE |
| ☐ *Lepraria* sp. | lichen | Leprariaceae | RE |
| ☐ *Leptogium lichenoides* | lichen | Collemaceae | RE |
| ☐ *Leptogium tenuissimum* | lichen | Collemaceae | RE |
| ☐ *Leptogium tremelloides* | lichen | Collemaceae | RE |
| ☐ *Ochrolechia tartarea* | lichen | Lecanoraceae | RE |
| ☐ *Parmelia aspera* | boulder lichen | Parmeliaceae | RE |
| ☐ *Parmelia aurulenta* | boulder lichen | Parmeliaceae | RE |
| ☐ *Parmelia borreri* | boulder lichen | Parmeliaceae | RE |
| ☐ *Parmelia caperata* | boulder lichen | Parmeliaceae | RE |
| ☐ *Parmelia crozalsiana* | boulder lichen | Parmeliaceae | RE |
| ☐ *Parmelia flaventior* | boulder lichen | Parmeliaceae | RE |
| ☐ *Parmelia livida* | boulder lichen | Parmeliaceae | RE |
| ☐ *Parmelia margaritata* | boulder lichen | Parmeliaceae | RE |
| ☐ *Parmelia perlata* | boulder lichen | Parmeliaceae | RE |
| ☐ *Parmelia rudecta* | boulder lichen | Parmeliaceae | RE |
| ☐ *Parmelia saxatilis* | boulder lichen | Parmeliaceae | RE |
| ☐ *Parmelia sulcata* | boulder lichen | Parmeliaceae | RE |
| ☐ *Parmelia ulophyllodes* | boulder lichen | Parmeliaceae | RE |
| ☐ *Peltigera aphthosa* | lichen | Peltigeraceae | RE |
| ☐ *Peltigera canina* | dog lichen | Peltigeraceae | RE |
| ☐ *Peltigera canina spuria* | lichen | Peltigeraceae | RE |
| ☐ *Peltigera horizontalis* | lichen | Peltigeraceae | RE |
| ☐ *Peltigera spuria* | lichen | Peltigeraceae | RE |
| ☐ *Pertusaria leioplaca* | lichen | Pertusariaceae | RE |

| Order Lecanorales (continued) | COMMON NAME | FAMILY | LOCAT ON |
|---|---|---|---|
| ☐ *Pertusaria multipuncta* | lichen | Pertusariaceae | RE |
| ☐ *Pertusaria pertusa* | lichen | Pertusariaceae | RE |
| ☐ *Pertusaria pustulata* | lichen | Pertusariaceae | RE |
| ☐ *Physcia adscendens* | lichen | Physciaceae | RE |
| ☐ *Physcia aguila detonsa* | lichen | Physciaceae | RE |
| ☐ *Physcia aipolia* | lichen | Physciaceae | RE |
| ☐ *Physcia ciliata* | lichen | Physciaceae | RE |
| ☐ *Physcia elaeina* | lichen | Physciaceae | RE |
| ☐ *Physcia grisea* | lichen | Physciaceae | RE |
| ☐ *Physcia hypoleuca* | lichen | Physciaceae | RE |
| ☐ *Physcia millegrana* | lichen | Physciaceae | RE |
| ☐ *Physcia orbicularis* | lichen | Physciaceae | RE |
| ☐ *Physcia stellaris* | lichen | Physciaceae | RE |
| ☐ *Physcia syncolla* | lichen | Physciaceae | RE |
| ☐ *Physcia tribacia* | lichen | Physciaceae | RE |
| ☐ *Physcia tribacoides* | lichen | Physciaceae | RE |
| ☐ *Placynthium nigrum* | lichen | Pannariaceae | RE |
| ☐ *Ramalina farinacea* | lichen | Usneaceae | RE |
| ☐ *Ramalina sinensis* | lichen | Usneaceae | RE |
| ☐ *Rinodina tephraspis* | lichen | Buelliaceae | RE |
| ☐ *Sarcogyne simplex* | lichen | Acarosporaceae | RE |
| ☐ *Sticta pulmonaria* | lichen | Stictaceae | RE |
| ☐ *Teloschistes chrysophthalmus* | lichen | Teloschistaceae | RE |
| ☐ *Usnea strigosa* | lichen | Usneaceae | RE |
| ☐ *Xanthoria candelaria* | lichen | Teloschistaceae | RE |
| ☐ *Xanthoria fallax* | lichen | Teloschistaceae | RE |
| ☐ *Xanthoria polycarpa* | lichen | Teloschistaceae | RE |

## KINGDOM PLANTAE

### DIVISION BRYOPHYTA (mosses and liverworts)

#### CLASS HEPATICOPSIDA (liverworts)

| Order Jungermanniales | | | |
|---|---|---|---|
| ☐ *Lophocolea heterophylla* | liverwort | Lophocoleaceae | CK |
| **Order Marchantiales (typical liverworts)** | | | |
| ☐ *Conocephalum conicum* | common liverwort | Conocephalaceae | CK |
| ☐ *Riccia fluitans* | slender riccia | Ricciaceae | ES |
| ☐ *Ricciocarpus natans* | purple-fringed riccia | Ricciaceae | ES |

#### CLASS SPHAGNOPSIDA (peat mosses)

| Order Sphagnales | | | |
|---|---|---|---|
| ☐ Sphagnum compactum | sphagnum | Sphagnaceae | RE |
| ☐ Sphagnum lescurii | sphagnum | Sphagnaceae | RE |
| ☐ Sphagnum magellanicum | sphagnum | Sphagnaceae | RE |
| ☐ Sphagnum palustre | boat-leaved sphagnum | Sphagnaceae | RE |
| ☐ Sphagnum russowii | sphagnum | Sphagnaceae | RE |
| ☐ Sphagnum sp. | bog moss | Sphagnaceae | CK |

#### CLASS BRYOPSIDA (mosses)

| Order Polytrichales | | | |
|---|---|---|---|
| ☐ *Atrichum altecristatum* | spineleaf moss | Polytrichaceae | RE |
| ☐ *Atrichum angustatum* | slender Catherinea | Polytrichaceae | RE |
| ☐ *Atrichum undulatum* | spineleaf moss | Polytrichaceae | RE |
| ☐ *Pogonatum pensilvanicum* | false hair-cap moss | Polytrichaceae | RE |
| ☐ *Polytrichum commune* | common hair-cap moss | Polytrichaceae | CK,FE |
| ☐ *Polytrichum ohioense* | hair-cap moss | Polytrichaceae | CK,FE |
| ☐ *Polytrichum piliferum* | hair-cap moss | Polytrichaceae | RE |
| **Order Tetraphales** | | | |
| ☐ *Tetraphis pellucida* | four-tooth moss | Tetraphidaceae | RE |

| | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| **Order Funariales** | | | |
| ☐ *Discelium nudum* | moss | Disceliaceae | RE |
| ☐ *Funaria hygrometrica* | cord moss | Funariaceae | CK,RE |
| ☐ *Physcomitrium pyriforme* | urn moss | Funariaceae | RE |
| **Order Orthotrichales** | | | |
| ☐ *Drummondia prorepens* | moss | Orthotrichaceae | RE |
| ☐ *Orthotrichum anomalum* | moss | Orthotrichaceae | RE |
| ☐ *Orthotrichum pumilum* | moss | Orthotrichaceae | RE |
| ☐ *Orthotrichum pusillum* | moss | Orthotrichaceae | RE |
| ☐ *Orthotrichum strangulatum* | moss | Orthotrichaceae | RE |
| ☐ *Ulota crispa* | moss | 1 Orthotrichaceae | RE |
| **Order Bryales** | | | |
| ☐ *Aulacomnium heterostichum* | moss | Aulacomniaceae | RE |
| ☐ *Aulacomnium palustre* | moss | Aulacomniaceae | RE |
| ☐ *Bartramia pomiformis* | apple moss | Bartramiaceae | RE |
| ☐ *Bryum argenteum* | silvery moss | Bryaceae | RE |
| ☐ *Bryum caespiticium* | silvery moss | Bryaceae | RE |
| ☐ *Bryum capillare* | silvery moss | Bryaceae | RE |
| ☐ *Bryum lisae* var. *cuspidatum* | silvery moss | Bryaceae | RE |
| ☐ *Bryum pseudotriquetrum* | silvery moss | Bryaceae | RE |
| ☐ *Leptobryum pyriforme* | moss | Bryaceae | RE |
| ☐ *Mnium cuspidatum* | woodsy mnium moss | Mniaceae | CK |
| ☐ *Mnium stellare* | star moss | Mniaceae | RE |
| ☐ *Philonotis fontana* | moss | Bartramiaceae | RE |
| ☐ *Plagiomnium ciliare* | moss | Mniaceae | RE |
| ☐ *Plagiomnium cuspidatum* | moss | Mniaceae | RE |
| ☐ *Plagiomnium medium* | moss | Mniaceae | RE |
| ☐ *Pohlia nutans* | moss | Bryaceae | RE |
| ☐ *Rhizomnium punctatum* | moss | Mniaceae | RE |
| ☐ *Rhodobryum roseum* | rose moss | Bryaceae | RE |
| ☐ *Amblystegium serpens* | moss | Amblystegiaceae | RE |
| **Order Hypnobryales** | | | |
| ☐ *Amblystegium serpens* var. *juratzkanum* | moss | Amblystegiaceae | RE |
| ☐ *Amblystegium varium* | moss | Amblystegiaceae | CK,FE |
| ☐ *Brachythecium acuminatum* | moss | Brachytheciaceae | RE |
| ☐ *Brachythecium campestre* | moss | Brachytheciaceae | RE |
| ☐ *Brachythecium oxycladon* | moss | Brachytheciaceae | RE |
| ☐ *Brachythecium rivulare* | rivulet brachythecium | Brachytheciaceae | RE |
| ☐ *Brachythecium rutabulum* | moss | Brachytheciaceae | RE |
| ☐ *Brachythecium salebrosum* | moss | Brachytheciaceae | RE |
| ☐ *Bryhnia graminicolor* | moss | Brachytheciaceae | RE |
| ☐ *Bryhnia novae-angliae* | moss | Brachytheciaceae | RE |
| ☐ *Bryoandersonia illecebra* | moss | Brachytheciaceae | RE |
| ☐ *Callicladium haldanianum* | moss | Hypnaceae | RE |
| ☐ *Calliergon stramineum* | moss | Amblystegiaceae | RE |
| ☐ *Calliergon trifarium* | moss | Amblystegiaceae | RE |
| ☐ *Calliergonella cuspidata* | moss | Amblystegiaceae | RE |
| ☐ *Campylium chrysophyllum* | moss | Amblystegiaceae | RE |
| ☐ *Campylium hispidulum* | moss | Amblystegiaceae | RE |
| ☐ *Campylium polygamum* | moss | Amblystegiaceae | RE |
| ☐ *Campylium stellatum* | moss | Amblystegiaceae | RE |
| ☐ *Cyrto-hypnum minutulum* | moss | Thuidiaceae | RE |
| ☐ *Drepanocladus aduncus* var. *aduncus* | moss | Amblystegiaceae | RE |
| ☐ *Drepanocladus aduncus* var. *kneiffii* | moss | Amblystegiaceae | RE |
| ☐ *Entodon cladorrhizans* | moss | Entodontaceae | RE |
| ☐ *Entodon seductrix* | moss | Entodontaceae | RE |
| ☐ *Eurhynchium hians* | moss | Brachytheciaceae | RE |
| ☐ *Eurhynchium pulchellum* | moss | Brachytheciaceae | RE |

| Order Hypnobryales (continued) | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| ☐ *Eurhynchium serrulatum* | moss | Brachytheciaceae | CK |
| ☐ *Helodium blandowii* | moss | Thuidiaceae | RE |
| ☐ *Helodium paludosum* | moss | Thuidiaceae | RE |
| ☐ *Herzogiella turfacea* | moss | Hypnaceae | RE |
| ☐ *Homomallium adnatum* | moss | Hypnaceae | RE |
| ☐ *Hygroamblystegium fluviatile* | moss | Amblystegiaceae | RE |
| ☐ *Hygroamblystegium tenax* | moss | Amblystegiaceae | RE |
| ☐ *Hygrohypnum luridum* | moss | Amblystegiaceae | RE |
| ☐ *Hypnum cupressiforme* | moss | Hypnaceae | RE |
| ☐ *Hypnum curvifolium* | feather moss | Hypnaceae | CK,RE |
| ☐ *Hypnum imponens* | moss | Hypnaceae | RE |
| ☐ *Hypnum lindbergii* | moss | Hypnaceae | RE |
| ☐ *Isopterygiopsis muelleriana* | moss | Hypnaceae | RE |
| ☐ *Leptodictyum humile* | moss | Amblystegiaceae | RE |
| ☐ *Leptodictyum riparium* | moss | Amblystegiaceae | RE |
| ☐ *Limprichtia revolvens* | moss | Amblystegiaceae | RE |
| ☐ *Plagiothecium cavifolium* | slender moss | Plagiotheciaceae | RE |
| ☐ *Plagiothecium denticulatum* | slender moss | Plagiotheciaceae | RE |
| ☐ *Plagiothecium* sp. | moss | Plagiotheciaceae | CK |
| ☐ *Platydictya confervoides* | moss | Hypnaceae | RE |
| ☐ *Platygyrium repens* | moss | Hypnaceae | RE |
| ☐ *Pleurozium schreberi* | moss | Hylocomiaceae | RE |
| ☐ *Pylaisiella intricata* | moss | Hypnaceae | RE |
| ☐ *Pylaisiella selwynii* | moss | Hypnaceae | RE |
| ☐ *Rauiella scita* | moss | Thuidiaceae | RE |
| ☐ *Rhytidium rugosum* | moss | Rhytidiaceae | RE |
| ☐ *Sematophyllum demissum* | moss | Sematophyllaceae | RE |
| ☐ *Steerecleus serrulatus* | moss | Brachytheciaceae | RE |
| ☐ *Taxiphyllum taxirameum* | moss | Hypnaceae | RE |
| ☐ *Thuidium delicatulum* | common fern moss | Thuidiaceae | CK,RE |
| ☐ *Thuidium recognitum* | fern moss | Thuidiaceae | RE |
| **Order Isobryales** | | | |
| ☐ *Anacamptodon splachnoides* | moss | Fabroniaceae | RE |
| ☐ *Anomodon attenuatus* | moss | Leskeaceae | RE |
| ☐ *Anomodon minor* | moss | Leskeaceae | RE |
| ☐ *Anomodon rostratus* | moss | Leskeaceae | RE |
| ☐ *Anomodon rugelii* | moss | Leskeaceae | RE |
| ☐ *Climacium americanum* | tree moss | Climaciaceae | CK,RE |
| ☐ *Climacium kindbergii* | tree-flooded moss | Climaciaceae | CK,RE |
| ☐ *Fontinalis dalecarlica* | common water moss | Fontinaliaceae | RE |
| ☐ *Fontinalis hypnoides* | water moss | Fontinaliaceae | RE |
| ☐ *Fontinalis hypnoides* var. *duriaei* | water moss | Fontinaliaceae | RE |
| ☐ *Hedwigia ciliata* | white-tipped moss | Hedwigiaceae | RE |
| ☐ *Leskea gracilescens* | moss | Leskeaceae | RE |
| ☐ *Leskea obscura* | moss | Leskeaceae | RE |
| ☐ *Leucodon julaceus* | moss | Leucodontaceae | RE |
| ☐ *Thelia asprella* | moss | Leskeaceae | RE |
| ☐ *Thelia hirtella* | moss | Leskeaceae | RE |
| **Order Pottiales** | | | |
| ☐ *Barbula convoluta* | moss | Pottiaceae | RE |
| ☐ *Barbula indica* var. *indica* | twisted teeth moss | Pottiaceae | RE |
| ☐ *Barbula unguiculata* | moss | Pottiaceae | RE |
| ☐ *Bryoerythrophyllum recurvirostre* | moss | Pottiaceae | RE |
| ☐ *Desmatodon obtusifolius* | moss | Pottiaceae | RE |
| ☐ *Desmatodon porteri* | moss | Pottiaceae | RE |
| ☐ *Didymodon fallax* | moss | Pottiaceae | RE |
| ☐ *Didymodon rigidulus* | moss | Pottiaceae | RE |

| Order Pottiales (continued) | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| ☐ *Gymnostomum aeruginosum* | moss | Pottiaceae | RE |
| ☐ *Hymenostylium recurvirostre* | moss | Pottiaceae | RE |
| ☐ *Hyophila involuta* | moss | Pottiaceae | RE |
| ☐ *Phascum cuspidatum* | moss | Pottiaceae | RE |
| ☐ *Tortella humilis* | twisted moss | Pottiaceae | RE |
| ☐ *Tortella tortuosa* | twisted moss | Pottiaceae | RE |
| ☐ *Tortula ruralis* | wall moss | Pottiaceae | RE |
| ☐ *Weissia controversa* | moss | Pottiaceae | RE |
| **Order Dicranales** | | | |
| ☐ *Bruchia flexuosa* | moss | Ditrichaceae | RE |
| ☐ *Ceratodon purpureus* | purple horn-tooth moss | Ditrichaceae | RE |
| ☐ *Dicranella cerviculata* | fork moss | Dicranaceae | RE |
| ☐ *Dicranella heteromalla* | silky fork moss | Dicranaceae | RE |
| ☐ *Dicranella varia* | fork moss | Dicranaceae | RE |
| ☐ *Dicranum flagellare* | broom moss | Dicranaceae | RE |
| ☐ *Dicranum scoparium* | broom moss | Dicranaceae | RE |
| ☐ *Dicranum viride* | broom moss | Dicranaceae | RE |
| ☐ *Ditrichum lineare* | moss | Ditrichaceae | RE |
| ☐ *Leucobryum glaucum* | white pin-cushion moss | Leucobryaceae | RE |
| ☐ *Pleuridium subulatum* | moss | Ditrichaceae | RE |
| **Order Fissidentales** | | | |
| ☐ *Fissidens adianthoides* | moss | Fissidentaceae | RE |
| ☐ *Fissidens bryoides* | moss | Fissidentaceae | RE |
| ☐ *Fissidens obtusifolius* | moss | Fissidentaceae | RE |
| ☐ *Fissidens taxifolius* | moss | Fissidentaceae | CK,RE |
| **Order Seligeriales** | | | |
| ☐ *Seligeria calcarea* | moss | Seligeriaceae | RE |
| ☐ *Seligeria campylopoda* | moss | Seligeriaceae | RE |
| ☐ *Seligeria pusilla* | moss | Seligeriaceae | RE |
| **Order Grimmiales** | | | |
| ☐ *Grimmia pulvinata* | moss | Grimmiaceae | RE |
| ☐ *Schistidium apocarpum* | moss | Grimmiaceae | RE |
| ☐ *Schistidium rivulare* | moss | Grimmiaceae | RE |
| **DIVISION LYCOPODIOPHYTA (clubmosses)** | | | |
| **CLASS LYCOPODIOPSIDA (clubmosses)** | | | |
| **Order Lycopodiales** | | | |
| ☐ *Lycopodium dendroideum* | tree-like clubmoss | Lycopodiaceae | CK |
| ☐ *Lycopodium obscurum* | tree clubmoss | Lycopodiaceae | CK |
| **DIVISION EQUISETOPHYTA (horsetails and scouring rushes)** | | | |
| **CLASS EQUISETOPSIDA (horsetails)** | | | |
| **Order Equisetales** | | | |
| ☐ *Equisetum arvense* | field or common horsetail | Equisetaceae | CK,ES |
| ☐ *Equisetum hyemale* | rough horsetail, scouring rush | Equisetaceae | CK |
| **DIVISION FILICOPHYTA [=POLYPODIOPHYTA] (ferns)** | | | |
| **CLASS FILICOPSIDA [=POLYPODIOPSIDA] (ferns)** | | | |
| **Order Ophioglossales** | | | |
| ☐ *Botrychium dissectum* | cut-leaf grapefern | Ophioglossaceae | CK |
| ☐ *Botrychium rugulosum* | leathery grapefern | Ophioglossaceae | CK |
| ☐ *Botrychium virginianum* | rattlesnake fern | Ophioglossaceae | CK,ES |

| Order Polypodiales | COMMON NAME | FAMILY | LOCATION |
|---|---|---|---|
| ☐ *Adiantum pedatum* | northern maidenhair fern | Adiantaceae | CK,ES |
| ☐ *Athyrium filix-femina* | subarctic lady fern | Aspleniaceae | CK,ES |
| ☐ *Cystopteris bulbifera* | bulblet fern | Aspleniaceae | CK |
| ☐ *Cystopteris tenuis* | fragile fern | Aspleniaceae | CK |
| ☐ *Dryopteris carthusiana* | spinulose woodfern | Aspleniaceae | CK,ES |
| ☐ *Dryopteris intermedia* | evergreen woodfern | Aspleniaceae | CK |
| ☐ *Dryopteris marginalis* | marginal shield-fern or woodfern | Aspleniaceae | CK |
| ☐ *Dryopteris* sp. | woodfern | Aspleniaceae | ES |
| ☐ *Gymnocarpium dryopteris* | oak-fern | Aspleniaceae | CK |
| ☐ *Onoclea sensibilis* | sensitive fern | Onocleaceae | CK,ES |
| ☐ *Osmunda cinnamomea* | cinnamon fern | Osmundaceae | ES |
| ☐ *Osmunda claytoniana* | fern | Osmundaceae | CK,ES |
| ☐ *Phegopteris hexagonoptera* | broad beech-fern | Aspleniaceae | CK |
| ☐ *Polypodium virginianum* | common polypody | Polypodiaceae | CK |
| ☐ *Polystichum acrostichoides* | Christmas fern | Aspleniaceae | CK,ES |

## LOCATION CODES:

CK – Old Woman Creek watershed upstream of the estuary

ES – Old Woman Creek estuary (including watershed within boundaries of NERR)

LE – Lake Erie, principally nearshore waters of Erie County and western Lorain County, Ohio

RE – Regional occurrence, principally Lake Erie watersheds of eastern Erie County and western Lorain County, Ohio

# Appendix C

## Alphabetized List of Algal Flora and Lower Plants of Old Woman Creek Estuary, Watershed, and Adjacent Waters of Lake Erie by Scientific Name

# ALPHABETIZED LIST OF ALGAL FLORA AND LOWER PLANTS OF OLD WOMAN CREEK ESTUARY, WATERSHED, AND ADJACENT WATERS OF LAKE ERIE
## by Scientific Name

### KINGDOMS MONERA AND PROTISTA
### (algal flora)

| SCIENTIFIC NAME | COMMON NAME | DIVISION | LOCATION |
|---|---|---|---|
| *Acanthoceras zachariasii* | centric diatom | Chrysophyta | ES |
| *Achnanthes biasolettiana* | pennate diatom | Chrysophyta | ES |
| *Achnanthes clevei* | pennate diatom | Chrysophyta | ES |
| *Achnanthes conspicua* | pennate diatom | Chrysophyta | CK |
| *Achnanthes grischuna* | pennate diatom | Chrysophyta | ES |
| *Achnanthes hungarica* | pennate diatom | Chrysophyta | ES |
| *Achnanthes lanceolata* | pennate diatom | Chrysophyta | CK,ES |
| *Achnanthes lanceolata* ssp. *dubia* | pennate diatom | Chrysophyta | CK,ES |
| *Achnanthes lanceolata* ssp. *lanceolata* | pennate diatom | Chrysophyta | CK,ES |
| *Achnanthes lanceolata* ssp. *l.* var. *boyei* | pennate diatom | Chrysophyta | ES |
| *Achnanthes laurenburgiana* | pennate diatom | Chrysophyta | ES |
| *Achnanthes minutissima* | pennate diatom | Chrysophyta | CK,ES |
| *Achnanthes minutissima* var. *gracillima* | pennate diatom | Chrysophyta | ES |
| *Achnanthes minutissima* var. *minutissima* | pennate diatom | Chrysophyta | CK |
| *Achnanthes minutissima* var. *saprophila* | pennate diatom | Chrysophyta | ES |
| *Achnanthes minutissima* var. 2 | pennate diatom | Chrysophyta | ES |
| *Achnanthes* sp. | pennate diatom | Chrysophyta | CK,ES |
| *Actinastrum hantzschii* | green alga | Chlorophyta | ES |
| *Actinocyclus normanii* | centric diatom | Chrysophyta | ES |
| *Amphilpleura pellucida* | pennate diatom | Chrysophyta | CK,ES |
| *Amphora montana* | pennate diatom | Chrysophyta | ES |
| *Amphora ovalis* | pennate diatom | Chrysophyta | ES |
| *Amphora pediculus* | pennate diatom | Chrysophyta | CK,ES |
| *Amphora* sp. | pennate diatom | Chrysophyta | ES |
| *Anabaena circinalis* | blue-green | Cyanophyta | ES |
| *Anabaena spiroides* | blue-green | Cyanophyta | LE |
| *Anabaena spiroides* var. *crassa* | blue-green | Cyanophyta | LE |
| *Anabaena variabilis* | blue-green | Cyanophyta | ES |
| *Anabaena* spp. | blue-greens | Cyanophyta | ES,LE |
| *Ankistrodesmus falcatus* | green alga | Chlorophyta | ES |
| *Ankistrodesmus stipitatus* | green alga | Chlorophyta | ES |
| *Ankyra judayi* | green alga | Chlorophyta | ES |
| *Anomoeoneis brachysira* | pennate diatom | Chrysophyta | ES |
| *Anomoeoneis sphaerophora* | pennate diatom | Chrysophyta | ES |
| *Anthophysa steinii* | golden-brown alga | Chrysophyta | ES |
| *Anthophysa vegetans* | golden-brown alga | Chrysophyta | ES |
| *Aphanizomenon flos-aquae* | blue-green | Cyanophyta | ES,LE |
| *Aphanocapsa delicatissima* | blue-green | Cyanophyta | ES |
| *Aphanocapsa elachista* | blue-green | Cyanophyta | ES |
| *Aphanocapsa incerta* | blue-green | Cyanophyta | CK |
| *Aphanothece saxicola* | blue-green | Cyanophyta | ES |
| *Ascoglena vaginicola* | euglenoid | Euglenophyta | ES |
| *Ascoglena* sp. | euglenoid | Euglenophyta | ES |
| *Astasia klebsii* | euglenoid | Euglenophyta | ES |
| *Astasia* spp. | euglenoids | Euglenophyta | ES |
| *Asterionella formosa* | pennate diatom | Chrysophyta | ES,LE |
| *Aulacoseira alpigena* | centric diatom | Chrysophyta | ES |
| *Aulacoseira ambigua* | centric diatom | Chrysophyta | ES |
| *Aulacoseira crassipunctata* | centric diatom | Chrysophyta | ES |
| *Aulacoseira granulata* | centric diatom | Chrysophyta | ES |
| *Aulacoseira granulata* var. *angustissima* | centric diatom | Chrysophyta | ES,LE |
| *Aulacoseira islandica* | centric diatom | Chrysophyta | ES |
| *Aulacoseira italica* | centric diatom | Chrysophyta | ES |
| *Aulacoseira* spp. | centric diatoms | Chrysophyta | ES |
| *Bangia atropurpurea* | red alga | Rhodophyta | LE |
| *Caloneis amphisbaena* | pennate diatom | Chrysophyta | CK,ES |
| *Caloneis bacillum* | pennate diatom | Chrysophyta | CK,ES |
| *Caloneis clevei* | pennate diatom | Chrysophyta | ES |
| *Caloneis molaris* | pennate diatom | Chrysophyta | ES |
| *Caloneis schumanniana* | pennate diatom | Chrysophyta | ES |

| SCIENTIFIC NAME | COMMON NAME | DIVISION | LOCATION |
|---|---|---|---|
| *Caloneis thermalis* | pennate diatom | Chrysophyta | ES |
| *Calothrix fusca* | blue-green | Cyanophyta | CK |
| *Calothrix* spp. | blue-greens | Cyanophyta | CK |
| *Carteria bourrellyi* | green alga | Chlorophyta | ES |
| *Carteria globosa* | green alga | Chlorophyta | ES |
| *Carteria wisconsinensis* | green alga | Chlorophyta | CK,ES |
| *Carteria* sp. | green alga | Chlorophyta | ES |
| *Centritractus ellipsoideus* | yellow-green alga | Chrysophyta | ES |
| *Ceratium hirundinella* | dinoflagellate | Pyrrhophyta | ES,LE |
| *Ceratium* sp. | dinoflagellate | Pyrrhophyta | ES |
| *Characium curvatum* | green alga | Chlorophyta | ES |
| *Characium* sp. | green alga | Chlorophyta | ES |
| *Chilomonas* sp. | cryptomonad | Cryptophyta | ES |
| *Chlamydocapsa ampla* | green alga | Chlorophyta | CK,ES |
| *Chlamydocapsa planctonica* | green alga | Chlorophyta | ES |
| *Chlamydocapsa* sp. | green alga | Chlorophyta | ES |
| *Chlamydomonas globosa* | green alga | Chlorophyta | CK,ES |
| *Chlamydomonas gracilis* | green alga | Chlorophyta | ES |
| *Chlamydomonas monadina* | green alga | Chlorophyta | ES |
| *Chlamydomonas reinhardtii* | green alga | Chlorophyta | ES |
| *Chlamydomonas subasymmetrica* | green alga | Chlorophyta | ES |
| *Chlamydomonas* spp. | green algae | Chlorophyta | CK,ES,LE |
| *Chlamydonephris excavata* | green alga | Chlorophyta | ES |
| *Chlorococcum* sp. | green alga | Chlorophyta | ES |
| *Chlorogonium elongatum* | green alga | Chlorophyta | ES |
| *Chlorogonium euchlorum* | green alga | Chlorophyta | ES |
| *Chlorogonium hyalinum* | green alga | Chlorophyta | ES |
| *Chroococcus dispersus* | blue-green | Cyanophyta | CK,ES |
| *Chroococcus minor* | blue-green | Cyanophyta | CK |
| *Chroococcus minutus* | blue-green | Cyanophyta | CK,LE |
| *Chroococcus planctonicus* | blue-green | Cyanophyta | ES |
| *Chroococcus* spp. | blue-greens | Cyanophyta | CK,ES |
| *Chroomonas norstedtii* | cryptomonad | Cryptophyta | ES |
| *Chroomonas* sp. | cryptomonad | Cryptophyta | ES |
| *Chrysococcus biporus* | golden-brown alga | Chrysophyta | ES |
| *Chrysococcus minutus* | golden-brown alga | Chrysophyta | ES |
| *Chrysococcus rufescens* var. *tripora* | golden-brown alga | Chrysophyta | ES |
| *Chrysococcus triporus* | golden-brown alga | Chrysophyta | ES |
| *Chrysococcus* spp. | golden-brown algae | Chrysophyta | ES |
| *Cladophora glomerata* | green alga | Chlorophyta | ES,LE |
| *Closteriopsis acicularis* | green alga | Chlorophyta | ES |
| *Closterium aciculare* var. *aciculare* | green alga, desmid | Chlorophyta | ES |
| *Closterium acutum* var. *acutum* | green alga, desmid | Chlorophyta | ES |
| *Closterium acutum* var. *variabile* | green alga, desmid | Chlorophyta | ES |
| *Closterium gracile* var. *gracile* | green alga, desmid | Chlorophyta | ES |
| *Closterium intermedium* | green alga, desmid | Chlorophyta | CK |
| *Closterium limneticum* var. *limneticum* | green alga, desmid | Chlorophyta | ES |
| *Closterium macilentum* var. *macilentum* | green alga, desmid | Chlorophyta | ES |
| *Closterium moniliferum* var. *moniliferum* | green alga, desmid | Chlorophyta | ES |
| *Closterium* spp. | green algae, desmids | Chlorophyta | ES |
| *Cocconeis pediculus* | pennate diatom | Chrysophyta | ES |
| *Cocconeis placentula* | pennate diatom | Chrysophyta | CK,ES |
| *Cocconeis placentula* var. *euglypta* | pennate diatom | Chrysophyta | ES |
| *Cocconeis placentula* var. *lineata* | pennate diatom | Chrysophyta | ES |
| *Coelastrum astroidenum* | green alga | Chlorophyta | ES |
| *Coelastrum cambricum* | green alga | Chlorophyta | ES |
| *Coelastrum microporum* | green alga | Chlorophyta | ES |
| *Coelastrum pseucomicroporum* | green alga | Chlorophyta | ES |
| *Coelastrum* sp. | green alga | Chlorophyta | ES |
| *Coelosphaerium naegelianum* | blue-green | Cyanophyta | ES |
| *Coelosphaerium pallidum* | blue-green | Cyanophyta | ES |
| *Coscinodiscus* sp. | centric diatom | Chrysophyta | ES |
| *Cosmarium formosulum* | green alga, desmid | Chlorophyta | ES |
| *Cosmarium granatum* | green alga, desmid | Chlorophyta | ES |
| *Cosmarium granatum* var. *granatum* | green alga, desmid | Chlorophyta | ES |
| *Cosmarium granulatum*? | green alga, desmid | Chlorophyta | ES |
| *Cosmarium* spp. | green algae, desmids | Chlorophyta | ES |

## KINGDOMS MONERA AND PROTISTA (continued)

| SCIENTIFIC NAME | COMMON NAME | DIVISION | LOCATION |
|---|---|---|---|
| *Crucigenia fenestrata* | green alga | Chlorophyta | ES |
| *Crucigenia mucronata* | green alga | Chlorophyta | ES |
| *Crucigenia quadrata* | green alga | Chlorophyta | ES |
| *Crucigenia tetrapedia* | green alga | Chlorophyta | ES |
| *Crucigeniella apiculata* | green alga | Chlorophyta | ES |
| *Crucigeniella rectangularis* | green alga | Chlorophyta | ES |
| *Cryptomonas compressa* | cryptomonad | Cryptophyta | ES |
| *Cryptomonas erosa* | cryptomonad | Cryptophyta | ES |
| *Cryptomonas erosa* var. *reflexa* | cryptomonad | Cryptophyta | CK |
| *Cryptomonas marssonii* | cryptomonad | Cryptophyta | ES |
| *Cryptomonas obovata* | cryptomonad | Cryptophyta | ES |
| *Cryptomonas ovata* | cryptomonad | Cryptophyta | ES |
| *Cryptomonas reflexa* | cryptomonad | Cryptophyta | ES |
| *Cryptomonas tenuis* | cryptomonad | Cryptophyta | ES |
| *Cryptomonas tetrapyrenoidosa* | cryptomonad | Cryptophyta | ES |
| *Cryptomonas* spp. | cryptomonads | Cryptophyta | ES |
| *Cyathomonas* sp. | cryptomonad | Cryptophyta | ES |
| *Cyathomonas truncata* | cryptomonad | Cryptophyta | ES |
| *Cyclostephanos invisitatus* | centric diatom | Chrysophyta | ES |
| *Cyclostephanos tholiformis* | centric diatom | Chrysophyta | ES |
| *Cyclotella atomus* | centric diatom | Chrysophyta | ES |
| *Cyclotella atomus* var. 1 | centric diatom | Chrysophyta | ES |
| *Cyclotella meneghiniana* | centric diatom | Chrysophyta | ES |
| *Cyclotella meneghiniana* var. 1 | centric diatom | Chrysophyta | ES |
| *Cyclotella pseudostelligera* | centric diatom | Chrysophyta | ES |
| *Cyclotella radiosa* | centric diatom | Chrysophyta | ES |
| *Cyclotella stelligera* | centric diatom | Chrysophyta | ES |
| *Cyclotella* spp. | centric diatoms | Chrysophyta | ES |
| *Cylindrotheca gracilis* | pennate diatom | Chrysophyta | ES |
| *Cymatopleura elliptica* | pennate diatom | Chrysophyta | CK |
| *Cymatopleura solea* | pennate diatom | Chrysophyta | ES |
| *Cymbella affinis* | pennate diatom | Chrysophyta | ES |
| *Cymbella caespitosa* | pennate diatom | Chrysophyta | ES |
| *Cymbella microcephala* | pennate diatom | Chrysophyta | ES |
| *Cymbella minuta* | pennate diatom | Chrysophyta | CK,ES |
| *Cymbella naviculiformis* | pennate diatom | Chrysophyta | ES |
| *Cymbella prostrata* | pennate diatom | Chrysophyta | CK |
| *Cymbella silesiaca* | pennate diatom | Chrysophyta | CK,ES |
| *Cymbella triangulum* | pennate diatom | Chrysophyta | LE |
| *Cymbella tumida* | pennate diatom | Chrysophyta | CK,ES |
| *Cymbella tumidula* | pennate diatom | Chrysophyta | CK,ES |
| *Cymbella turgidula* | pennate diatom | Chrysophyta | CK,ES |
| *Dactylococcopsis irregularis* | blue-green | Cyanophyta | ES |
| *Denticula kuetzingii* | pennate diatom | Chrysophyta | ES |
| *Desmococcus olivaceus* | green alga | Chlorophyta | CK |
| *Diatoma mesodon* | pennate diatom | Chrysophyta | ES |
| *Diatoma tenuis* | pennate diatom | Chrysophyta | ES |
| *Diatoma vulgaris* | pennate diatom | Chrysophyta | ES |
| *Diatoma vulgaris* var. *distorta* | pennate diatom | Chrysophyta | ES |
| *Dictyosphaerium puchellum* | green alga | Chlorophyta | ES |
| *Didymocystis inconspicua* | green alga | Chlorophyta | ES |
| *Didymocystis planctonicus* | green alga | Chlorophyta | ES |
| *Didymocystis* sp. | green alga | Chlorophyta | ES |
| *Didymogenes palatina* | green alga | Chlorophyta | ES |
| *Dinobryon bavaricum* | golden-brown alga | Chrysophyta | ES |
| *Dinobryon divergens* | golden-brown alga | Chrysophyta | ES |
| *Dinobryon sertularia* | golden-brown alga | Chrysophyta | ES |
| *Dinobryon sociale* | golden-brown alga | Chrysophyta | ES |
| *Dinobryon* sp. | golden-brown alga | Chrysophyta | ES |
| *Draparnaldia glomerata* | green alga | Chlorophyta | CK,ES |
| *Entomoneis ornata* | pennate diatom | Chrysophyta | LE |
| *Epipyxis tabellariae* | golden-brown alga | Chrysophyta | ES |
| *Epithemia adnata* | pennate diatom | Chrysophyta | ES |
| *Epithemia turgida* | pennate diatom | Chrysophyta | ES |
| *Eudorina elegans* | green alga | Chlorophyta | LE |
| *Euglena acus* | euglenoid | Euglenophyta | ES |
| *Euglena bellovacensis* | euglenoid | Euglenophyta | ES |

## KINGDOMS MONERA AND PROTISTA (continued)

| SCIENTIFIC NAME | COMMON NAME | DIVISION | LOCATION |
|---|---|---|---|
| *Euglena deses* | euglenoid | Euglenophyta | ES |
| *Euglena ehrenbergii* | euglenoid | Euglenophyta | ES |
| *Euglena elastica* | euglenoid | Euglenophyta | ES |
| *Euglena fronsundulata* | euglenoid | Euglenophyta | ES |
| *Euglena gasterosteus* | euglenoid | Euglenophyta | CK,ES |
| *Euglena gracilis* | euglenoid | Euglenophyta | ES |
| *Euglena ignobilis* | euglenoid | Euglenophyta | ES |
| *Euglena minima* | euglenoid | Euglenophyta | ES |
| *Euglena oxyuris* | euglenoid | Euglenophyta | ES |
| *Euglena oxyuris* var. *minima* | euglenoid | Euglenophyta | ES |
| *Euglena oxyuris* var. *minor* | euglenoid | Euglenophyta | ES |
| *Euglena pisciformis* | euglenoid | Euglenophyta | ES |
| *Euglena proxima* | euglenoid | Euglenophyta | ES |
| *Euglena spathirhyncha* | euglenoid | Euglenophyta | ES |
| *Euglena spirogyra* | euglenoid | Euglenophyta | ES |
| *Euglena tripteris* | euglenoid | Euglenophyta | ES |
| *Euglena vermiforis* | euglenoid | Euglenophyta | ES |
| *Euglena* spp. | euglenoids | Euglenophyta | CK,ES |
| *Eunotia arcus* var. *bidens* | pennate diatom | Chrysophyta | ES |
| *Eunotia bilunaris* var. *bilunaris* | pennate diatom | Chrysophyta | ES |
| *Eunotia bilunarius* var. *mucophila* | pennate diatom | Chrysophyta | ES |
| *Eunotia denticulata* | pennate diatom | Chrysophyta | ES |
| *Eunotia diodon* | pennate diatom | Chrysophyta | ES |
| *Eunotia exigua* | pennate diatom | Chrysophyta | ES |
| *Eunotia formica* | pennate diatom | Chrysophyta | ES |
| *Eunotia pectinalis* | pennate diatom | Chrysophyta | ES |
| *Eunotia* sp. | pennate diatom | Chrysophyta | ES |
| *Fragilaria capucina* | pennate diatom | Chrysophyta | CK,ES,LE |
| *Fragilaria capucina* var. *gracilis* | pennate diatom | Chrysophyta | ES |
| *Fragilaria capucina* var. *radians* | pennate diatom | Chrysophyta | ES |
| *Fragilaria capucina* var. *rumpens* | pennate diatom | Chrysophyta | CK,ES |
| *Fragilaria capucina* var. *vaucheriae* | pennate diatom | Chrysophyta | CK,ES |
| *Fragilaria construens* | pennate diatom | Chrysophyta | ES |
| *Fragilaria construens* f. *venter* | pennate diatom | Chrysophyta | CK,ES |
| *Fragilaria crotonensis* | pennate diatom | Chrysophyta | ES,LE |
| *Fragilaria fasciculata* | pennate diatom | Chrysophyta | CK,ES |
| *Fragilaria leptostauron* var. *martyi* | pennate diatom | Chrysophyta | ES |
| *Fragilaria parasitica* var. *subconstricta* | pennate diatom | Chrysophyta | ES |
| *Fragilaria pulchella* | pennate diatom | Chrysophyta | ES |
| *Fragilaria tenera* | pennate diatom | Chrysophyta | ES |
| *Fragilaria ulna* | pennate diatom | Chrysophyta | CK,ES |
| *Fragilaria ulna* var. *acus* | pennate diatom | Chrysophyta | ES |
| *Fragilaria ulna* var. *danica* | pennate diatom | Chrysophyta | ES |
| *Fragilaria ulna* var. *obtusa* | pennate diatom | Chrysophyta | CK |
| *Fragilaria ulna* var. *oxyrhynchus* | pennate diatom | Chrysophyta | CK |
| *Fragilaria ulna* var. 1 | pennate diatom | Chrysophyta | ES |
| *Fragilaria virescens* | pennate diatom | Chrysophyta | CK,ES |
| *Franceia droescheri* | green alga | Chlorophyta | ES |
| *Frustulia rhomboides* | pennate diatom | Chrysophyta | ES |
| *Frustulia vulgaris* | pennate diatom | Chrysophyta | ES |
| *Glenodinium* sp. | dinoflagellate | Pyrrhophyta | ES |
| *Gloeocapsa aeruginosa* | blue-green | Cyanophyta | CK |
| *Gloeocapsa* sp. | blue-green | Cyanophyta | ES |
| *Gloeocystis vesiculosa* | green alga | Chlorophyta | CK,ES |
| *Golenkinia radiata* | green alga | Chlorophyta | ES |
| *Golenkiniopsis* sp. | green alga | Chlorophyta | ES |
| *Gomphonema acuminatum* | pennate diatom | Chrysophyta | ES |
| *Gomphonema affine* | pennate diatom | Chrysophyta | CK,ES |
| *Gomphonema affine* var. *elongatum* | pennate diatom | Chrysophyta | ES |
| *Gomphonema amoenum* | pennate diatom | Chrysophyta | ES |
| *Gomphonema angustatum* | pennate diatom | Chrysophyta | CK,ES |
| *Gomphonema angustatum* var. *citera* | pennate diatom | Chrysophyta | CK |
| *Gomphonema angustatum* var. *sarcophogus* | pennate diatom | Chrysophyta | ES |
| *Gomphonema angustum* | pennate diatom | Chrysophyta | CK,ES |
| *Gomphonema augar* var. *spaerophorum* | pennate diatom | Chrysophyta | CK |
| *Gomphonema augur* | pennate diatom | Chrysophyta | CK,ES |
| *Gomphonema clavatum* | pennate diatom | Chrysophyta | ES |

## KINGDOMS MONERA AND PROTISTA (continued)

| SCIENTIFIC NAME | COMMON NAME | DIVISION | LOCATION |
|---|---|---|---|
| *Gomphonema clevei* | pennate diatom | Chrysophyta | ES |
| *Gomphonema dichotomum* | pennate diatom | Chrysophyta | ES |
| *Gomphonema gracile* | pennate diatom | Chrysophyta | ES |
| *Gomphonema minutum* | pennate diatom | Chrysophyta | ES |
| *Gomphonema minutum* f. *lamanense* | pennate diatom | Chrysophyta | ES |
| *Gomphonema olivaceum* | pennate diatom | Chrysophyta | CK,ES |
| *Gomphonema parvulum* | pennate diatom | Chrysophyta | CK,ES |
| *Gomphonema truncatum* | pennate diatom | Chrysophyta | ES |
| *Gomphonema truncatum* var. *elongata* | pennate diatom | Chrysophyta | ES |
| *Gomphonema* sp. | pennate diatom | Chrysophyta | ES |
| *Gomphosphaeria lacustris* | blue-green | Cyanophyta | ES |
| *Goniochloris fallax* | yellow-green alga | Chrysophyta | ES |
| *Gymnodinium aeruginosun* | dinoflagellate | Pyrrhophyta | ES |
| *Gymnodinium helveticum* | dinoflagellate | Pyrrhophyta | ES |
| *Gymnodinium palustre* | dinoflagellate | Pyrrhophyta | ES |
| *Gymnodinium* spp. | dinoflagellates | Pyrrhophyta | CK,ES |
| *Gyrosigma acuminatum* | pennate diatom | Chrysophyta | CK |
| *Gyrosigma attenuatum* | pennate diatom | Chrysophyta | ES |
| *Gyrosigma exilis* | pennate diatom | Chrysophyta | ES |
| *Gyrosigma scalproides* | pennate diatom | Chrysophyta | ES |
| *Gyrosigma* sp. | pennate diatom | Chrysophyta | ES |
| *Haematococcus pluvialis* | green alga | Chlorophyta | ES |
| *Hantzschia amphioxys* | pennate diatom | Chrysophyta | ES |
| *Katodinium fungiforme* | dinoflagellate | Pyrrhophyta | ES |
| *Kephryion ovale* | golden-brown alga | Chrysophyta | ES |
| *Kephryion spirale* | golden-brown alga | Chrysophyta | LE |
| *Kephryion* spp. | golden-brown algae | Chrysophyta | ES |
| *Kirchneriella contorta* var. *contorta* | green alga | Chlorophyta | ES |
| *Kirchneriella contorta* var. *elegans* | green alga | Chlorophyta | ES |
| *Kirchneriella lunaris* | green alga | Chlorophyta | ES |
| *Kirchneriella* sp. | green alga | Chlorophyta | ES |
| *Korshikoviella limnetica* | green alga | Chlorophyta | ES |
| *Lagerheimia balatonica* | green alga | Chlorophyta | ES |
| *Lagerheimia ciliata* | green alga | Chlorophyta | ES |
| *Lagerheimia citriformis* | green alga | Chlorophyta | ES |
| *Lagerheimia genevensis* | green alga | Chlorophyta | ES |
| *Lagerheimia marssonii* | green alga | Chlorophyta | ES |
| *Lagerheimia subsalsa* | green alga | Chlorophyta | ES |
| *Lagerheimia wratislawiensis* | green alga | Chlorophyta | ES |
| *Lepocinclis ovum* | euglenoid | Euglenophyta | ES |
| *Lepocinclis ovum* f. *typica* | euglenoid | Euglenophyta | ES |
| *Lepocinclis ovum* var. *deflandriana* | euglenoid | Euglenophyta | ES |
| *Lepocinclis ovum* var. *dimidio-minor* | euglenoid | Euglenophyta | ES |
| *Lepocinclis ovum* var. *ovata* f. *ecaudata* | euglenoid | Euglenophyta | ES |
| *Lepocinclis texta* f. *minor* | euglenoid | Euglenophyta | ES |
| *Lepocinclis* spp. | euglenoids | Euglenophyta | CK,ES |
| *Lyngbya* sp. | blue-green | Cyanophyta | CK,ES |
| *Mallomonas acaroides* | golden-brown alga | Chrysophyta | ES |
| *Mallomonas elegans* | golden-brown alga | Chrysophyta | ES |
| *Mallomonas intermedia* | golden-brown alga | Chrysophyta | ES |
| *Melosira varians* | centric diatom | Chrysophyta | ES |
| *Menoidium gibbum* | euglenoid | Euglenophyta | ES |
| *Meridion circulare* | pennate diatom | Chrysophyta | CK,ES |
| *Meridion circulare* var. *constrictum* | pennate diatom | Chrysophyta | ES |
| *Merismopedia glauca* | blue-green | Cyanophyta | ES |
| *Merismopedia minima* | blue-green | Cyanophyta | CK,ES |
| *Merismopedia tenuissima* | blue-green | Cyanophyta | ES |
| *Micractinium pusillum* | green alga | Chlorophyta | ES |
| *Microcoleus lyngbyaceus* | blue-green | Cyanophyta | CK |
| *Microcystis aeruginosa* | blue-green | Cyanophyta | ES |
| *Microcystis minutissima* | blue-green | Cyanophyta | ES |
| *Microcystis* sp. | blue-green | Cyanophyta | ES |
| *Microglena* sp. | golden-brown alga | Chrysophyta | ES |
| *Microspora* sp. | green alga | Chlorophyta | ES |
| *Microspora stagnorum* | green alga | Chlorophyta | ES |
| *Monas guttula* | golden-brown alga | Chrysophyta | ES |
| *Monas socialis* | golden-brown alga | Chrysophyta | ES |

| SCIENTIFIC NAME | COMMON NAME | DIVISION | LOCATION |
|---|---|---|---|
| *Monas* sp. | golden-brown alga | Chrysophyta | ES |
| *Monoraphidium arcuatum* | green alga | Chlorophyta | ES,LE |
| *Monoraphidium circinale* | green alga | Chlorophyta | ES |
| *Monoraphidium contortum* | green alga | Chlorophyta | ES |
| *Monoraphidium convolutum* var. *convolutum* | green alga | Chlorophyta | ES |
| *Monoraphidium griffithii* | green alga | Chlorophyta | ES |
| *Monoraphidium komarkovae* | green alga | Chlorophyta | ES |
| *Monoraphidium mirabile* | green alga | Chlorophyta | ES |
| *Monoraphidium* sp. | green alga | Chlorophyta | ES |
| *Mougeotia* sp. | green alga | Chlorophyta | ES |
| *Navicula absoluta* | pennate diatom | Chrysophyta | ES |
| *Navicula agnita* | pennate diatom | Chrysophyta | ES |
| *Navicula arvensis* | pennate diatom | Chrysophyta | ES |
| *Navicula atomus* | pennate diatom | Chrysophyta | ES |
| *Navicula atomus* var. *permitis* | pennate diatom | Chrysophyta | ES |
| *Navicula bacillum* | pennate diatom | Chrysophyta | ES |
| *Navicula bahusiensis* | pennate diatom | Chrysophyta | ES |
| *Navicula capitata* | pennate diatom | Chrysophyta | ES |
| *Navicula capitata* var. *capitata* | pennate diatom | Chrysophyta | ES |
| *Navicula capitatoradiata* | pennate diatom | Chrysophyta | ES |
| *Navicula cincta* | pennate diatom | Chrysophyta | ES |
| *Navicula confervacea* | pennate diatom | Chrysophyta | ES |
| *Navicula contenta* | pennate diatom | Chrysophyta | ES |
| *Navicula cryptocephala* | pennate diatom | Chrysophyta | ES |
| *Navicula cryptotenella* | pennate diatom | Chrysophyta | CK,ES |
| *Navicula cuspidata* | pennate diatom | Chrysophyta | CK,ES |
| *Navicula decussis* | pennate diatom | Chrysophyta | CK,ES |
| *Navicula elginensis* | pennate diatom | Chrysophyta | CK,ES |
| *Navicula erifuga* | pennate diatom | Chrysophyta | ES |
| *Navicula goeppertiana* | pennate diatom | Chrysophyta | ES |
| *Navicula goeppertiana* var. *goeppertiana* | pennate diatom | Chrysophyta | ES |
| *Navicula goeppertiana* var. *monita* | pennate diatom | Chrysophyta | ES |
| *Navicula gregaria* | pennate diatom | Chrysophyta | CK,ES |
| *Navicula grunowii* var. 1 | pennate diatom | Chrysophyta | ES |
| *Navicula halophila* | pennate diatom | Chrysophyta | ES |
| *Navicula heimansii* | pennate diatom | Chrysophyta | ES |
| *Navicula hustedtii* | pennate diatom | Chrysophyta | ES |
| *Navicula ingenua* | pennate diatom | Chrysophyta | ES |
| *Navicula insocibilis* | pennate diatom | Chrysophyta | ES |
| *Navicula integra* | pennate diatom | Chrysophyta | ES |
| *Navicula lanceolata* | pennate diatom | Chrysophyta | CK,ES |
| *Navicula menisculus* | pennate diatom | Chrysophyta | ES |
| *Navicula menisculus* var. *grunowii* | pennate diatom | Chrysophyta | ES |
| *Navicula menisculus* var. *upsaliensis* | pennate diatom | Chrysophyta | CK,ES |
| *Navicula minima* | pennate diatom | Chrysophyta | CK,ES |
| *Navicula minima* var. *pseudofossalis* | pennate diatom | Chrysophyta | ES |
| *Navicula minusculoides* | pennate diatom | Chrysophyta | ES |
| *Navicula molestiformis* | pennate diatom | Chrysophyta | ES |
| *Navicula monoculata* | pennate diatom | Chrysophyta | ES |
| *Navicula mutica* | pennate diatom | Chrysophyta | ES |
| *Navicula mutica* var. *ventricosa* | pennate diatom | Chrysophyta | ES |
| *Navicula pelliculosa* | pennate diatom | Chrysophyta | ES |
| *Navicula praeterita* | pennate diatom | Chrysophyta | ES |
| *Navicula pseudolanceolata* | pennate diatom | Chrysophyta | ES |
| *Navicula pupula* | pennate diatom | Chrysophyta | ES |
| *Navicula pupula* var. *aquaeductae* | pennate diatom | Chrysophyta | ES |
| *Navicula pupula* var. *rectangularis* | pennate diatom | Chrysophyta | ES |
| *Navicula pygmaea* | pennate diatom | Chrysophyta | ES |
| *Navicula radiosa* | pennate diatom | Chrysophyta | ES |
| *Navicula recens* | pennate diatom | Chrysophyta | ES |
| *Navicula rhynchocephala* | pennate diatom | Chrysophyta | ES |
| *Navicula salinarum* | pennate diatom | Chrysophyta | CK,ES |
| *Navicula saprophila* | pennate diatom | Chrysophyta | CK,ES |
| *Navicula schroeterii* | pennate diatom | Chrysophyta | ES |
| *Navicula similis* | pennate diatom | Chrysophyta | ES |
| *Navicula seminulum* | pennate diatom | Chrysophyta | ES |
| *Navicula splendicula* | pennate diatom | Chrysophyta | ES |

## KINGDOMS MONERA AND PROTISTA (continued)

| SCIENTIFIC NAME | COMMON NAME | DIVISION | LOCATION |
|---|---|---|---|
| *Navicula subminuscula* | pennate diatom | Chrysophyta | ES |
| *Navicula submolesta* | pennate diatom | Chrysophyta | ES |
| *Navicula tenelloides* | pennate diatom | Chrysophyta | ES |
| *Navicula tenera* | pennate diatom | Chrysophyta | ES |
| *Navicula tripunctata* | pennate diatom | Chrysophyta | CK,ES |
| *Navicula tripunctata* var. *schizonemoides* | pennate diatom | Chrysophyta | ES |
| *Navicula trivialis* | pennate diatom | Chrysophyta | ES |
| *Navicula vaucherie* | pennate diatom | Chrysophyta | ES |
| *Navicula veneta* | pennate diatom | Chrysophyta | CK,ES |
| *Navicula viridula* | pennate diatom | Chrysophyta | ES |
| *Navicula viridula* var. *germainii* | pennate diatom | Chrysophyta | CK,ES |
| *Navicula viridula* var. *rostellata* | pennate diatom | Chrysophyta | CK,ES |
| *Navicula viridula* var. 1 | pennate diatom | Chrysophyta | ES |
| *Navicula* spp. | pennate diatoms | Chrysophyta | ES |
| *Nedium affine* | pennate diatom | Chrysophyta | ES |
| *Nedium dubium* | pennate diatom | Chrysophyta | ES |
| *Neodesmus danubialis* | green alga | Chlorophyta | ES |
| *Nephrochlamys subsolitaria* | green alga | Chlorophyta | ES |
| *Nephrochlamys* spp. | green algae | Chlorophyta | ES |
| *Nitzschia acicularis* | pennate diatom | Chrysophyta | ES |
| *Nitzschia acidoclinata* | pennate diatom | Chrysophyta | ES |
| *Nitzschia acuminata* | pennate diatom | Chrysophyta | ES |
| *Nitzschia admissoides* | pennate diatom | Chrysophyta | CK |
| *Nitzschia agnita* | pennate diatom | Chrysophyta | ES |
| *Nitzschia amphibia* | pennate diatom | Chrysophyta | CK,ES |
| *Nitzschia angustata* | pennate diatom | Chrysophyta | ES |
| *Nitzschia angustatula* | pennate diatom | Chrysophyta | ES |
| *Nitzschia angustiforaminata* | pennate diatom | Chrysophyta | ES |
| *Nitzschia bita*? | pennate diatom | Chrysophyta | CK |
| *Nitzschia brevissima* | pennate diatom | Chrysophyta | ES |
| *Nitzschia capitellata* | pennate diatom | Chrysophyta | ES |
| *Nitzschia clausii* | pennate diatom | Chrysophyta | ES |
| *Nitzschia closterium* | pennate diatom | Chrysophyta | ES |
| *Nitzschia communis* | pennate diatom | Chrysophyta | CK,ES |
| *Nitzschia commutatoides* | pennate diatom | Chrysophyta | ES |
| *Nitzschia compressa* var. *vexans* | pennate diatom | Chrysophyta | ES |
| *Nitzschia constricta* | pennate diatom | Chrysophyta | CK |
| *Nitzschia dissipata* | pennate diatom | Chrysophyta | CK,ES |
| *Nitzschia dissipata* var. *media* | pennate diatom | Chrysophyta | ES |
| *Nitzschia dubia* | pennate diatom | Chrysophyta | ES |
| *Nitzschia filiformis* | pennate diatom | Chrysophyta | ES |
| *Nitzschia fonticola* | pennate diatom | Chrysophyta | ES |
| *Nitzschia frustulum* | pennate diatom | Chrysophyta | ES |
| *Nitzschia frustulum* var. *perpusilla* | pennate diatom | Chrysophyta | ES |
| *Nitzschia fruticosa* | pennate diatom | Chrysophyta | ES |
| *Nitzschia gracilis* | pennate diatom | Chrysophyta | ES |
| *Nitzschia hantzschiana* | pennate diatom | Chrysophyta | ES |
| *Nitzschia hungarica* | pennate diatom | Chrysophyta | ES |
| *Nitzschia inconspicua* | pennate diatom | Chrysophyta | ES |
| *Nitzschia intermedia* | pennate diatom | Chrysophyta | CK,ES |
| *Nitzschia levidensis* | pennate diatom | Chrysophyta | ES |
| *Nitzschia linearis* | pennate diatom | Chrysophyta | ES |
| *Nitzschia linearis* var. *subtilis* | pennate diatom | Chrysophyta | ES |
| *Nitzschia littoralis* | pennate diatom | Chrysophyta | ES |
| *Nitzschia microcephala* | pennate diatom | Chrysophyta | ES |
| *Nitzschia nereidis* | pennate diatom | Chrysophyta | ES |
| *Nitzschia palea* | pennate diatom | Chrysophyta | CK,ES |
| *Nitzschia palea* var. *minuta* | pennate diatom | Chrysophyta | ES |
| *Nitzschia paleacea* | pennate diatom | Chrysophyta | ES |
| *Nitzschia parvula* | pennate diatom | Chrysophyta | ES |
| *Nitzschia perspicua* | pennate diatom | Chrysophyta | ES |
| *Nitzschia plana* | pennate diatom | Chrysophyta | ES |
| *Nitzschia pusilla* | pennate diatom | Chrysophyta | CK,ES |
| *Nitzschia recta* | pennate diatom | Chrysophyta | CK,ES |
| *Nitzschia reversa* | pennate diatom | Chrysophyta | ES |
| *Nitzschia sigma* | pennate diatom | Chrysophyta | ES |
| *Nitzschia sigmoidea* | pennate diatom | Chrysophyta | CK,ES |

## KINGDOMS MONERA AND PROTISTA (continued)

| SCIENTIFIC NAME | COMMON NAME | DIVISION | LOCATION |
|---|---|---|---|
| *Nitzschia sinuata* | pennate diatom | Chrysophyta | ES |
| *Nitzschia sinuata* var. *tabellaria* | pennate diatom | Chrysophyta | CK,ES |
| *Nitzschia sociabilis* | pennate diatom | Chrysophyta | ES |
| *Nitzschia solita* | pennate diatom | Chrysophyta | ES |
| *Nitzschia spiculum* | pennate diatom | Chrysophyta | ES |
| *Nitzschia stricta* | pennate diatom | Chrysophyta | ES |
| *Nitzschia subacicularis* | pennate diatom | Chrysophyta | ES |
| *Nitzschia supralitorea* | pennate diatom | Chrysophyta | ES |
| *Nitzschia tropica* | pennate diatom | Chrysophyta | ES |
| *Nitzschia tryblionella* | pennate diatom | Chrysophyta | ES |
| *Nitzschia tubicola* | pennate diatom | Chrysophyta | ES |
| *Nitzschia valga* | pennate diatom | Chrysophyta | ES |
| *Ochromonas ludibunda* | golden-brown alga | Chrysophyta | ES |
| *Ochromonas nana* | golden-brown alga | Chrysophyta | ES |
| *Ochromonas* sp. | golden-brown alga | Chrysophyta | ES |
| *Oedogonium* sp. | green alga | Chlorophyta | ES |
| *Oocystis lacustris* | green alga | Chlorophyta | ES,LE |
| *Oocystis novae-semliae* | green alga | Chlorophyta | ES |
| *Oocystis parva* | green alga | Chlorophyta | ES |
| *Oocystis pusilla* | green alga | Chlorophyta | ES |
| *Oocystis* sp. | green alga | Chlorophyta | ES |
| *Ophiocytium capitatum* var. *longispina* | yellow-green alga | Chrysophyta | ES |
| *Oscillatoria agardhii* | blue-green | Cyanophyta | ES,LE |
| *Oscillatoria amphibia* | blue-green | Cyanophyta | ES |
| *Oscillatoria chlorina* | blue-green | Cyanophyta | LE |
| *Oscillatoria granulata* | blue-green | Cyanophyta | ES |
| *Oscillatoria hamelii* | blue-green | Cyanophyta | ES,LE |
| *Oscillatoria limosa* | blue-green | Cyanophyta | CK,ES |
| *Oscillatoria prolifica* | blue-green | Cyanophyta | LE |
| *Oscillatoria subbrevis* | blue-green | Cyanophyta | CK,ES |
| *Oscillatoria tenuis* | blue-green | Cyanophyta | CK,ES |
| *Oscillatoria* spp. | blue-greens | Cyanophyta | ES,LE |
| *Pandorina* sp. | green alga | Chlorophyta | ES |
| *Pandorinamorum* | green alga | Chlorophyta | ES |
| *Pediastrum boryanum* | green alga | Chlorophyta | ES |
| *Pediastrum duplex* | green alga | Chlorophyta | ES |
| *Pediastrum duplex* var. *duplex* | green alga | Chlorophyta | ES |
| *Pediastrum duplex* var. *reticulatum* | green alga | Chlorophyta | ES |
| *Pediastrum simplex* | green alga | Chlorophyta | ES |
| *Pediastrum simplex* var. *biwaense* | green alga | Chlorophyta | ES |
| *Pediastrum simplex* var. *echinulatum* | green alga | Chlorophyta | ES |
| *Pediastrum simplex* var. *sturmii* | green alga | Chlorophyta | ES |
| *Pediastrum tetras* | green alga | Chlorophyta | ES |
| *Pediastrum tetras* var. *tetraodon* | green alga | Chlorophyta | ES |
| *Pediastrum* sp. | green alga | Chlorophyta | ES |
| *Pedinopera* sp. | green alga | Chlorophyta | ES |
| *Perdiniopsis quadridens* | dinoflagellate | Pyrrhophyta | ES |
| *Phacotus lenticularis* | green alga | Chlorophyta | ES |
| *Phacotus* sp. | green alga | Chlorophyta | ES |
| *Phacus acuminatus* | euglenoid | Euglenophyta | CK,ES |
| *Phacus arnoldi* | euglenoid | Euglenophyta | ES |
| *Phacus caudatus* | euglenoid | Euglenophyta | ES |
| *Phacus contortus* | euglenoid | Euglenophyta | ES |
| *Phacus curvicauda* | euglenoid | Euglenophyta | ES |
| *Phacus helikoides* | euglenoid | Euglenophyta | ES |
| *Phacus longicauda* | euglenoid | Euglenophyta | ES |
| *Phacus obicularis* | euglenoid | Euglenophyta | ES |
| *Phacus pleuronectes* | euglenoid | Euglenophyta | ES |
| *Phacus pseudonordstedii* | euglenoid | Euglenophyta | ES |
| *Phacus rudicula* | euglenoid | Euglenophyta | ES |
| *Phacus tortus* | euglenoid | Euglenophyta | ES |
| *Phacus triqueter* | euglenoid | Euglenophyta | ES |
| *Phacus* sp. | euglenoid | Euglenophyta | ES |
| *Phormidium tenue* | blue-green | Cyanophyta | ES |
| *Physomonas vestita* | golden-brown alga | Chrysophyta | ES |
| *Pinnularia abaujensis* var. *rostrata* | pennate diatom | Chrysophyta | ES |
| *Pinnularia borealis* | pennate diatom | Chrysophyta | LE |

## KINGDOMS MONERA AND PROTISTA (continued)

| SCIENTIFIC NAME | COMMON NAME | DIVISION | LOCATION |
|---|---|---|---|
| *Pinnularia intermedia* | pennate diatom | Chrysophyta | ES |
| *Pinnularia microstauron* | pennate diatom | Chrysophyta | ES |
| *Pinnularia microstauron* var. *brebissonii* | pennate diatom | Chrysophyta | ES |
| *Pinnularia microstauron* var. *b.* f. *diminuta* | pennate diatom | Chrysophyta | ES |
| *Pinnularia nodosa* | pennate diatom | Chrysophyta | ES |
| *Pinnularia obscura* | pennate diatom | Chrysophyta | ES |
| *Pinnularia stomatophora* | pennate diatom | Chrysophyta | ES |
| *Pinnularia viridis* | pennate diatom | Chrysophyta | ES |
| *Pinnularia* sp. | pennate diatom | Chrysophyta | ES |
| *Plagiotropis lepidoptera* var. *probosidea* | pennate diatom | Chrysophyta | ES |
| *Planonephros parvula* | cryptomonad | Cryptophyta | ES |
| *Pleurosigma delicatulum* | pennate diatom | Chrysophyta | CK |
| *Pseudokephyrion cylindricum* | golden-brown alga | Chrysophyta | ES |
| *Pseudokephyrion entzii* f. *granulata* | golden-brown alga | Chrysophyta | ES |
| *Pseudosphaerocystis lacustris* | green alga | Chlorophyta | CK,ES |
| *Pseudostaurastrum hastatum* | yellow-green alga | Chrysophyta | ES |
| *Pteromonas angulosa* | green alga | Chlorophyta | ES |
| *Pteromonas* sp. | green alga | Chlorophyta | ES |
| *Quadrigula closteroides* | green alga | Chlorophyta | ES |
| *Quadrigula lacustris* | green alga | Chlorophyta | ES |
| *Radiofilum conjunctivum* | green alga | Chlorophyta | CK |
| *Raphidiopsis mediterranea* | blue-green | Cyanophyta | LE |
| *Reimeria sinuata* | pennate diatom | Chrysophyta | CK,ES |
| *Rhabdoderma minima* | blue-green | Cyanophyta | ES |
| *Rhabdoderma* sp. | blue-green | Cyanophyta | ES |
| *Rhabdomonas* sp. | euglenoid | Euglenophyta | ES |
| *Rhizoclonium hieroglyphicum* | green alga | Chlorophyta | CK |
| *Rhizosolenia eriensis* | centric diatom | Chrysophyta | ES |
| *Rhodomonas lacustris* | cryptomonad | Cryptophyta | ES |
| *Rhodomonas lens* | cryptomonad | Cryptophyta | ES |
| *Rhodomonas minuta* | cryptomonad | Cryptophyta | ES |
| *Rhodomonas minuta* var. *nannoplanctonica* | cryptomonad | Cryptophyta | ES,LE |
| *Rhodomonas* spp. | cryptomonads | Cryptophyta | CK,ES |
| *Rhoicosphenia abbreviata* | pennate diatom | Chrysophyta | CK,ES |
| *Scenedesmus acuminatus* | green alga | Chlorophyta | ES |
| *Scenedesmus acuminatus* var. *minor* | green alga | Chlorophyta | ES |
| *Scenedesmus armatus* | green alga | Chlorophyta | ES |
| *Scenedesmus bicaudatus* | green alga | Chlorophyta | ES |
| *Scenedesmus bijuga* | green alga | Chlorophyta | ES |
| *Scenedesmus bijuga* var. *alternans* | green alga | Chlorophyta | ES |
| *Scenedesmus brevispina* | green alga | Chlorophyta | ES |
| *Scenedesmus denticulatus* | green alga | Chlorophyta | ES |
| *Scenedesmus dimorphus* | green alga | Chlorophyta | CK,ES |
| *Scenedesmus hystrix* | green alga | Chlorophyta | ES |
| *Scenedesmus longispina* | green alga | Chlorophyta | ES |
| *Scenedesmus opoliensis* | green alga | Chlorophyta | CK,ES |
| *Scenedesmus quadricauda* | green alga | Chlorophyta | ES |
| *Scenedesmus quadricauda* var. *longispina* | green alga | Chlorophyta | ES |
| *Scenedesmus sempervirens* | green alga | Chlorophyta | ES |
| *Scenedesmus serratus* | green alga | Chlorophyta | ES |
| *Scenedesmus smithii* | green alga | Chlorophyta | ES |
| *Scenedesmus sooi?* | green alga | Chlorophyta | ES |
| *Scenedesmus subspicatus* | green alga | Chlorophyta | ES |
| *Scenedesmus verrucosus* | green alga | Chlorophyta | ES |
| *Scenedesmus* spp. | green algae | Chlorophyta | CK,ES |
| *Schizothrix calcicola* | blue-green | Cyanophyta | CK,ES |
| *Schroederia indica* | green alga | Chlorophyta | LE |
| *Schroederia robusta* | green alga | Chlorophyta | ES |
| *Schroederia setigera* | green alga | Chlorophyta | ES |
| *Schroederia spiralis* | green alga | Chlorophyta | ES |
| *Scytomonas* sp. | euglenoid | Euglenophyta | ES |
| *Selenastrum capricornutum* | green alga | Chlorophyta | ES |
| *Selenastrum* sp. | green alga | Chlorophyta | ES |
| *Skeletonema potamos* | centric diatom | Chrysophyta | ES |
| *Sphaerellopsis* spp. | green algae | Chlorophyta | ES |
| *Spirogyra* sp. | green alga | Chlorophyta | CK,ES |
| *Spirulina* sp. | blue-green | Cyanophyta | ES |

## KINGDOMS MONERA AND PROTISTA (continued)

| SCIENTIFIC NAME | COMMON NAME | DIVISION | LOCATION |
|---|---|---|---|
| *Spumella* sp. | golden-brown alga | Chrysophyta | ES |
| *Staurastrum gracile* | green alga, desmid | Chlorophyta | ES |
| *Stauroneis anceps* | pennate diatom | Chrysophyta | ES |
| *Stauroneis kriegeri* | pennate diatom | Chrysophyta | ES |
| *Stauroneis phoenicenteron* | pennate diatom | Chrysophyta | ES |
| *Stauroneis smithii* | pennate diatom | Chrysophyta | ES |
| *Stauroneis thermicola* | pennate diatom | Chrysophyta | ES |
| *Stephanodiscus alpinus* | centric diatom | Chrysophyta | ES |
| *Stephanodiscus binderanus* | centric diatom | Chrysophyta | ES,LE |
| *Stephanodiscus hantzschii* | centric diatom | Chrysophyta | ES |
| *Stephanodiscus minutulus* | centric diatom | Chrysophyta | ES |
| *Stephanodiscus nipigonensis* | centric diatom | Chrysophyta | ES |
| *Stephanodiscus parvus* | centric diatom | Chrysophyta | ES |
| *Stephanodiscus rotula* | centric diatom | Chrysophyta | CK,ES,LE |
| *Stephanodiscus subtilis* | centric diatom | Chrysophyta | ES |
| *Stephanodiscus* sp. | centric diatom | Chrysophyta | ES |
| *Stigeoclonium farctum* | green alga | Chlorophyta | ES |
| *Stigeoclonium tenue* | green alga | Chlorophyta | ES |
| *Stigeoclonium* sp. | green alga | Chlorophyta | ES |
| *Stipitococcus vasiformis* | yellow-green alga | Chrysophyta | ES |
| *Stokesiella* sp. | golden-brown alga | Chrysophyta | ES |
| *Strombomonas acuminata* | euglenoid | Euglenophyta | ES |
| *Strombomonas fluviatilis* | euglenoid | Euglenophyta | ES |
| *Strombomonas gibberosa* | euglenoid | Euglenophyta | ES |
| *Strombomonas longicauda* | euglenoid | Euglenophyta | ES |
| *Strombomonas schauinslandii* | euglenoid | Euglenophyta | ES |
| *Strombomonas verrucosa* var. *zmiewika* | euglenoid | Euglenophyta | ES |
| *Strombomonas* sp. | euglenoid | Euglenophyta | ES |
| *Surirella angusta* | pennate diatom | Chrysophyta | ES |
| *Surirella brebissonii* var. *kuetzingii* | pennate diatom | Chrysophyta | ES |
| *Surirella minuta* | pennate diatom | Chrysophyta | CK,ES |
| *Surirella ovalis* | pennate diatom | Chrysophyta | ES |
| *Surirella suecica* | pennate diatom | Chrysophyta | ES |
| *Surirella tenera* | pennate diatom | Chrysophyta | ES |
| *Surirella turgida* | pennate diatom | Chrysophyta | ES |
| *Synechococcus leopoliensis* | blue-green | Cyanophyta | ES |
| *Synechococcus* sp. | blue-green | Cyanophyta | ES |
| *Synura uvella* | golden-brown alga | Chrysophyta | ES |
| *Tabellaria fenestrata* | pennate diatom | Chrysophyta | ES |
| *Tabellaria* sp. | pennate diatom | Chrysophyta | ES |
| *Tetraedron caudatum* | green alga | Chlorophyta | ES |
| *Tetraedron incus* | green alga | Chlorophyta | ES |
| *Tetraedron minimum* | green alga | Chlorophyta | CK,ES |
| *Tetraedron muticum* | green alga | Chlorophyta | ES |
| *Tetraedron regulare* | green alga | Chlorophyta | ES |
| *Tetraedron trigonum* var. *gracile* | green alga | Chlorophyta | ES |
| *Tetrastrum elegans* | green alga | Chlorophyta | ES |
| *Tetrastrum glabrum* | green alga | Chlorophyta | CK,ES |
| *Tetrastrum heteracanthum* | green alga | Chlorophyta | ES |
| *Tetrastrum heteracanthum* (*elegans* f.) | green alga | Chlorophyta | ES |
| *Tetrastrum punctatum* | green alga | Chlorophyta | ES |
| *Tetrastrum staurogeniaeforme* | green alga | Chlorophyta | ES |
| *Thalassiosira pseudonana* | centric diatom | Chrysophyta | ES |
| *Thalassiosira weissflogii* | centric diatom | Chrysophyta | ES |
| *Trachelomonas abrupta* var. *minor* | euglenoid | Euglenophyta | ES |
| *Trachelomonas armata* | euglenoid | Euglenophyta | ES |
| *Trachelomonas bulla* | euglenoid | Euglenophyta | ES |
| *Trachelomonas crebea* | euglenoid | Euglenophyta | ES |
| *Trachelomonas granulosa* | euglenoid | Euglenophyta | ES |
| *Trachelomonas hispida* | euglenoid | Euglenophyta | ES |
| *Trachelomonas horrida* | euglenoid | Euglenophyta | ES |
| *Trachelomonas lacustris* | euglenoid | Euglenophyta | ES |
| *Trachelomonas oblonga* | euglenoid | Euglenophyta | ES |
| *Trachelomonas oblonga* var. *attenuata* | euglenoid | Euglenophyta | ES |
| *Trachelomonas oblonga* var. *truncata* | euglenoid | Euglenophyta | ES |
| *Trachelomonas oblonga* var. *umbilicophora* | euglenoid | Euglenophyta | ES |
| *Trachelomonas planctonica* | euglenoid | Euglenophyta | ES |

## KINGDOMS MONERA AND PROTISTA (continued)

| SCIENTIFIC NAME | COMMON NAME | DIVISION | LOCATION |
|---|---|---|---|
| *Trachelomonas scabra* | euglenoid | Euglenophyta | ES |
| *Trachelomonas spiralis* | euglenoid | Euglenophyta | ES |
| *Trachelomonas superba* | euglenoid | Euglenophyta | ES |
| *Trachelomonas varians* | euglenoid | Euglenophyta | ES |
| *Trachelomonas volvocina* | euglenoid | Euglenophyta | ES |
| *Trachelomonas volvocina* var. *minuta* | euglenoid | Euglenophyta | ES |
| *Trachelomonas* spp. | euglenoids | Euglenophyta | ES |
| *Treubaria quadrispina* | green alga | Chlorophyta | ES |
| *Treubaria schmidlei* | green alga | Chlorophyta | ES |
| *Treubaria triappendiculata* | green alga | Chlorophyta | ES |
| *Ulothrix tenerrima* | green alga | Chlorophyta | CK |
| *Ulothrix tenuissima* | green alga | Chlorophyta | CK |
| *Ulothrix* sp. | green alga | Chlorophyta | ES |
| *Urceolus ovatus* | euglenoid | Euglenophyta | ES |
| *Urceolus sabulosus* | euglenoid | Euglenophyta | ES |
| *Vaucheria* sp. | yellow-green alga | Chrysophyta | ES |
| *Volvox* sp. | green alga | Chlorophyta | ES |
| *Willea irregularis* | green alga | Chlorophyta | ES |
| *Woloszynskia coronata* | dinoflagellate | Pyrrhophyta | ES |

## KINGDOM FUNGI (fungi and lichens)

| | | | |
|---|---|---|---|
| *Achlya americana* | water mold | Phycomycota | LE,RE |
| *Achlya bisexualis* | water mold | Phycomycota | LE,RE |
| *Achlya debaryana* | water mold | Phycomycota | LE,RE |
| *Achlya dubia* | water mold | Phycomycota | LE,RE |
| *Achlya flagellata* | water mold | Phycomycota | LE,RE |
| *Achlya klebsiana* | water mold | Phycomycota | LE,RE |
| *Achlya polyandra* | water mold | Phycomycota | LE,RE |
| *Achlya prolifera* | water mold | Phycomycota | LE,RE |
| *Achlya proliferoides* | water mold | Phycomycota | LE,RE |
| *Achlya rodrigueziana* | water mold | Phycomycota | LE,RE |
| *Achlya* sp. | water mold | Phycomycota | LE,RE |
| *Acryodes incarnata* | slime mold | Myxomycota | RE |
| *Aecidium cimicifugatum* | rust | Basidiomycota | RE |
| *Aecidium compositatum* | rust | Basidiomycota | RE |
| *Aecidium fraxini* | rust | Basidiomycota | RE |
| *Aecidium grossulariæ* | rust | Basidiomycota | RE |
| *Aecidium impatientis* | rust | Basidiomycota | RE |
| *Aecidium nesææ* | rust | Basidiomycota | RE |
| *Aecidium oenotheræ* | rust | Basidiomycota | RE |
| *Aecidium pammelii* | rust | Basidiomycota | RE |
| *Aecidium pustulatum* | rust | Basidiomycota | RE |
| *Agaricus campestris* | meadow mushroom | Basidiomycota | CK |
| *Agaricus comtulus* | agaricus | Basidiomycota | RE |
| *Alectoria nidulifera* | lichen | Mycophycophyta | RE |
| *Aleuria aurantia* | orange peel fungus | Ascomycota | CK |
| *Allodus podophylli* | May-apple rust | Basidiomycota | CK |
| *Allomyces arbuscula* | water mold | Phycomycota | LE,RE |
| *Amanita phalloides* | death cup | Basidiomycota | RE |
| *Amanitopsis vaginata* | sheathed amanitopsis | Basidiomycota | RE |
| *Anaptychia echinata* | lichen | Mycophycophyta | RE |
| *Anaptychia hypoleuca* | lichen | Mycophycophyta | RE |
| *Anaptychia leucomelaena* | lichen | Mycophycophyta | RE |
| *Anaptychia palmulata* | lichen | Mycophycophyta | RE |
| *Anaptychia speciosa* | lichen | Mycophycophyta | RE |
| *Aphanomyces euteiches* | water mold | Phycomycota | LE,RE |
| *Aphanomyces laevis* | water mold | Phycomycota | LE,RE |
| *Aphanomyces scaber* | water mold | Phycomycota | LE,RE |
| *Aphanomyces* sp. | water mold | Phycomycota | LE,RE |
| *Apiognomonia veneta* | sycamore anthracnose | Ascomycota | CK |
| *Apiosporina morbosa* | black knot | Ascomycota | CK |
| *Apodachlya brachynema* | water mold | Phycomycota | LE,RE |
| *Arcyria cinerea* | slime mold | Myxomycota | RE |
| *Arcyria denudata* | carnival candy slime | Myxomycota | RE |
| *Arcyria incarnata* | slime mold | Myxomycota | RE |

## KINGDOM FUNGI (continued)

| SCIENTIFIC NAME | COMMON NAME | DIVISION | LOCATION |
|---|---|---|---|
| *Arcyria nutans* | slime mold | Myxomycota | RE |
| *Armillaria mellea* | honey mushroom | Basidiomycota | CK |
| *Arthonia punctiformis* | lichen | Mycophycophyta | RE |
| *Arthonia radiata* | lichen | Mycophycophyta | RE |
| *Arthopyrenia alba* | lichen | Mycophycophyta | RE |
| *Arthothelium spectabile* | lichen | Mycophycophyta | RE |
| *Aspergillus herbariorum* | mold | Ascomycota | RE |
| *Aspergillus niger* | mold | Ascomycota | RE |
| *Atrichum undulatum* | wavy Catherinea mushroom | Basidiomycota | CK |
| *Bacidia fuscorubella* | lichen | Mycophycophyta | RE |
| *Bacidia schweinitzii* | lichen | Mycophycophyta | RE |
| *Badhamia affinis* | slime mold | Myxomycota | RE |
| *Bilimbia sabuletorum* | lichen | Mycophycophyta | RE |
| *Bilimbia trachona* | lichen | Mycophycophyta | RE |
| *Bjerkandera adusta* | pore fungus | Basidiomycota | CK |
| *Blastocladia globosa* | water mold | Phycomycota | LE,RE |
| *Blastocladia pringsheimii* | water mold | Phycomycota | LE,RE |
| *Blastocladia ramosa* | water mold | Phycomycota | LE,RE |
| *Blastocladia simplex* | water mold | Phycomycota | LE,RE |
| *Blastocladia tenuis* | water mold | Phycomycota | LE,RE |
| *Blumeriella jaapii* | cherry leaf spot | Ascomycota | CK |
| *Boletus chrysenteron* | golden-flesh or red-crack bolete | Basidiomycota | RE |
| *Boletus piperatus* | edible bolete | Basidiomycota | RE |
| *Botryosphaeria dothidea* | white apple rot | Ascomycota | CK |
| *Botryosphaeria obtusa* | black apple rot | Ascomycota | CK |
| *Botrytis cinerea* | raspberry mold | Deuteromycota | CK |
| *Bovista pila* | common puffball | Basidiomycota | CK |
| *Buellia parasema* | lichen | Mycophycophyta | RE |
| *Calocera cornea* | clublike tuning fork | Basidiomycota | RE |
| *Calonema aureum* | slime mold | Myxomycota | RE |
| *Caloplaca aurantiaca* | lichen | Mycophycophyta | RE |
| *Caloplaca cerina* | lichen | Mycophycophyta | RE |
| *Calvatia gigantea* | giant puffball | Basidiomycota | CK |
| *Candelaria concolor* | lichen | Mycophycophyta | RE |
| *Candelaria fibrosa* | lichen | Mycophycophyta | RE |
| *Cercospora chenopodii* | imperfect fungus | Deuteromycota | RE |
| *Cercospora clavata* | imperfect fungus | Deuteromycota | RE |
| *Cercospora helianthi* | imperfect fungus | Deuteromycota | RE |
| *Cercospora maianthemi* | imperfect fungus | Deuteromycota | RE |
| *Cercospora monoica* | imperfect fungus | Deuteromycota | RE |
| *Cercospora osmorhizæ* | imperfect fungus | Deuteromycota | RE |
| *Cercospora oxybaphi* | imperfect fungus | Deuteromycota | RE |
| *Cercospora tuberosa* | imperfect fungus | Deuteromycota | RE |
| *Cetraria ciliaris* | shield lichen | Mycophycophyta | RE |
| *Cetraria ericetorum* | shield lichen | Mycophycophyta | RE |
| *Cicinnobolus cesatii* | imperfect fungus | Deuteromycota | RE |
| *Cladonia arbuscula* | lichen | Mycophycophyta | RE |
| *Cladonia bacillaris* | lichen | Mycophycophyta | RE |
| *Cladonia caespiticia* | lichen | Mycophycophyta | RE |
| *Cladonia capitata* | lichen | Mycophycophyta | RE |
| *Cladonia coniocraea* | lichen | Mycophycophyta | RE |
| *Cladonia conista* | lichen | Mycophycophyta | RE |
| *Cladonia cristatella* | British soldiers or red crest lichen | Mycophycophyta | RE |
| *Cladonia cryptochlorophaea* | lichen | Mycophycophyta | RE |
| *Cladonia fimbriata* | lichen | Mycophycophyta | RE |
| *Cladonia furcata* | lichen | Mycophycophyta | RE |
| *Cladonia gracilis* | spoon lichen | Mycophycophyta | RE |
| *Cladonia grayi* | lichen | Mycophycophyta | RE |
| *Cladonia nemoxyna* | lichen | Mycophycophyta | RE |
| *Cladonia parasitica* | lichen | Mycophycophyta | RE |
| *Cladonia pyxidata* | pixie cup lichen | Mycophycophyta | RE |
| *Cladonia rangiferina* | reindeer lichen | Mycophycophyta | RE |
| *Cladonia squamosa* | lichen | Mycophycophyta | RE |
| *Cladonia subcariosa* | lichen | Mycophycophyta | RE |
| *Cladonia verticillata* | ladder lichen | Mycophycophyta | RE |
| *Cladonia* sp. | reindeer moss | Mycophycophyta | CK |

## KINGDOM FUNGI (continued)

| SCIENTIFIC NAME | COMMON NAME | DIVISION | LOCATION |
|---|---|---|---|
| *Cladosporium carpophilum* | peach scab | Deuteromycota | CK |
| *Clavaria flaccida* | soft coral fungus | Basidiomycota | RE |
| *Clavaria pyxidata* | edible coral fungus | Basidiomycota | RE |
| *Clavaria* sp. | coral mushroom | Basidiomycota | CK |
| *Claviceps purpurea* | ergot claviceps | Ascomycota | RE |
| *Clitocybe infundibuliformis-membranacea* | funnel clitocybe | Basidiomycota | RE |
| *Clitopilus abortivus* | field type mushroom | Basidiomycota | CK |
| *Coleosporium sonchi-arvensis* | rust | Basidiomycota | RE |
| *Collema subfurvum* | lichen | Mycophycophyta | RE |
| *Collybia delicatella* | collybia | Basidiomycota | RE |
| *Collybia dryophila* | oak-loving collybia | Basidiomycota | RE |
| *Collybia myriadophylla* | conifer collybia | Basidiomycota | RE |
| *Collybia platyphylla* | broad-gilled collybia | Basidiomycota | RE |
| *Comatichia laxa* | slime mold | Myxomycota | RE |
| *Comatichia pulchella* | slime mold | Myxomycota | RE |
| *Comatricha stemonitis* | slime mold | Myxomycota | RE |
| *Coniocybe furfuracea* | lichen | Mycophycophyta | RE |
| *Coniothyrium* sp. | raspberry cane blight | Deuteromycota | CK |
| *Conotrema urceolatum* | lichen | Mycophycophyta | RE |
| *Coprinus fuscescens* | ink-cup | Basidiomycota | RE |
| *Coprinus micaceus* | glistening ink-cup | Basidiomycota | RE |
| *Cordyceps militaris* | military orange caterpillar fungus | Ascomycota | RE |
| *Craterium minimum* | slime mold | Myxomycota | RE |
| *Crepidotus malachius* | spotted stumpfoot | Basidiomycota | CK |
| *Cribraria intricata* | slime mold | Myxomycota | RE |
| *Cryphonectria parasitica* | chestnut blight | Ascomycota | CK |
| *Cyathus striatus* | fluted bird's nest | Basidiomycota | RE |
| *Cylindrosporium padi* | imperfect fungus | Deuteromycota | RE |
| *Cystopus bliti* | downy mildew | Phycomycota | RE |
| *Cystopus candidus* | downy mildew | Phycomycota | RE |
| *Daedalea confragosa* | currycomb bracket fungus | Basidiomycota | CK |
| *Daedalea quercina* | oak mazegill fungus | Basidiomycota | CK |
| *Daldinia cingulata* | zoned black fungus | Ascomycota | RE |
| *Diachea leucopodia* | white-footed slime | Myxomycota | RE |
| *Diaporthe ailanthi* | flask fungus | Ascomycota | RE |
| *Dictydium cancellatum* | Japanese-lantern slime | Myxomycota | RE |
| *Dictyuchus anomalus* | water mold | Phycomycota | LE,RE |
| *Dictyuchus missouriensis* | water mold | Phycomycota | LE,RE |
| *Dictyuchus monosporus* | water mold | Phycomycota | LE,RE |
| *Dictyuchus pseudodictyon* | water mold | Phycomycota | LE,RE |
| *Dictyuchus* sp. | water mold | Phycomycota | LE,RE |
| *Diderma crustaceum* | slime mold | Myxomycota | RE |
| *Diderma hemisphericum* | slime mold | Myxomycota | RE |
| *Diderma reticulatum* | slime mold | Myxomycota | RE |
| *Didymaria ungeri* | imperfect fungus | Deuteromycota | RE |
| *Didymium crustaceum* | slime mold | Myxomycota | RE |
| *Didymium iridis* | slime mold | Myxomycota | RE |
| *Didymium melanospermum* | slime mold | Myxomycota | RE |
| *Didymium squamulosum* | slime mold | Myxomycota | RE |
| *Diplodia maydis* | corn ear rot | Deuteromycota | CK |
| dothidean spp. | pear sooty molds | Ascomycota | CK |
| *Drechslera teres* | imperfect fungus | Deuteromycota | RE |
| *Elsinoë corni* | dogwood anthracnose | Ascomycota | CK |
| *Empusa grylli* | mold | Phycomycota | RE |
| *Entoloma* sp. | entoloma | Basidiomycota | RE |
| *Entophlyctis aurea* | water mold | Phycomycota | LE,RE |
| *Entyloma menispermi* | smut | Basidiomycota | RE |
| *Erysiphe cichoracearum* | powdery mildew | Ascomycota | RE |
| *Erysiphe communis* | powdery mildew | Ascomycota | RE |
| *Erysiphe montagnei* | powdery mildew | Ascomycota | RE |
| *Erysiphe polygoni* | black locust powdery mildew | Ascomycota | RE |
| *Exidia spiculosa* | jelly fungus | Basidiomycota | CK |
| *Favolus alveolaris* | pore fungus | Basidiomycota | CK |
| *Fomes applanatus* | artist's fomes | Basidiomycota | RE |
| *Fomes everhartii* | artist's type fungus | Basidiomycota | CK |
| *Fomes ohioensis* | artist's type fungus | Basidiomycota | CK |

| SCIENTIFIC NAME | COMMON NAME | DIVISION | LOCATION |
|---|---|---|---|
| *Fuligo cinerea* | slime mold | Myxomycota | RE |
| *Fuligo violacea* | slime mold | Myxomycota | RE |
| *Galera* sp. | deadly galerina | Basidiomycota | RE |
| *Ganoderma applanatum* | artist's shelf fungus | Basidiomycota | CK |
| *Geaster hygrometricus* | water measuring earthstar | Basidiomycota | RE |
| *Geolegnia inflata* | water mold | Phycomycota | LE,RE |
| *Gleosporium irregulare* | imperfect fungus | Deuteromycota | RE |
| *Gleosporium nervisequum* | imperfect fungus | Deuteromycota | RE |
| *Gleosporium septorioides* | imperfect fungus | Deuteromycota | RE |
| *Glomerella cingulata* | apple bitter rot | Ascomycota | CK |
| *Gomphidius* sp. | gomphidius | Basidiomycota | RE |
| *Gonapodya prolifera* | water mold | Phycomycota | LE,RE |
| *Graphis scripta* | script lichen | Mycophycophyta | RE |
| *Guignardia bidwellii* | grape black rot | Ascomycota | CK,RE |
| *Gymnoconia peckiana* | rust | Basidiomycota | RE |
| *Gymnoconia* sp. | orange rust | Basidiomycota | CK |
| *Gymnosporangium globosum* | rust | Basidiomycota | RE |
| *Gymnosporangium juniperi-virginianae* | cedar-apple rust | Basidiomycota | CK |
| *Gymnosporangium nidus-avis* | rust | Basidiomycota | RE |
| *Gyrodom merulioides* | fleshy pore fungus or bolete | Basidiomycota | CK |
| *Hemitrichia clavata* | yellow-fuzz cone slime | Myxomycota | RE |
| *Hemitrichia intorta* | slime mold | Myxomycota | RE |
| *Hemitrichia stipitata* | slime mold | Myxomycota | RE |
| *Hemitrichia vesparium* | slime mold | Myxomycota | RE |
| *Hydrochaete olivacea* | red leather fungus | Basidiomycota | CK,RE |
| *Hypoxylon* sp. | wood-wart | Ascomycota | RE |
| *Inocybe* sp. | fiber cap | Basidiomycota | RE |
| *Irpex lacteus* | white leather fungus | Basidiomycota | RE |
| *Isoachlya* sp.? | water mold | Phycomycota | LE,RE |
| *Kunkelia nitens* | blackberry rust | Basidiomycota | CK |
| *Lachnea scutellata* | patella | Ascomycota | RE |
| *Lachnobolus globosus* | slime mold | Myxomycota | RE |
| *Lactarius rimosellus* | milk cap | Basidiomycota | RE |
| *Lactarius subdulcis* | dull milk cap | Basidiomycota | RE |
| *Lactarius theiogalus* | yellow -straining milk cap | Basidiomycota | RE |
| *Laetiporus sulphurous* | sulfur polypore | Basidiomycota | RE |
| *Lamproderma arcyrionema* | slime mold | Myxomycota | RE |
| *Lecanora dispersa* | lichen | Mycophycophyta | RE |
| *Lecanora pallida* | lichen | Mycophycophyta | RE |
| *Lecanora subfusca* | lichen | Mycophycophyta | RE |
| *Lecanora varia* | lichen | Mycophycophyta | RE |
| *Lecidea albocaerulescens* | whitewash lichen | Mycophycophyta | RE |
| *Lecidea myriocarpoides* | whitewash lichen | Mycophycophyta | RE |
| *Lecidea parasema* | whitewash lichen | Mycophycophyta | RE |
| *Lecidea viridescens* | whitewash lichen | Mycophycophyta | RE |
| *Lentinus sulcatus* | lentinus | Basidiomycota | RE |
| *Lenzites betulina* | birch mazegill fungus | Basidiomycota | CK |
| *Lenzites sepiaria* | gill polypore | Basidiomycota | RE |
| *Lepiota adirondackensis* | Adirondacks lepiota | Basidiomycota | RE |
| *Lepiota cristata* | crested lepiota | Basidiomycota | RE |
| *Lepiota erminea* | ermine lepiota | Basidiomycota | RE |
| *Lepiota illinita* | lepiota | Basidiomycota | RE |
| *Lepraria* sp. | lichen | Mycophycophyta | RE |
| *Leptogium lichenoides* | lichen | Mycophycophyta | RE |
| *Leptogium tenuissimum* | lichen | Mycophycophyta | RE |
| *Leptogium tremelloides* | lichen | Mycophycophyta | RE |
| *Leptolegnia subterranea* | water mold | Phycomycota | LE,RE |
| *Leucostoma* sp. | peach canker | Ascomycota | CK |
| *Lindbladia tubulina* | slime mold | Myxomycota | RE |
| *Lycogala epidendrum* | wolf's-milk slime | Myxomycota | RE |
| *Lycogala flavo-fuscum* | slime mold | Myxomycota | RE |
| *Lycoperdon perlatum* | gem puffball | Basidiomycota | CK |
| *Lycoperdon pusillum* | mini puffball | Basidiomycota | CK,RE |
| *Lycoperdon pyriforme* | pear-shaped or stump puffball | Basidiomycota | CK,RE |
| *Macropodia semitosta* | paxina | Ascomycota | RE |
| *Macrolepiota procera* | parasol mushroom | Basidiomycota | CK |

| SCIENTIFIC NAME | COMMON NAME | DIVISION | LOCATION |
|---|---|---|---|
| *Macrosporium saponariæ* | imperfect fungus | Deuteromycota | RE |
| *Macrosporium solani* | imperfect fungus | Deuteromycota | RE |
| *Marasmius albiceps* | marasmius | Basidiomycota | RE |
| *Marasmius candidus* | marasmius | Basidiomycota | RE |
| *Marasmius nigripes* | marasmius | Basidiomycota | RE |
| *Marasmius oreades* | fairy-ring mushroom | Basidiomycota | CK |
| *Marasmius siccus* | orange pin-wheel | Basidiomycota | RE |
| *Marasmius trullisatipes* | marasmius | Basidiomycota | RE |
| *Marsonia toxicodendri* | imperfect fungus | Deuteromycota | RE |
| *Melampsora salicis-capreæ* | melampsora rust | Basidiomycota | RE |
| *Microsphæra alni* | lilac powdery mildew | Ascomycota | CK,RE |
| *Microsphæra diffusa* | powdery mildew | Ascomycota | RE |
| *Microsphæra ravenellii* | powdery mildew | Ascomycota | RE |
| *Microsphaera viburni* | powdery mildew | Ascomycota | CK |
| *Microthelia micula* | lichen | Mycophycophyta | RE |
| *Monilinia fructicola* | stone fruits brown rot | Ascomycota | CK |
| *Monoblepharis* sp. | water mold | Phycomycota | LE,RE |
| *Morchella esculenta* | common morel | Ascomycota | CK |
| *Mucilago spongiosa* | slime mold | Myxomycota | RE |
| *Mucor stolonifer* | mold | Phycomycota | RE |
| *Mutinus caninus* | dog stinkhorn | Basidiomycota | CK |
| *Mycena capillaris* | bonnet mushroom | Basidiomycota | RE |
| *Mycosphaerella fragariae* | strawberry leaf spot | Ascomycota | CK |
| *Myriostoma coliformis* | pepper box | Basidiomycota | RE |
| *Nectria galligena* | nectria canker | Ascomycota | CK |
| *Negrido caladii* | Jack in the pulpit rust | Basidiomycota | CK |
| *Ochrolechia tartarea* | lichen | Mycophycophyta | RE |
| *Oligoporus tephroleucus* | pore fungus | Basidiomycota | CK |
| *Olpidiopsis saprolegniae* | water mold | Phycomycota | LE,RE |
| *Olpidiopsis varians* | water mold | Phycomycota | LE,RE |
| *Opegrapha lichenoides* | lichen | Mycophycophyta | RE |
| *Opegrapha pulicaris* | lichen | Mycophycophyta | RE |
| *Opegrapha viridis* | lichen | Mycophycophyta | RE |
| *Ophiostoma ulmi* | Dutch elm disease | Ascomycota | CK |
| *Ophiotheca wrightii* | slime mold | Myxomycota | RE |
| *Ovularia obliqua* | imperfect fungus | Deuteromycota | RE |
| *Panus rudis* | rudy panus | Basidiomycota | RE |
| *Panus strypticus* | field type mushroom | Basidiomycota | CK |
| *Parmelia aspera* | boulder lichen | Mycophycophyta | RE |
| *Parmelia aurulenta* | boulder lichen | Mycophycophyta | RE |
| *Parmelia borreri* | boulder lichen | Mycophycophyta | RE |
| *Parmelia caperata* | boulder lichen | Mycophycophyta | RE |
| *Parmelia crozalsiana* | boulder lichen | Mycophycophyta | RE |
| *Parmelia flaventior* | boulder lichen | Mycophycophyta | RE |
| *Parmelia livida* | boulder lichen | Mycophycophyta | RE |
| *Parmelia margaritata* | boulder lichen | Mycophycophyta | RE |
| *Parmelia perlata* | boulder lichen | Mycophycophyta | RE |
| *Parmelia rudecta* | boulder lichen | Mycophycophyta | RE |
| *Parmelia saxatilis* | boulder lichen | Mycophycophyta | RE |
| *Parmelia sulcata* | boulder lichen | Mycophycophyta | RE |
| *Parmelia ulophyllodes* | boulder lichen | Mycophycophyta | RE |
| *Patella setosa* | cup fungus | Ascomycota | CK |
| *Peltaster fructicola* | apple sooty blotch mold | Deuteromycota | CK |
| *Peltigera aphthosa* | lichen | Mycophycophyta | RE |
| *Peltigera canina* | dog lichen | Mycophycophyta | RE |
| *Peltigera canina spuria* | lichen | Mycophycophyta | RE |
| *Peltigera horizontalis* | lichen | Mycophycophyta | RE |
| *Peltigera spuria* | lichen | Mycophycophyta | RE |
| *Penicillium crustaceum* | mold | Ascomycota | RE |
| *Penicillium* sp. | blue mold | Ascomycota | CK |
| *Perichæna quadrata* | slime mold | Myxomycota | RE |
| *Peronospora geranii* | downy mildew | Phycomycota | RE |
| *Peronospora parasitica* | downy mildew | Phycomycota | RE |
| *Pertusaria leioplaca* | lichen | Mycophycophyta | RE |
| *Pertusaria multipuncta* | lichen | Mycophycophyta | RE |
| *Pertusaria pertusa* | lichen | Mycophycophyta | RE |

| SCIENTIFIC NAME | COMMON NAME | DIVISION | LOCATION |
|---|---|---|---|
| *Pertusaria pustulata* | lichen | Mycophycophyta | RE |
| *Phaeolus schweinitzii* | polypore | Basidiomycota | RE |
| *Phellinus gilvus* | polypore | Basidiomycota | CK,RE |
| *Pholiota unicolor* | scalecap mushroom | Basidiomycota | CK |
| *Phoma uvicola* | imperfect fungus | Deuteromycota | RE |
| *Phragmidium obtusum* | rust | Basidiomycota | RE |
| *Phyllactinia corylea* | tree powdery mildew | Ascomycota | RE |
| *Phyllosticta cruenta* | imperfect fungus | Deuteromycota | RE |
| *Phyllosticta iridis* | imperfect fungus | Deuteromycota | RE |
| *Phyllosticta palustri* | imperfect fungus | Deuteromycota | RE |
| *Phyllosticta phaseolina* | imperfect fungus | Deuteromycota | RE |
| *Physarella oblonga* | slime mold | Myxomycota | RE |
| *Physarum nutans* | slime mold | Myxomycota | RE |
| *Physarum vernum* | slime mold | Myxomycota | RE |
| *Physarum viride* | slime mold | Myxomycota | RE |
| *Physarum viride* var. *incanum* | slime mold | Myxomycota | RE |
| *Physcia adscendens* | lichen | Mycophycophyta | RE |
| *Physcia aguila detonsa* | lichen | Mycophycophyta | RE |
| *Physcia aipolia* | lichen | Mycophycophyta | RE |
| *Physcia ciliata* | lichen | Mycophycophyta | RE |
| *Physcia elaeina* | lichen | Mycophycophyta | RE |
| *Physcia grisea* | lichen | Mycophycophyta | RE |
| *Physcia hypoleuca* | lichen | Mycophycophyta | RE |
| *Physcia millegrana* | lichen | Mycophycophyta | RE |
| *Physcia orbicularis* | lichen | Mycophycophyta | RE |
| *Physcia stellaris* | lichen | Mycophycophyta | RE |
| *Physcia syncolla* | lichen | Mycophycophyta | RE |
| *Physcia tribacia* | lichen | Mycophycophyta | RE |
| *Physcia tribacoides* | lichen | Mycophycophyta | RE |
| *Phytophthora cactorum* | crown rot | Phycomycota | CK |
| *Phytophthora undulatum* | downy mildew | Phycomycota | LE,RE |
| *Placynthium nigrum* | lichen | Mycophycophyta | RE |
| *Plasmopara sordida* | downy mildew | Phycomycota | RE |
| *Plasmopara viticola* | downy mildew of grape | Phycomycota | CK,ES,RE |
| *Pleurotus sapidus* | lavender-spored pleurotus | Basidiomycota | CK,RE |
| *Plowrightia morbosa* | rot | Ascomycota | RE |
| *Pluteus cervinus* | fawn-colored pluteus | Basidiomycota | RE |
| *Podosphaera leucotricha* | apple powdery mildew | Ascomycota | CK |
| *Podosphæra oxyacanthæ* | powdery mildew | Ascomycota | RE |
| *Polyporus arcularius* | polypore | Basidiomycota | CK,RE |
| *Polyporus carneus* | polypore | Basidiomycota | RE |
| *Polyporus elegans* | pore fungus | Basidiomycota | CK |
| *Polyporus squamosus* | Dryad's saddle fungus | Basidiomycota | CK |
| *Polystictus hirsutus-albiporus* | polypore | Basidiomycota | RE |
| *Poria unita* | pore fungus | Basidiomycota | CK |
| *Protoachlya paradoxa* | water mold | Phycomycota | LE,RE |
| *Pseudopeziza medicaginis* | leaf spot | Ascomycota | RE |
| *Psilocybe ammophila* | psilocybe | Basidiomycota | RE |
| *Puccinia caricis* | current rust | Basidiomycota | RE |
| *Puccinia coronata* | buckthorn crown rust | Basidiomycota | RE |
| *Puccinia fraxinata* | rust | Basidiomycota | RE |
| *Puccinia glechomatis* | rust | Basidiomycota | RE |
| *Puccinia graminis* | grape rust | Basidiomycota | RE |
| *Puccinia helianthi* | rust | Basidiomycota | RE |
| *Puccinia malvacearum* | rust | Basidiomycota | RE |
| *Puccinia menthæ* | rust | Basidiomycota | RE |
| *Puccinia osmorhizæ* | rust | Basidiomycota | RE |
| *Puccinia podophylli* | rust | Basidiomycota | RE |
| *Puccinia polygoni-amphibii* | rust | Basidiomycota | RE |
| *Puccinia seymeriæ* | rust | Basidiomycota | RE |
| *Puccinia simplex* | rust | Basidiomycota | RE |
| *Puccinia taraxaci* | rust | Basidiomycota | RE |
| *Puccinia xanthii* | rust | Basidiomycota | RE |
| *Pucciniastrum agrimoniæ* | rust | Basidiomycota | RE |
| *Pyenoporus cinnibarinus* | cinnabar polypore | Basidiomycota | RE |
| *Pyrenula leucoplaca* | lichen | Mycophycophyta | RE |

| SCIENTIFIC NAME | COMMON NAME | DIVISION | LOCATION |
|---|---|---|---|
| *Pythium aphanidermatum* | downy mildew | Phycomycota | LE,RE |
| *Pythium cystosiphon*? | downy mildew | Phycomycota | LE,RE |
| *Pythium debaryanum* | downy mildew | Phycomycota | LE,RE |
| *Pythium proliferum* | downy mildew | Phycomycota | LE,RE |
| *Pythium pulchrum* | downy mildew | Phycomycota | LE,RE |
| *Pythium ultimum* | downy mildew | Phycomycota | LE,RE |
| *Pythium* sp. | downy mildew | Phycomycota | LE,RE |
| *Ramalina farinacea* | lichen | Mycophycophyta | RE |
| *Ramalina sinensis* | lichen | Mycophycophyta | RE |
| *Ramularia arvensis* | imperfect fungus | Deuteromycota | RE |
| *Ramularia celastiri* | imperfect fungus | Deuteromycota | RE |
| *Ramularia variabilis* | imperfect fungus | Deuteromycota | RE |
| *Reticularia splendens* | slime mold | Myxomycota | RE |
| *Rhinotrichum curtisii* | imperfect fungus | Deuteromycota | RE |
| *Rhizopus* sp. | bread mold | Phycomycota | CK |
| *Rhytisma* sp. | maple tar spot | Ascomycota | CK |
| *Rinodina tephraspis* | lichen | Mycophycophyta | RE |
| *Rozella allomycis* | water mold | Phycomycota | LE,RE |
| *Russula alutacea* | red brittle gills | Basidiomycota | RE |
| *Russula compacta* | compact brittle gills | Basidiomycota | RE |
| *Russula ftens* | fetid brittle gills | Basidiomycota | RE |
| *Russula pectinata* | brittle gills | Basidiomycota | RE |
| *Russula xerampelina* | crab-scented brittle gills | Basidiomycota | RE |
| *Saprolegnia diclina* | water mold | Phycomycota | LE,RE |
| *Saprolegnia ferax* | water mold | Phycomycota | LE,RE |
| *Saprolegnia monoica* | water mold | Phycomycota | LE,RE |
| *Saprolegnia parasitica* | water mold | Phycomycota | LE,RE |
| *Saprolegnia* sp. | water mold | Phycomycota | LE,RE |
| *Sarcogyne simplex* | lichen | Mycophycophyta | RE |
| *Schizophyllum commune* | spit-gilled bracket | Basidiomycota | RE |
| *Scleroderma citrinum* | common earth ball | Basidiomycota | CK |
| *Sclerotinia fructigena* | rind rot | Ascomycota | ES |
| *Septoria ægopodii* | imperfect fungus | Deuteromycota | RE |
| *Septoria aquilegiæ* | imperfect fungus | Deuteromycota | RE |
| *Septoria erigerontis* | imperfect fungus | Deuteromycota | RE |
| *Septoria lactucicola* | imperfect fungus | Deuteromycota | RE |
| *Septoria littorea* | imperfect fungus | Deuteromycota | RE |
| *Septoria lophanthi* | imperfect fungus | Deuteromycota | RE |
| *Septoria musiva* | imperfect fungus | Deuteromycota | RE |
| *Septoria ochroleuca* | imperfect fungus | Deuteromycota | RE |
| *Septoria oenotheræ* | imperfect fungus | Deuteromycota | RE |
| *Septoria podophyllina* | imperfect fungus | Deuteromycota | RE |
| *Septoria polygonorum* | imperfect fungus | Deuteromycota | RE |
| *Septoria rubi* | imperfect fungus | Deuteromycota | RE |
| *Septoria scrophulariæ* | imperfect fungus | Deuteromycota | RE |
| *Septoria violæ-palustris* | imperfect fungus | Deuteromycota | RE |
| *Sphærotheca castagnei* | downy mildew | Ascomycota | RE |
| *Steccherinum ochraceum* | hydnum tooth fungus | Basidiomycota | CK |
| *Stemonitis fenestrata* | slime mold | Myxomycota | RE |
| *Stemonitis fusca* | slime mold | Myxomycota | RE |
| *Stemonitis herbatica* | slime mold | Myxomycota | RE |
| *Stemonitis maxima* | slime mold | Myxomycota | RE |
| *Stemonitis smithii* | slime mold | Myxomycota | RE |
| *Stereum candidum* | sereum | Basidiomycota | RE |
| *Stereum disciforme* | sereum | Basidiomycota | RE |
| *Stereum fasciatum* | sereum | Basidiomycota | RE |
| *Stereum frustulosum* | false turkeytail fungus | Basidiomycota | CK |
| *Stereum versicolor* | sereum | Basidiomycota | RE |
| *Sticta pulmonaria* | lichen | Mycophycophyta | RE |
| *Strobilomyces strobilaceus* | old-man-of-the-woods | Basidiomycota | RE |
| *Synchytrium decipiens* | water mold | Phycomycota | LE,RE |
| *Taphrina communis* | plum pockets | Ascomycota | CK |
| *Taphrina deformans* | peach leaf curl | Ascomycota | CK |
| *Teloschistes chrysophthalmus* | lichen | Mycophycophyta | RE |
| *Tilmadoche alba* | slime mold | Myxomycota | RE |
| *Trametes conchifer* | pore fungus | Basidiomycota | CK |

## KINGDOM FUNGI (continued)

| SCIENTIFIC NAME | COMMON NAME | DIVISION | LOCATION |
|---|---|---|---|
| *Trametes versicolor* | turkeytail or pore fungus | Basidiomycota | CK |
| *Tremella candida* | jelly fungus | Basidiomycota | RE |
| *Trichia inconspicua* | slime mold | Myxomycota | RE |
| *Tricholoma albo-flavidum* | knight-cap | Basidiomycota | RE |
| *Trypethelium virens* | lichen | Mycophycophyta | RE |
| *Tuberculina persicina* | imperfect fungus | Deuteromycota | RE |
| *Tubifera ferruginosa* | red raspberry slime | Myxomycota | RE |
| *Tubifera microsperma* | slime mold | Myxomycota | RE |
| *Tulostoma campestre* | field tylostoma | Basidiomycota | RE |
| *Tulostoma fimbriatum* | buried-stalk puffball | Basidiomycota | RE |
| *Uncinula necator* | grape powdery mildew | Ascomycota | CK |
| *Uromyces euphorbiæ* | rust | Basidiomycota | RE |
| *Uromyces phaseoli* | rust | Basidiomycota | RE |
| *Uromyces striatus* | rust | Basidiomycota | RE |
| *Uromyces toxicodendri* | rust | Basidiomycota | RE |
| *Uromyces trifolii* | rust | Basidiomycota | RE |
| *Usnea strigosa* | lichen | Mycophycophyta | RE |
| *Ustilago avenæ* | smut | Basidiomycota | RE |
| *Ustilago hordei* | smut | Basidiomycota | RE |
| *Ustilago maydis* | corn smut | Basidiomycota | CK |
| *Ustilago zeæ* | smut | Basidiomycota | CK,RE |
| *Venturia crataegi* | apple scab | Ascomycota | CK |
| *Venturia pyrina* | pear scab | Ascomycota | CK |
| *Verrucaria muralis* | pitted lichen | Mycophycophyta | RE |
| *Xanthoria candelaria* | lichen | Mycophycophyta | RE |
| *Xanthoria fallax* | lichen | Mycophycophyta | RE |
| *Xanthoria polycarpa* | lichen | Mycophycophyta | RE |
| *Xylaria digitata* | finger fungus | Ascomycota | RE |
| *Xylaria polymorpha* | dead man's fingers | Ascomycota | RE |
| *Zygophiala jamaicensis* | apple flyspeck | Deuteromycota | CK |

## KINGDOM PLANTAE
## (mosses, horsetails, and ferns)

| | | | |
|---|---|---|---|
| *Adiantum pedatum* | northern maidenhair fern | Filicophyta | CK,ES |
| *Amblystegium serpens* | moss | Bryophyta | RE |
| *Amblystegium serpens* var. *juratzkanum* | moss | Bryophyta | RE |
| *Amblystegium varium* | moss | Bryophyta | CK,RE |
| *Anacamptodon splachnoides* | moss | Bryophyta | RE |
| *Anomodon attenuatus* | moss | Bryophyta | RE |
| *Anomodon minor* | moss | Bryophyta | RE |
| *Anomodon rostratus* | moss | Bryophyta | RE |
| *Anomodon rugelii* | moss | Bryophyta | RE |
| *Athyrium filix-femina* | subarctic lady fern | Filicophyta | CK,ES |
| *Atrichum altecristatum* | spineleaf moss | Bryophyta | RE |
| *Atrichum angustatum* | slender Catherinea | Bryophyta | RE |
| *Atrichum undulatum* | spineleaf moss | Bryophyta | RE |
| *Aulacomnium heterostichum* | moss | Bryophyta | RE |
| *Aulacomnium palustre* | moss | Bryophyta | RE |
| *Barbula convoluta* | moss | Bryophyta | RE |
| *Barbula indica* var. *indica* | twisted teeth moss | Bryophyta | RE |
| *Barbula unguiculata* | moss | Bryophyta | RE |
| *Bartramia pomiformis* | apple moss | Bryophyta | RE |
| *Botrychium dissectum* | cut-leaf grapefern | Filicophyta | CK |
| *Botrychium rugulosum* | leathery grapefern | Filicophyta | CK |
| *Botrychium virginianum* | rattlesnake fern | Filicophyta | CK,ES |
| *Brachythecium acuminatum* | moss | Bryophyta | RE |
| *Brachythecium campestre* | moss | Bryophyta | RE |
| *Brachythecium oxycladon* | moss | Bryophyta | RE |
| *Brachythecium rivulare* | rivulet brachythecium | Bryophyta | RE |
| *Brachythecium rutabulum* | moss | Bryophyta | RE |
| *Brachythecium salebrosum* | moss | Bryophyta | RE |
| *Bruchia flexuosa* | moss | Bryophyta | RE |
| *Bryhnia graminicolor* | moss | Bryophyta | RE |
| *Bryhnia novae-angliae* | moss | Bryophyta | RE |
| *Bryoandersonia illecebra* | moss | Bryophyta | RE |
| *Bryoerythrophyllum recurvirostre* | moss | Bryophyta | RE |

| SCIENTIFIC NAME | COMMON NAME | DIVISION | LOCATION |
|---|---|---|---|
| *Bryum argenteum* | silvery moss | Bryophyta | RE |
| *Bryum caespiticium* | silvery moss | Bryophyta | RE |
| *Bryum capillare* | silvery moss | Bryophyta | RE |
| *Bryum lisae* var. *cuspidatum* | silvery moss | Bryophyta | RE |
| *Bryum pseudotriquetrum* | silvery moss | Bryophyta | RE |
| *Callicladium haldanianum* | moss | Bryophyta | RE |
| *Calliergon stramineum* | moss | Bryophyta | RE |
| *Calliergon trifarium* | moss | Bryophyta | RE |
| *Calliergonella cuspidata* | moss | Bryophyta | RE |
| *Campylium chrysophyllum* | moss | Bryophyta | RE |
| *Campylium hispidulum* | moss | Bryophyta | RE |
| *Campylium polygamum* | moss | Bryophyta | RE |
| *Campylium stellatum* | moss | Bryophyta | RE |
| *Ceratodon purpureus* | purple horn-tooth moss | Bryophyta | RE |
| *Climacium americanum* | tree moss | Bryophyta | CK,RE |
| *Climacium kindbergii* | tree-flooded moss | Bryophyta | CK,RE |
| *Conocephalum conicum* | common liverwort | Bryophyta | CK |
| *Cyrto-hypnum minutulum* | moss | Bryophyta | RE |
| *Cystopteris bulbifera* | bulblet fern | Filicophyta | CK |
| *Cystopteris tenuis* | fragile fern | Filicophyta | CK |
| *Desmatodon obtusifolius* | moss | Bryophyta | RE |
| *Desmatodon porteri* | moss | Bryophyta | RE |
| *Dicranella cerviculata* | fork moss | Bryophyta | RE |
| *Dicranella heteromalla* | silky fork moss | Bryophyta | RE |
| *Dicranella varia* | fork moss | Bryophyta | RE |
| *Dicranum flagellare* | broom moss | Bryophyta | RE |
| *Dicranum scoparium* | broom moss | Bryophyta | RE |
| *Dicranum viride* | broom moss | Bryophyta | RE |
| *Didymodon fallax* | moss | Bryophyta | RE |
| *Didymodon rigidulus* | moss | Bryophyta | RE |
| *Discelium nudum* | moss | Bryophyta | RE |
| *Ditrichum lineare* | moss | Bryophyta | RE |
| *Drepanocladus aduncus* var. *aduncus* | moss | Bryophyta | RE |
| *Drepanocladus aduncus* var. *kneiffii* | moss | Bryophyta | RE |
| *Drummondia prorepens* | moss | Bryophyta | RE |
| *Dryopteris carthusiana* | spinulose woodfern | Filicophyta | CK,ES |
| *Dryopteris intermedia* | evergreen woodfern | Filicophyta | CK |
| *Dryopteris marginalis* | marginal shield-fern or woodfern | Filicophyta | CK |
| *Dryopteris* sp. | woodfern | Filicophyta | ES |
| *Entodon cladorrhizans* | moss | Bryophyta | RE |
| *Entodon seductrix* | moss | Bryophyta | RE |
| *Equisetum arvense* | field or common horsetail | Equisetophyta | CK,ES |
| *Equisetum hyemale* | rough horsetail, scouring rush | Equisetophyta | CK |
| *Eurhynchium hians* | moss | Bryophyta | RE |
| *Eurhynchium pulchellum* | moss | Bryophyta | RE |
| *Eurhynchium serrulatum* | moss | Bryophyta | CK |
| *Fissidens adianthoides* | moss | Bryophyta | RE |
| *Fissidens bryoides* | moss | Bryophyta | RE |
| *Fissidens obtusifolius* | moss | Bryophyta | RE |
| *Fissidens taxifolius* | moss | Bryophyta | CK,RE |
| *Fontinalis dalecarlica* | common water moss | Bryophyta | RE |
| *Fontinalis hypnoides* | water moss | Bryophyta | RE |
| *Fontinalis hypnoides* var. *duriaei* | water moss | Bryophyta | RE |
| *Funaria hygrometrica* | cord moss | Bryophyta | CK,RE |
| *Grimmia pulvinata* | moss | Bryophyta | RE |
| *Gymnocarpium dryopteris* | oak-fern | Filicophyta | CK |
| *Gymnostomum aeruginosum* | moss | Bryophyta | RE |
| *Hedwigia ciliata* | white-tipped moss | Bryophyta | RE |
| *Helodium blandowii* | moss | Bryophyta | RE |
| *Helodium paludosum* | moss | Bryophyta | RE |
| *Herzogiella turfacea* | moss | Bryophyta | RE |
| *Homomallium adnatum* | moss | Bryophyta | RE |
| *Hygroamblystegium fluviatile* | moss | Bryophyta | RE |
| *Hygroamblystegium tenax* | moss | Bryophyta | RE |
| *Hygrohypnum luridum* | moss | Bryophyta | RE |
| *Hymenostylium recurvirostre* | moss | Bryophyta | RE |

| SCIENTIFIC NAME | COMMON NAME | DIVISION | LOCATION |
|---|---|---|---|
| *Hyophila involuta* | moss | Bryophyta | RE |
| *Hypnum cupressiforme* | moss | Bryophyta | RE |
| *Hypnum curvifolium* | feather moss | Bryophyta | CK,RE |
| *Hypnum imponens* | moss | Bryophyta | RE |
| *Hypnum lindbergii* | moss | Bryophyta | RE |
| *Isopterygiopsis muelleriana* | moss | Bryophyta | RE |
| *Leptobryum pyriforme* | moss | Bryophyta | RE |
| *Leptodictyum humile* | moss | Bryophyta | RE |
| *Leptodictyum riparium* | moss | Bryophyta | RE |
| *Leskea gracilescens* | moss | Bryophyta | RE |
| *Leskea obscura* | moss | Bryophyta | RE |
| *Leucobryum glaucum* | white pin-cushion moss | Bryophyta | RE |
| *Leucodon julaceus* | moss | Bryophyta | RE |
| *Limprichtia revolvens* | moss | Bryophyta | RE |
| *Lophocolea heterophylla* | liverwort | Bryophyta | CK |
| *Lycopodium dendroideum* | tree-like clubmoss | Lycopodiophyta | CK |
| *Lycopodium obscurum* | tree clubmoss | Lycopodiophyta | CK |
| *Mnium cuspidatum* | woodsy mnium moss | Bryophyta | CK |
| *Mnium stellare* | star moss | Bryophyta | RE |
| *Onoclea sensibilis* | sensitive fern | Filicophyta | CK,ES |
| *Orthotrichum anomalum* | moss | Bryophyta | RE |
| *Orthotrichum pumilum* | moss | Bryophyta | RE |
| *Orthotrichum pusillum* | moss | Bryophyta | RE |
| *Orthotrichum strangulatum* | moss | Bryophyta | RE |
| *Osmunda cinnamomea* | cinnamon fern | Filicophyta | ES |
| *Osmunda claytoniana* | fern | Filicophyta | CK,ES |
| *Phascum cuspidatum* | moss | Bryophyta | RE |
| *Phegopteris hexagonoptera* | broad beech-fern | Filicophyta | CK |
| *Philonotis fontana* | moss | Bryophyta | RE |
| *Physcomitrium pyriforme* | urn moss | Bryophyta | RE |
| *Plagiomnium ciliare* | moss | Bryophyta | RE |
| *Plagiomnium cuspidatum* | moss | Bryophyta | RE |
| *Plagiomnium medium* | moss | Bryophyta | RE |
| *Plagiothecium cavifolium* | slender moss | Bryophyta | RE |
| *Plagiothecium denticulatum* | slender moss | Bryophyta | RE |
| *Plagiothecium* sp. | moss | Bryophyta | CK |
| *Platydictya confervoides* | moss | Bryophyta | RE |
| *Platygyrium repens* | moss | Bryophyta | RE |
| *Pleuridium subulatum* | moss | Bryophyta | RE |
| *Pleurozium schreberi* | moss | Bryophyta | RE |
| *Pogonatum pensilvanicum* | false hair-cap moss | Bryophyta | RE |
| *Pohlia nutans* | moss | Bryophyta | RE |
| *Polypodium virginianum* | common polypody | Filicophyta | CK |
| *Polystichum acrostichoides* | Christmas fern | Filicophyta | CK,ES |
| *Polytrichum commune* | common hair-cap moss | Bryophyta | CK,RE |
| *Polytrichum ohioense* | hair-cap moss | Bryophyta | CK,RE |
| *Polytrichum piliferum* | hair-cap moss | Bryophyta | RE |
| *Pylaisiella intricata* | moss | Bryophyta | RE |
| *Pylaisiella selwynii* | moss | Bryophyta | RE |
| *Rauiella scita* | moss | Bryophyta | RE |
| *Rhizomnium punctatum* | moss | Bryophyta | RE |
| *Rhodobryum roseum* | rose moss | Bryophyta | RE |
| *Rhytidium rugosum* | moss | Bryophyta | RE |
| *Riccia fluitans* | slender riccia | Bryophyta | ES |
| *Ricciocarpus natans* | purple-fringed riccia | Bryophyta | ES |
| *Schistidium apocarpum* | moss | Bryophyta | RE |
| *Schistidium rivulare* | moss | Bryophyta | RE |
| *Seligeria calcarea* | moss | Bryophyta | RE |
| *Seligeria campylopoda* | moss | Bryophyta | RE |
| *Seligeria pusilla* | moss | Bryophyta | RE |
| *Sematophyllum demissum* | moss | Bryophyta | RE |
| *Sphagnum compactum* | sphagnum | Bryophyta | RE |
| *Sphagnum lescurii* | sphagnum | Bryophyta | RE |
| *Sphagnum magellanicum* | sphagnum | Bryophyta | RE |
| *Sphagnum palustre* | boat-leaved sphagnum | Bryophyta | RE |
| *Sphagnum russowii* | sphagnum | Bryophyta | RE |

**KINGDOM PLANTAE (continued)**

| SCIENTIFIC NAME | COMMON NAME | DIVISION | LOCATION |
|---|---|---|---|
| *Sphagnum* sp. | bog moss | Bryophyta | CK |
| *Steerecleus serrulatus* | moss | Bryophyta | RE |
| *Taxiphyllum taxirameum* | moss | Bryophyta | RE |
| *Tetraphis pellucida* | four-tooth moss | Bryophyta | RE |
| *Thelia asprella* | moss | Bryophyta | RE |
| *Thelia hirtella* | moss | Bryophyta | RE |
| *Thuidium delicatulum* | common fern moss | Bryophyta | CK,RE |
| *Thuidium recognitum* | fern moss | Bryophyta | RE |
| *Tortella humilis* | twisted moss | Bryophyta | RE |
| *Tortella tortuosa* | twisted moss | Bryophyta | RE |
| *Tortula ruralis* | wall moss | Bryophyta | RE |
| *Ulota crispa* | moss | Bryophyta | RE |
| *Weissia controversa* | moss | Bryophyta | RE |

## LOCATION CODES:

CK – Old Woman Creek watershed upstream of the estuary

ES – Old Woman Creek estuary (including watershed within boundaries of NERR)

LE – Lake Erie, principally nearshore waters of Erie County and western Lorain County, Ohio

RE – Regional occurrence, principally Lake Erie watersheds of eastern Erie County and western Lorain County, Ohio

# Appendix D

## Alphabetized List of Algal Flora and Lower Plants of Old Woman Creek Estuary, Watershed, and Adjacent Waters of Lake Erie by Common Name

# ALPHABETIZED LIST OF ALGAL FLORA AND LOWER PLANTS OF OLD WOMAN CREEK ESTUARY, WATERSHED, AND ADJACENT LAKE ERIE by Common Name

## ALGAL FLORA
## (Kingdoms Monera and Protista)

| COMMON NAME | SCIENTIFIC NAME | DIVISION | LOCATION |
|---|---|---|---|
| blue-green | *Anabaena circinalis* | Cyanophyta | ES |
| blue-green | *Anabaena spiroides* | Cyanophyta | LE |
| blue-green | *Anabaena spiroides* var. *crassa* | Cyanophyta | LE |
| blue-green | *Anabaena variabilis* | Cyanophyta | ES |
| blue-green | *Aphanizomenon flos-aquae* | Cyanophyta | ES,LE |
| blue-green | *Aphanocapsa delicatissima* | Cyanophyta | ES |
| blue-green | *Aphanocapsa elachista* | Cyanophyta | ES |
| blue-green | *Aphanocapsa incerta* | Cyanophyta | CK |
| blue-green | *Aphanothece saxicola* | Cyanophyta | ES |
| blue-green | *Calothrix fusca* | Cyanophyta | CK |
| blue-green | *Chroococcus dispersus* | Cyanophyta | CK,ES |
| blue-green | *Chroococcus minor* | Cyanophyta | CK |
| blue-green | *Chroococcus minutus* | Cyanophyta | CK,LE |
| blue-green | *Chroococcus planctonicus* | Cyanophyta | ES |
| blue-green | *Coelosphaerium naegelianum* | Cyanophyta | ES |
| blue-green | *Coelosphaerium pallidum* | Cyanophyta | ES |
| blue-green | *Dactylococcopsis irregularis* | Cyanophyta | ES |
| blue-green | *Gloeocapsa aeruginosa* | Cyanophyta | CK |
| blue-green | *Gloeocapsa* sp. | Cyanophyta | ES |
| blue-green | *Lyngbya* sp. | Cyanophyta | CK,ES |
| blue-green | *Merismopedia glauca* | Cyanophyta | ES |
| blue-green | *Merismopedia minima* | Cyanophyta | CK,ES |
| blue-green | *Merismopedia tenuissima* | Cyanophyta | ES |
| blue-green | *Microcoleus lyngbyaceus* | Cyanophyta | CK |
| blue-green | *Microcystis aeruginosa* | Cyanophyta | ES |
| blue-green | *Microcystis minutissima* | Cyanophyta | ES |
| blue-green | *Microcystis* sp. | Cyanophyta | ES |
| blue-green | *Oscillatoria agardhii* | Cyanophyta | ES,LE |
| blue-green | *Oscillatoria amphibia* | Cyanophyta | ES |
| blue-green | *Oscillatoria chlorina* | Cyanophyta | LE |
| blue-green | *Oscillatoria granulata* | Cyanophyta | ES |
| blue-green | *Oscillatoria hamelii* | Cyanophyta | ES,LE |
| blue-green | *Oscillatoria limosa* | Cyanophyta | CK,ES |
| blue-green | *Oscillatoria prolifica* | Cyanophyta | LE |
| blue-green | *Oscillatoria subbrevis* | Cyanophyta | CK,ES |
| blue-green | *Oscillatoria tenuis* | Cyanophyta | CK,ES |
| blue-green | *Phormidium tenue* | Cyanophyta | ES |
| blue-green | *Raphidiopsis mediterranea* | Cyanophyta | LE |
| blue-green | *Rhabdoderma minima* | Cyanophyta | ES |
| blue-green | *Rhabdoderma* sp. | Cyanophyta | ES |
| blue-green | *Schizothrix calcicola* | Cyanophyta | CK,ES |
| blue-green | *Spirulina* sp. | Cyanophyta | ES |
| blue-green | *Synechococcus leopoliensis* | Cyanophyta | ES |
| blue-green | *Synechococcus* sp. | Cyanophyta | ES |
| blue-greens | *Anabaena* spp. | Cyanophyta | ES,LE |
| blue-greens | *Calothrix* spp. | Cyanophyta | CK |
| blue-greens | *Chroococcus* spp. | Cyanophyta | CK,ES |
| blue-greens | *Oscillatoria* spp. | Cyanophyta | ES,LE |
| cryptomonad | *Chilomonas* sp. | Cryptophyta | ES |
| cryptomonad | *Chroomonas norstedtii* | Cryptophyta | ES |
| cryptomonad | *Chroomonas* sp. | Cryptophyta | ES |
| cryptomonad | *Cryptomonas compressa* | Cryptophyta | ES |
| cryptomonad | *Cryptomonas erosa* | Cryptophyta | ES |
| cryptomonad | *Cryptomonas erosa* var. *reflexa* | Cryptophyta | CK |
| cryptomonad | *Cryptomonas marssonii* | Cryptophyta | ES |
| cryptomonad | *Cryptomonas obovata* | Cryptophyta | ES |
| cryptomonad | *Cryptomonas ovata* | Cryptophyta | ES |
| cryptomonad | *Cryptomonas reflexa* | Cryptophyta | ES |
| cryptomonad | *Cryptomonas tenuis* | Cryptophyta | ES |
| cryptomonad | *Cryptomonas tetrapyrenoidosa* | Cryptophyta | ES |

## ALGAL FLORA (continued)

| COMMON NAME | SCIENTIFIC NAME | DIVISION | LOCATION |
|---|---|---|---|
| cryptomonad | *Cyathomonas* sp. | Cryptophyta | ES |
| cryptomonad | *Cyathomonas truncata* | Cryptophyta | ES |
| cryptomonad | *Planonephros parvula* | Cryptophyta | ES |
| cryptomonad | *Rhodomonas lacustris* | Cryptophyta | ES |
| cryptomonad | *Rhodomonas lens* | Cryptophyta | ES |
| cryptomonad | *Rhodomonas minuta* | Cryptophyta | ES |
| cryptomonad | *Rhodomonas minuta* var. *nannoplanctonica* | Cryptophyta | ES,LE |
| cryptomonads | *Cryptomonas* spp. | Cryptophyta | ES |
| cryptomonads | *Rhodomonas* spp. | Cryptophyta | CK,ES |
| diatom, centric | *Acanthoceras zachariasii* | Chrysophyta | ES |
| diatom, centric | *Actinocyclus normanii* | Chrysophyta | ES |
| diatom, centric | *Aulacoseira granulata* var. *angustissima* | Chrysophyta | ES,LE |
| diatom, centric | *Coscinodiscus* sp. | Chrysophyta | ES |
| diatom, centric | *Cyclostephanos invisitatus* | Chrysophyta | ES |
| diatom, centric | *Cyclostephanos tholiformis* | Chrysophyta | ES |
| diatom, centric | *Cyclotella atomus* | Chrysophyta | ES |
| diatom, centric | *Cyclotella atomus* var. 1 | Chrysophyta | ES |
| diatom, centric | *Cyclotella meneghiniana* | Chrysophyta | ES |
| diatom, centric | *Cyclotella meneghiniana* var. 1 | Chrysophyta | ES |
| diatom, centric | *Cyclotella pseudostelligera* | Chrysophyta | ES |
| diatom, centric | *Cyclotella radiosa* | Chrysophyta | ES |
| diatom, centric | *Cyclotella stelligera* | Chrysophyta | ES |
| diatom, centric | *Melosira varians* | Chrysophyta | ES |
| diatom, centric | *Rhizosolenia eriensis* | Chrysophyta | ES |
| diatom, centric | *Skeletonema potamos* | Chrysophyta | ES |
| diatom, centric | *Stephanodiscus alpinus* | Chrysophyta | ES |
| diatom, centric | *Stephanodiscus binderanus* | Chrysophyta | ES,LE |
| diatom, centric | *Stephanodiscus hantzschii* | Chrysophyta | ES |
| diatom, centric | *Stephanodiscus minutulus* | Chrysophyta | ES |
| diatom, centric | *Stephanodiscus nipigonensis* | Chrysophyta | ES |
| diatom, centric | *Stephanodiscus parvus* | Chrysophyta | ES |
| diatom, centric | *Stephanodiscus rotula* | Chrysophyta | CK,ES,LE |
| diatom, centric | *Stephanodiscus* sp. | Chrysophyta | ES |
| diatom, centric | *Stephanodiscus subtilis* | Chrysophyta | ES |
| diatom, centric | *Thalassiosira pseudonana* | Chrysophyta | ES |
| diatom, centric | *Thalassiosira weissflogii* | Chrysophyta | ES |
| diatoms, centric | *Aulacoseira alpigena* | Chrysophyta | ES |
| diatoms, centric | *Aulacoseira ambigua* | Chrysophyta | ES |
| diatoms, centric | *Aulacoseira crassipunctata* | Chrysophyta | ES |
| diatoms, centric | *Aulacoseira granulata* | Chrysophyta | ES |
| diatoms, centric | *Aulacoseira islandica* | Chrysophyta | ES |
| diatoms, centric | *Aulacoseira italica* | Chrysophyta | ES |
| diatoms, centric | *Aulacoseira* spp. | Chrysophyta | ES |
| diatoms, centric | *Cyclotella* spp. | Chrysophyta | ES |
| diatom, pennate | *Achnanthes biasolettiana* | Chrysophyta | ES |
| diatom, pennate | *Achnanthes clevei* | Chrysophyta | ES |
| diatom, pennate | *Achnanthes conspicua* | Chrysophyta | CK |
| diatom, pennate | *Achnanthes grischuna* | Chrysophyta | ES |
| diatom, pennate | *Achnanthes hungarica* | Chrysophyta | ES |
| diatom, pennate | *Achnanthes lanceolata* | Chrysophyta | CK,ES |
| diatom, pennate | *Achnanthes lanceolata* ssp. *dubia* | Chrysophyta | CK,ES |
| diatom, pennate | *Achnanthes lanceolata* ssp. *l.* var. *boyei* | Chrysophyta | ES |
| diatom, pennate | *Achnanthes lanceolata* ssp. *lanceolata* | Chrysophyta | CK,ES |
| diatom, pennate | *Achnanthes laurenburgiana* | Chrysophyta | ES |
| diatom, pennate | *Achnanthes minutissima* | Chrysophyta | CK,ES |
| diatom, pennate | *Achnanthes minutissima* var. 2 | Chrysophyta | ES |
| diatom, pennate | *Achnanthes minutissima* var. *gracillima* | Chrysophyta | ES |
| diatom, pennate | *Achnanthes minutissima* var. *minutissima* | Chrysophyta | CK |
| diatom, pennate | *Achnanthes minutissima* var. *saprophila* | Chrysophyta | ES |
| diatom, pennate | *Achnanthes* sp. | Chrysophyta | CK,ES |
| diatom, pennate | *Amphilpleura pellucida* | Chrysophyta | CK,ES |
| diatom, pennate | *Amphora montana* | Chrysophyta | ES |
| diatom, pennate | *Amphora ovalis* | Chrysophyta | ES |
| diatom, pennate | *Amphora pediculus* | Chrysophyta | CK,ES |
| diatom, pennate | *Amphora* sp. | Chrysophyta | ES |
| diatom, pennate | *Anomoeoneis brachysira* | Chrysophyta | ES |

## ALGAL FLORA (continued)

| COMMON NAME | SCIENTIFIC NAME | DIVISION | LOCATION |
|---|---|---|---|
| diatom, pennate | *Anomoeoneis sphaerophora* | Chrysophyta | ES |
| diatom, pennate | *Asterionella formosa* | Chrysophyta | ES,LE |
| diatom, pennate | *Caloneis amphisbaena* | Chrysophyta | CK,ES |
| diatom, pennate | *Caloneis bacillum* | Chrysophyta | CK,ES |
| diatom, pennate | *Caloneis clevei* | Chrysophyta | ES |
| diatom, pennate | *Caloneis molaris* | Chrysophyta | ES |
| diatom, pennate | *Caloneis schumanniana* | Chrysophyta | ES |
| diatom, pennate | *Caloneis thermalis* | Chrysophyta | ES |
| diatom, pennate | *Cocconeis pediculus* | Chrysophyta | ES |
| diatom, pennate | *Cocconeis placentula* | Chrysophyta | CK,ES |
| diatom, pennate | *Cocconeis placentula* var. *euglypta* | Chrysophyta | ES |
| diatom, pennate | *Cocconeis placentula* var. *lineata* | Chrysophyta | ES |
| diatom, pennate | *Cylindrotheca gracilis* | Chrysophyta | ES |
| diatom, pennate | *Cymatopleura elliptica* | Chrysophyta | CK |
| diatom, pennate | *Cymatopleura solea* | Chrysophyta | ES |
| diatom, pennate | *Cymbella affinis* | Chrysophyta | ES |
| diatom, pennate | *Cymbella caespitosa* | Chrysophyta | ES |
| diatom, pennate | *Cymbella microcephala* | Chrysophyta | ES |
| diatom, pennate | *Cymbella minuta* | Chrysophyta | CK,ES |
| diatom, pennate | *Cymbella naviculiformis* | Chrysophyta | ES |
| diatom, pennate | *Cymbella prostrata* | Chrysophyta | CK |
| diatom, pennate | *Cymbella silesiaca* | Chrysophyta | CK,ES |
| diatom, pennate | *Cymbella triangulum* | Chrysophyta | LE |
| diatom, pennate | *Cymbella tumida* | Chrysophyta | CK,ES |
| diatom, pennate | *Cymbella tumidula* | Chrysophyta | CK,ES |
| diatom, pennate | *Cymbella turgidula* | Chrysophyta | CK,ES |
| diatom, pennate | *Denticula kuetzingii* | Chrysophyta | ES |
| diatom, pennate | *Diatoma mesodon* | Chrysophyta | ES |
| diatom, pennate | *Diatoma tenuis* | Chrysophyta | ES |
| diatom, pennate | *Diatoma vulgaris* | Chrysophyta | ES |
| diatom, pennate | *Diatoma vulgaris* var. *distorta* | Chrysophyta | ES |
| diatom, pennate | *Entomoneis ornata* | Chrysophyta | LE |
| diatom, pennate | *Epithemia adnata* | Chrysophyta | ES |
| diatom, pennate | *Epithemia turgida* | Chrysophyta | ES |
| diatom, pennate | *Eunotia arcus* var. *bidens* | Chrysophyta | ES |
| diatom, pennate | *Eunotia bilunaris* var. *bilunaris* | Chrysophyta | ES |
| diatom, pennate | *Eunotia bilunarius* var. *mucophila* | Chrysophyta | ES |
| diatom, pennate | *Eunotia denticulata* | Chrysophyta | ES |
| diatom, pennate | *Eunotia diodon* | Chrysophyta | ES |
| diatom, pennate | *Eunotia exigua* | Chrysophyta | ES |
| diatom, pennate | *Eunotia formica* | Chrysophyta | ES |
| diatom, pennate | *Eunotia pectinalis* | Chrysophyta | ES |
| diatom, pennate | *Eunotia* sp. | Chrysophyta | ES |
| diatom, pennate | *Fragilaria capucina* | Chrysophyta | CK,ES,LE |
| diatom, pennate | *Fragilaria capucina* var. *gracilis* | Chrysophyta | ES |
| diatom, pennate | *Fragilaria capucina* var. *radians* | Chrysophyta | ES |
| diatom, pennate | *Fragilaria capucina* var. *rumpens* | Chrysophyta | CK,ES |
| diatom, pennate | *Fragilaria capucina* var. *vaucheriae* | Chrysophyta | CK,ES |
| diatom, pennate | *Fragilaria construens* | Chrysophyta | ES |
| diatom, pennate | *Fragilaria construens* f. *venter* | Chrysophyta | CK,ES |
| diatom, pennate | *Fragilaria crotonensis* | Chrysophyta | ES,LE |
| diatom, pennate | *Fragilaria fasciculata* | Chrysophyta | CK,ES |
| diatom, pennate | *Fragilaria leptostauron* var. *martyi* | Chrysophyta | ES |
| diatom, pennate | *Fragilaria parasitica* var. *subconstricta* | Chrysophyta | ES |
| diatom, pennate | *Fragilaria pulchella* | Chrysophyta | ES |
| diatom, pennate | *Fragilaria tenera* | Chrysophyta | ES |
| diatom, pennate | *Fragilaria ulna* | Chrysophyta | CK,ES |
| diatom, pennate | *Fragilaria ulna* var. 1 | Chrysophyta | ES |
| diatom, pennate | *Fragilaria ulna* var. *acus* | Chrysophyta | ES |
| diatom, pennate | *Fragilaria ulna* var. *danica* | Chrysophyta | ES |
| diatom, pennate | *Fragilaria ulna* var. *obtusa* | Chrysophyta | CK |
| diatom, pennate | *Fragilaria ulna* var. *oxyrhynchus* | Chrysophyta | CK |
| diatom, pennate | *Fragilaria virescens* | Chrysophyta | CK,ES |
| diatom, pennate | *Frustulia rhomboides* | Chrysophyta | ES |
| diatom, pennate | *Frustulia vulgaris* | Chrysophyta | ES |
| diatom, pennate | *Gomphonema acuminatum* | Chrysophyta | ES |

## ALGAL FLORA (continued)

| COMMON NAME | SCIENTIFIC NAME | DIVISION | LOCATION |
|---|---|---|---|
| diatom, pennate | *Gomphonema affine* | Chrysophyta | CK,ES |
| diatom, pennate | *Gomphonema affine* var. *elongatum* | Chrysophyta | ES |
| diatom, pennate | *Gomphonema amoenum* | Chrysophyta | ES |
| diatom, pennate | *Gomphonema angustatum* | Chrysophyta | CK,ES |
| diatom, pennate | *Gomphonema angustatum* var. *citera* | Chrysophyta | CK |
| diatom, pennate | *Gomphonema angustatum* var. *sarcophogus* | Chrysophyta | ES |
| diatom, pennate | *Gomphonema angustum* | Chrysophyta | CK,ES |
| diatom, pennate | *Gomphonema augar* var. *spaerophorum* | Chrysophyta | CK |
| diatom, pennate | *Gomphonema augur* | Chrysophyta | CK,ES |
| diatom, pennate | *Gomphonema clavatum* | Chrysophyta | ES |
| diatom, pennate | *Gomphonema clevei* | Chrysophyta | ES |
| diatom, pennate | *Gomphonema dichotomum* | Chrysophyta | ES |
| diatom, pennate | *Gomphonema gracile* | Chrysophyta | ES |
| diatom, pennate | *Gomphonema minutum* | Chrysophyta | ES |
| diatom, pennate | *Gomphonema minutum* f. *lamanense* | Chrysophyta | ES |
| diatom, pennate | *Gomphonema olivaceum* | Chrysophyta | CK,ES |
| diatom, pennate | *Gomphonema parvulum* | Chrysophyta | CK,ES |
| diatom, pennate | *Gomphonema* sp. | Chrysophyta | ES |
| diatom, pennate | *Gomphonema truncatum* | Chrysophyta | ES |
| diatom, pennate | *Gomphonema truncatum* var. *elongata* | Chrysophyta | ES |
| diatom, pennate | *Gomphosphaeria lacustris* | Cyanophyta | ES |
| diatom, pennate | *Gyrosigma acuminatum* | Chrysophyta | CK |
| diatom, pennate | *Gyrosigma attenuatum* | Chrysophyta | ES |
| diatom, pennate | *Gyrosigma exilis* | Chrysophyta | ES |
| diatom, pennate | *Gyrosigma scalproides* | Chrysophyta | ES |
| diatom, pennate | *Gyrosigma* sp. | Chrysophyta | ES |
| diatom, pennate | *Hantzschia amphioxys* | Chrysophyta | ES |
| diatom, pennate | *Meridion circulare* | Chrysophyta | CK,ES |
| diatom, pennate | *Meridion circulare* var. *constrictum* | Chrysophyta | ES |
| diatom, pennate | *Navicula absoluta* | Chrysophyta | ES |
| diatom, pennate | *Navicula agnita* | Chrysophyta | ES |
| diatom, pennate | *Navicula arvensis* | Chrysophyta | ES |
| diatom, pennate | *Navicula atomus* | Chrysophyta | ES |
| diatom, pennate | *Navicula atomus* var. *permitis* | Chrysophyta | ES |
| diatom, pennate | *Navicula bacillum* | Chrysophyta | ES |
| diatom, pennate | *Navicula bahusiensis* | Chrysophyta | ES |
| diatom, pennate | *Navicula capitata* | Chrysophyta | ES |
| diatom, pennate | *Navicula capitata* var. *capitata* | Chrysophyta | ES |
| diatom, pennate | *Navicula capitatoradiata* | Chrysophyta | ES |
| diatom, pennate | *Navicula cincta* | Chrysophyta | ES |
| diatom, pennate | *Navicula confervacea* | Chrysophyta | ES |
| diatom, pennate | *Navicula contenta* | Chrysophyta | ES |
| diatom, pennate | *Navicula cryptocephala* | Chrysophyta | ES |
| diatom, pennate | *Navicula cryptotenella* | Chrysophyta | CK,ES |
| diatom, pennate | *Navicula cuspidata* | Chrysophyta | CK,ES |
| diatom, pennate | *Navicula decussis* | Chrysophyta | CK,ES |
| diatom, pennate | *Navicula elginensis* | Chrysophyta | CK,ES |
| diatom, pennate | *Navicula erifuga* | Chrysophyta | ES |
| diatom, pennate | *Navicula goeppertiana* | Chrysophyta | ES |
| diatom, pennate | *Navicula goeppertiana* var. *goeppertiana* | Chrysophyta | ES |
| diatom, pennate | *Navicula goeppertiana* var. *monita* | Chrysophyta | ES |
| diatom, pennate | *Navicula gregaria* | Chrysophyta | CK,ES |
| diatom, pennate | *Navicula grunowii* var. 1 | Chrysophyta | ES |
| diatom, pennate | *Navicula halophila* | Chrysophyta | ES |
| diatom, pennate | *Navicula heimansii* | Chrysophyta | ES |
| diatom, pennate | *Navicula hustedtii* | Chrysophyta | ES |
| diatom, pennate | *Navicula ingenua* | Chrysophyta | ES |
| diatom, pennate | *Navicula insocibilis* | Chrysophyta | ES |
| diatom, pennate | *Navicula integra* | Chrysophyta | ES |
| diatom, pennate | *Navicula lanceolata* | Chrysophyta | CK,ES |
| diatom, pennate | *Navicula menisculus* | Chrysophyta | ES |
| diatom, pennate | *Navicula menisculus* var. *grunowii* | Chrysophyta | ES |
| diatom, pennate | *Navicula menisculus* var. *upsaliensis* | Chrysophyta | CK,ES |
| diatom, pennate | *Navicula minima* | Chrysophyta | CK,ES |
| diatom, pennate | *Navicula minima* var. *pseudofossalis* | Chrysophyta | ES |
| diatom, pennate | *Navicula minusculoides* | Chrysophyta | ES |

## ALGAL FLORA (continued)

| COMMON NAME | SCIENTIFIC NAME | DIVISION | LOCATION |
|---|---|---|---|
| diatom, pennate | *Navicula molestiformis* | Chrysophyta | ES |
| diatom, pennate | *Navicula monoculata* | Chrysophyta | ES |
| diatom, pennate | *Navicula mutica* | Chrysophyta | ES |
| diatom, pennate | *Navicula mutica* var. *ventricosa* | Chrysophyta | ES |
| diatom, pennate | *Navicula pelliculosa* | Chrysophyta | ES |
| diatom, pennate | *Navicula praeterita* | Chrysophyta | ES |
| diatom, pennate | *Navicula pseudolanceolata* | Chrysophyta | ES |
| diatom, pennate | *Navicula pupula* | Chrysophyta | ES |
| diatom, pennate | *Navicula pupula* var. *aquaeductae* | Chrysophyta | ES |
| diatom, pennate | *Navicula pupula* var. *rectangularis* | Chrysophyta | ES |
| diatom, pennate | *Navicula pygmaea* | Chrysophyta | ES |
| diatom, pennate | *Navicula radiosa* | Chrysophyta | ES |
| diatom, pennate | *Navicula recens* | Chrysophyta | ES |
| diatom, pennate | *Navicula rhynchocephala* | Chrysophyta | ES |
| diatom, pennate | *Navicula salinarum* | Chrysophyta | CK,ES |
| diatom, pennate | *Navicula saprophila* | Chrysophyta | CK,ES |
| diatom, pennate | *Navicula schroeterii* | Chrysophyta | ES |
| diatom, pennate | *Navicula seminulum* | Chrysophyta | ES |
| diatom, pennate | *Navicula similis* | Chrysophyta | ES |
| diatom, pennate | *Navicula splendicula* | Chrysophyta | ES |
| diatom, pennate | *Navicula subminuscula* | Chrysophyta | ES |
| diatom, pennate | *Navicula submolesta* | Chrysophyta | ES |
| diatom, pennate | *Navicula tenelloides* | Chrysophyta | ES |
| diatom, pennate | *Navicula tenera* | Chrysophyta | ES |
| diatom, pennate | *Navicula tripunctata* | Chrysophyta | CK,ES |
| diatom, pennate | *Navicula tripunctata* var. *schizonemoides* | Chrysophyta | ES |
| diatom, pennate | *Navicula trivialis* | Chrysophyta | ES |
| diatom, pennate | *Navicula vaucherie* | Chrysophyta | ES |
| diatom, pennate | *Navicula veneta* | Chrysophyta | CK,ES |
| diatom, pennate | *Navicula viridula* | Chrysophyta | ES |
| diatom, pennate | *Navicula viridula* var. 1 | Chrysophyta | ES |
| diatom, pennate | *Navicula viridula* var. *germainii* | Chrysophyta | CK,ES |
| diatom, pennate | *Navicula viridula* var. *rostellata* | Chrysophyta | CK,ES |
| diatom, pennate | *Nedium affine* | Chrysophyta | ES |
| diatom, pennate | *Nedium dubium* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia acicularis* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia acidoclinata* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia acuminata* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia admissoides* | Chrysophyta | CK |
| diatom, pennate | *Nitzschia agnita* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia amphibia* | Chrysophyta | CK,ES |
| diatom, pennate | *Nitzschia angustata* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia angustatula* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia angustiforaminata* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia bita*? | Chrysophyta | CK |
| diatom, pennate | *Nitzschia brevissima* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia capitellata* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia clausii* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia closterium* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia communis* | Chrysophyta | CK,ES |
| diatom, pennate | *Nitzschia commutatoides* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia compressa* var. *vexans* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia constricta* | Chrysophyta | CK |
| diatom, pennate | *Nitzschia dissipata* | Chrysophyta | CK,ES |
| diatom, pennate | *Nitzschia dissipata* var. *media* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia dubia* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia filiformis* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia fonticola* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia frustulum* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia frustulum* var. *perpusilla* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia fruticosa* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia gracilis* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia hantzschiana* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia hungarica* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia inconspicua* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia intermedia* | Chrysophyta | CK,ES |

## ALGAL FLORA (continued)

| COMMON NAME | SCIENTIFIC NAME | DIVISION | LOCATION |
|---|---|---|---|
| diatom, pennate | *Nitzschia levidensis* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia linearis* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia linearis* var. *subtilis* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia littoralis* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia microcephala* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia nereidis* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia palea* | Chrysophyta | CK,ES |
| diatom, pennate | *Nitzschia palea* var. *minuta* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia paleacea* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia parvula* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia perspicua* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia plana* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia pusilla* | Chrysophyta | CK,ES |
| diatom, pennate | *Nitzschia recta* | Chrysophyta | CK,ES |
| diatom, pennate | *Nitzschia reversa* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia sigma* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia sigmoidea* | Chrysophyta | CK,ES |
| diatom, pennate | *Nitzschia sinuata* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia sinuata* var. *tabellaria* | Chrysophyta | CK,ES |
| diatom, pennate | *Nitzschia sociabilis* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia solita* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia spiculum* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia stricta* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia subacicularis* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia supralitorea* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia tropica* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia tryblionella* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia tubicola* | Chrysophyta | ES |
| diatom, pennate | *Nitzschia valga* | Chrysophyta | ES |
| diatom, pennate | *Pinnularia abaujensis* var. *rostrata* | Chrysophyta | ES |
| diatom, pennate | *Pinnularia borealis* | Chrysophyta | LE |
| diatom, pennate | *Pinnularia intermedia* | Chrysophyta | ES |
| diatom, pennate | *Pinnularia microstauron* | Chrysophyta | ES |
| diatom, pennate | *Pinnularia microstauron* var. *b.* f. *diminuta* | Chrysophyta | ES |
| diatom, pennate | *Pinnularia microstauron* var. *brebissonii* | Chrysophyta | ES |
| diatom, pennate | *Pinnularia nodosa* | Chrysophyta | ES |
| diatom, pennate | *Pinnularia obscura* | Chrysophyta | ES |
| diatom, pennate | *Pinnularia* sp. | Chrysophyta | ES |
| diatom, pennate | *Pinnularia stomatophora* | Chrysophyta | ES |
| diatom, pennate | *Pinnularia viridis* | Chrysophyta | ES |
| diatom, pennate | *Plagiotropis lepidoptera* var. *probosidea* | Chrysophyta | ES |
| diatom, pennate | *Pleurosigma delicatulum* | Chrysophyta | CK |
| diatom, pennate | *Reimeria sinuata* | Chrysophyta | CK,ES |
| diatom, pennate | *Rhoicosphenia abbreviata* | Chrysophyta | CK,ES |
| diatom, pennate | *Stauroneis anceps* | Chrysophyta | ES |
| diatom, pennate | *Stauroneis kriegeri* | Chrysophyta | ES |
| diatom, pennate | *Stauroneis phoenicenteron* | Chrysophyta | ES |
| diatom, pennate | *Stauroneis smithii* | Chrysophyta | ES |
| diatom, pennate | *Stauroneis thermicola* | Chrysophyta | ES |
| diatom, pennate | *Surirella angusta* | Chrysophyta | ES |
| diatom, pennate | *Surirella brebissonii* var. *kuetzingii* | Chrysophyta | ES |
| diatom, pennate | *Surirella minuta* | Chrysophyta | CK,ES |
| diatom, pennate | *Surirella ovalis* | Chrysophyta | ES |
| diatom, pennate | *Surirella suecica* | Chrysophyta | ES |
| diatom, pennate | *Surirella tenera* | Chrysophyta | ES |
| diatom, pennate | *Surirella turgida* | Chrysophyta | ES |
| diatom, pennate | *Tabellaria fenestrata* | Chrysophyta | ES |
| diatom, pennate | *Tabellaria* sp. | Chrysophyta | ES |
| diatoms, pennate | *Navicula* spp. | Chrysophyta | ES |
| dinoflagellate | *Ceratium hirundinella* | Pyrrhophyta | ES,LE |
| dinoflagellate | *Ceratium* sp. | Pyrrhophyta | ES |
| dinoflagellate | *Glenodinium* sp. | Pyrrhophyta | ES |
| dinoflagellate | *Gymnodinium aeruginosun* | Pyrrhophyta | ES |
| dinoflagellate | *Gymnodinium helveticum* | Pyrrhophyta | ES |
| dinoflagellate | *Gymnodinium palustre* | Pyrrhophyta | ES |
| dinoflagellate | *Katodinium fungiforme* | Pyrrhophyta | ES |

## ALGAL FLORA (continued)

| COMMON NAME | SCIENTIFIC NAME | DIVISION | LOCATION |
|---|---|---|---|
| dinoflagellate | *Perdiniopsis quadridens* | Pyrrhophyta | ES |
| dinoflagellate | *Woloszynskia coronata* | Pyrrhophyta | ES |
| dinoflagellates | *Gymnodinium* spp. | Pyrrhophyta | CK,ES |
| euglenoid | *Ascoglena* sp. | Euglenophyta | ES |
| euglenoid | *Ascoglena vaginicola* | Euglenophyta | ES |
| euglenoid | *Astasia klebsii* | Euglenophyta | ES |
| euglenoid | *Euglena acus* | Euglenophyta | ES |
| euglenoid | *Euglena bellovacensis* | Euglenophyta | ES |
| euglenoid | *Euglena deses* | Euglenophyta | ES |
| euglenoid | *Euglena ehrenbergii* | Euglenophyta | ES |
| euglenoid | *Euglena elastica* | Euglenophyta | ES |
| euglenoid | *Euglena fronsundulata* | Euglenophyta | ES |
| euglenoid | *Euglena gasterosteus* | Euglenophyta | CK,ES |
| euglenoid | *Euglena gracilis* | Euglenophyta | ES |
| euglenoid | *Euglena ignobilis* | Euglenophyta | ES |
| euglenoid | *Euglena minima* | Euglenophyta | ES |
| euglenoid | *Euglena oxyuris* | Euglenophyta | ES |
| euglenoid | *Euglena oxyuris* var. *minima* | Euglenophyta | ES |
| euglenoid | *Euglena oxyuris* var. *minor* | Euglenophyta | ES |
| euglenoid | *Euglena pisciformis* | Euglenophyta | ES |
| euglenoid | *Euglena proxima* | Euglenophyta | ES |
| euglenoid | *Euglena spathirhyncha* | Euglenophyta | ES |
| euglenoid | *Euglena spirogyra* | Euglenophyta | ES |
| euglenoid | *Euglena tripteris* | Euglenophyta | ES |
| euglenoid | *Euglena vermiforis* | Euglenophyta | ES |
| euglenoid | *Lepocinclis ovum* | Euglenophyta | ES |
| euglenoid | *Lepocinclis ovum* f. *typica* | Euglenophyta | ES |
| euglenoid | *Lepocinclis ovum* var. *deflandriana* | Euglenophyta | ES |
| euglenoid | *Lepocinclis ovum* var. *dimidio-minor* | Euglenophyta | ES |
| euglenoid | *Lepocinclis ovum* var. *ovata* f. *ecaudata* | Euglenophyta | ES |
| euglenoid | *Lepocinclis texta* f. *minor* | Euglenophyta | ES |
| euglenoid | *Menoidium gibbum* | Euglenophyta | ES |
| euglenoid | *Phacus acuminatus* | Euglenophyta | CK,ES |
| euglenoid | *Phacus arnoldi* | Euglenophyta | ES |
| euglenoid | *Phacus caudatus* | Euglenophyta | ES |
| euglenoid | *Phacus contortus* | Euglenophyta | ES |
| euglenoid | *Phacus curvicauda* | Euglenophyta | ES |
| euglenoid | *Phacus helikoides* | Euglenophyta | ES |
| euglenoid | *Phacus longicauda* | Euglenophyta | ES |
| euglenoid | *Phacus obicularis* | Euglenophyta | ES |
| euglenoid | *Phacus pleuronectes* | Euglenophyta | ES |
| euglenoid | *Phacus pseudonordstedii* | Euglenophyta | ES |
| euglenoid | *Phacus rudicula* | Euglenophyta | ES |
| euglenoid | *Phacus* sp. | Euglenophyta | ES |
| euglenoid | *Phacus tortus* | Euglenophyta | ES |
| euglenoid | *Phacus triqueter* | Euglenophyta | ES |
| euglenoid | *Rhabdomonas* sp. | Euglenophyta | ES |
| euglenoid | *Scytomonas* sp. | Euglenophyta | ES |
| euglenoid | *Strombomonas acuminata* | Euglenophyta | ES |
| euglenoid | *Strombomonas fluviatilis* | Euglenophyta | ES |
| euglenoid | *Strombomonas gibberosa* | Euglenophyta | ES |
| euglenoid | *Strombomonas longicauda* | Euglenophyta | ES |
| euglenoid | *Strombomonas schauinslandii* | Euglenophyta | ES |
| euglenoid | *Strombomonas* sp. | Euglenophyta | ES |
| euglenoid | *Strombomonas verrucosa* var. *zmiewika* | Euglenophyta | ES |
| euglenoid | *Trachelomonas abrupta* var. *minor* | Euglenophyta | ES |
| euglenoid | *Trachelomonas armata* | Euglenophyta | ES |
| euglenoid | *Trachelomonas bulla* | Euglenophyta | ES |
| euglenoid | *Trachelomonas crebea* | Euglenophyta | ES |
| euglenoid | *Trachelomonas granulosa* | Euglenophyta | ES |
| euglenoid | *Trachelomonas hispida* | Euglenophyta | ES |
| euglenoid | *Trachelomonas horrida* | Euglenophyta | ES |
| euglenoid | *Trachelomonas lacustris* | Euglenophyta | ES |
| euglenoid | *Trachelomonas oblonga* | Euglenophyta | ES |
| euglenoid | *Trachelomonas oblonga* var. *attenuata* | Euglenophyta | ES |
| euglenoid | *Trachelomonas oblonga* var. *truncata* | Euglenophyta | ES |

## ALGAL FLORA (continued)

| COMMON NAME | SCIENTIFIC NAME | DIVISION | LOCATION |
|---|---|---|---|
| euglenoid | *Trachelomonas oblonga* var. *umbilicophora* | Euglenophyta | ES |
| euglenoid | *Trachelomonas planctonica* | Euglenophyta | ES |
| euglenoid | *Trachelomonas scabra* | Euglenophyta | ES |
| euglenoid | *Trachelomonas spiralis* | Euglenophyta | ES |
| euglenoid | *Trachelomonas superba* | Euglenophyta | ES |
| euglenoid | *Trachelomonas varians* | Euglenophyta | ES |
| euglenoid | *Trachelomonas volvocina* | Euglenophyta | ES |
| euglenoid | *Trachelomonas volvocina* var. *minuta* | Euglenophyta | ES |
| euglenoid | *Urceolus ovatus* | Euglenophyta | ES |
| euglenoid | *Urceolus sabulosus* | Euglenophyta | ES |
| euglenoids | *Astasia* spp. | Euglenophyta | ES |
| euglenoids | *Euglena* spp. | Euglenophyta | CK,ES |
| euglenoids | *Lepocinclis* spp. | Euglenophyta | CK,ES |
| euglenoids | *Trachelomonas* spp. | Euglenophyta | ES |
| golden-brown alga | *Anthophysa steinii* | Chrysophyta | ES |
| golden-brown alga | *Anthophysa vegetans* | Chrysophyta | ES |
| golden-brown alga | *Chrysococcus biporus* | Chrysophyta | ES |
| golden-brown alga | *Chrysococcus minutus* | Chrysophyta | ES |
| golden-brown alga | *Chrysococcus rufescens* var. *tripora* | Chrysophyta | ES |
| golden-brown alga | *Chrysococcus triporus* | Chrysophyta | ES |
| golden-brown alga | *Dinobryon bavaricum* | Chrysophyta | ES |
| golden-brown alga | *Dinobryon divergens* | Chrysophyta | ES |
| golden-brown alga | *Dinobryon sertularia* | Chrysophyta | ES |
| golden-brown alga | *Dinobryon sociale* | Chrysophyta | ES |
| golden-brown alga | *Dinobryon* sp. | Chrysophyta | ES |
| golden-brown alga | *Epipyxis tabellariae* | Chrysophyta | ES |
| golden-brown alga | *Kephryion ovale* | Chrysophyta | ES |
| golden-brown alga | *Kephryion spirale* | Chrysophyta | LE |
| golden-brown alga | *Mallomonas acaroides* | Chrysophyta | ES |
| golden-brown alga | *Mallomonas elegans* | Chrysophyta | ES |
| golden-brown alga | *Mallomonas intermedia* | Chrysophyta | ES |
| golden-brown alga | *Microglena* sp. | Chrysophyta | ES |
| golden-brown alga | *Monas guttula* | Chrysophyta | ES |
| golden-brown alga | *Monas socialis* | Chrysophyta | ES |
| golden-brown alga | *Monas* sp. | Chrysophyta | ES |
| golden-brown alga | *Ochromonas ludibunda* | Chrysophyta | ES |
| golden-brown alga | *Ochromonas nana* | Chrysophyta | ES |
| golden-brown alga | *Ochromonas* sp. | Chrysophyta | ES |
| golden-brown alga | *Physomonas vestita* | Chrysophyta | ES |
| golden-brown alga | *Pseudokephyrion cylindricum* | Chrysophyta | ES |
| golden-brown alga | *Pseudokephyrion entzii* f. *granulata* | Chrysophyta | ES |
| golden-brown alga | *Spumella* sp. | Chrysophyta | ES |
| golden-brown alga | *Stokesiella* sp. | Chrysophyta | ES |
| golden-brown alga | *Synura uvella* | Chrysophyta | ES |
| golden-brown algae | *Chrysococcus* spp. | Chrysophyta | ES |
| golden-brown algae | *Kephryion* spp. | Chrysophyta | ES |
| green alga | *Actinastrum hantzschii* | Chlorophyta | ES |
| green alga | *Ankistrodesmus falcatus* | Chlorophyta | ES |
| green alga | *Ankistrodesmus stipitatus* | Chlorophyta | ES |
| green alga | *Ankyra judayi* | Chlorophyta | ES |
| green alga | *Carteria bourrellyi* | Chlorophyta | ES |
| green alga | *Carteria globosa* | Chlorophyta | ES |
| green alga | *Carteria* sp. | Chlorophyta | ES |
| green alga | *Carteria wisconsinensis* | Chlorophyta | CK,ES |
| green alga | *Characium curvatum* | Chlorophyta | ES |
| green alga | *Characium* sp. | Chlorophyta | ES |
| green alga | *Chlamydocapsa ampla* | Chlorophyta | CK,ES |
| green alga | *Chlamydocapsa planctonica* | Chlorophyta | ES |
| green alga | *Chlamydocapsa* sp. | Chlorophyta | ES |
| green alga | *Chlamydomonas globosa* | Chlorophyta | CK,ES |
| green alga | *Chlamydomonas gracilis* | Chlorophyta | ES |
| green alga | *Chlamydomonas monadina* | Chlorophyta | ES |
| green alga | *Chlamydomonas reinhardtii* | Chlorophyta | ES |
| green alga | *Chlamydomonas subasymmetrica* | Chlorophyta | ES |
| green alga | *Chlamydonephris excavata* | Chlorophyta | ES |
| green alga | *Chlorococcum* sp. | Chlorophyta | ES |

## ALGAL FLORA (continued)

| COMMON NAME | SCIENTIFIC NAME | DIVISION | LOCATION |
|---|---|---|---|
| green alga | *Chlorogonium elongatum* | Chlorophyta | ES |
| green alga | *Chlorogonium euchlorum* | Chlorophyta | ES |
| green alga | *Chlorogonium hyalinum* | Chlorophyta | ES |
| green alga | *Cladophora glomerata* | Chlorophyta | ES,LE |
| green alga | *Closteriopsis acicularis* | Chlorophyta | ES |
| green alga | *Coelastrum astroidenum* | Chlorophyta | ES |
| green alga | *Coelastrum cambricum* | Chlorophyta | ES |
| green alga | *Coelastrum microporum* | Chlorophyta | ES |
| green alga | *Coelastrum pseucomicroporum* | Chlorophyta | ES |
| green alga | *Coelastrum* sp. | Chlorophyta | ES |
| green alga | *Crucigenia fenestrata* | Chlorophyta | ES |
| green alga | *Crucigenia mucronata* | Chlorophyta | ES |
| green alga | *Crucigenia quadrata* | Chlorophyta | ES |
| green alga | *Crucigenia tetrapedia* | Chlorophyta | ES |
| green alga | *Crucigeniella apiculata* | Chlorophyta | ES |
| green alga | *Crucigeniella rectangularis* | Chlorophyta | ES |
| green alga | *Desmococcus olivaceus* | Chlorophyta | CK |
| green alga | *Dictyosphaerium puchellum* | Chlorophyta | ES |
| green alga | *Didymocystis inconspicua* | Chlorophyta | ES |
| green alga | *Didymocystis planctonicus* | Chlorophyta | ES |
| green alga | *Didymocystis* sp. | Chlorophyta | ES |
| green alga | *Didymogenes palatina* | Chlorophyta | ES |
| green alga | *Draparnaldia glomerata* | Chlorophyta | CK,ES |
| green alga | *Eudorina elegans* | Chlorophyta | LE |
| green alga | *Franceia droescheri* | Chlorophyta | ES |
| green alga | *Gloeocystis vesiculosa* | Chlorophyta | CK,ES |
| green alga | *Golenkinia radiata* | Chlorophyta | ES |
| green alga | *Golenkiniopsis* sp. | Chlorophyta | ES |
| green alga | *Haematococcus pluvialis* | Chlorophyta | ES |
| green alga | *Kirchneriella contorta* var. *contorta* | Chlorophyta | ES |
| green alga | *Kirchneriella contorta* var. *elegans* | Chlorophyta | ES |
| green alga | *Kirchneriella lunaris* | Chlorophyta | ES |
| green alga | *Kirchneriella* sp. | Chlorophyta | ES |
| green alga | *Korshikoviella limnetica* | Chlorophyta | ES |
| green alga | *Lagerheimia balatonica* | Chlorophyta | ES |
| green alga | *Lagerheimia ciliata* | Chlorophyta | ES |
| green alga | *Lagerheimia citriformis* | Chlorophyta | ES |
| green alga | *Lagerheimia genevensis* | Chlorophyta | ES |
| green alga | *Lagerheimia marssonii* | Chlorophyta | ES |
| green alga | *Lagerheimia subsalsa* | Chlorophyta | ES |
| green alga | *Lagerheimia wratislawiensis* | Chlorophyta | ES |
| green alga | *Micractinium pusillum* | Chlorophyta | ES |
| green alga | *Microspora* sp. | Chlorophyta | ES |
| green alga | *Microspora stagnorum* | Chlorophyta | ES |
| green alga | *Monoraphidium arcuatum* | Chlorophyta | ES,LE |
| green alga | *Monoraphidium circinale* | Chlorophyta | ES |
| green alga | *Monoraphidium contortum* | Chlorophyta | ES |
| green alga | *Monoraphidium convolutum* var. *convolutum* | Chlorophyta | ES |
| green alga | *Monoraphidium griffithii* | Chlorophyta | ES |
| green alga | *Monoraphidium komarkovae* | Chlorophyta | ES |
| green alga | *Monoraphidium mirabile* | Chlorophyta | ES |
| green alga | *Monoraphidium* sp. | Chlorophyta | ES |
| green alga | *Mougeotia* sp. | Chlorophyta | ES |
| green alga | *Neodesmus danubialis* | Chlorophyta | ES |
| green alga | *Nephrochlamys subsolitaria* | Chlorophyta | ES |
| green alga | *Oedogonium* sp. | Chlorophyta | ES |
| green alga | *Oocystis lacustris* | Chlorophyta | ES,LE |
| green alga | *Oocystis novae-semliae* | Chlorophyta | ES |
| green alga | *Oocystis parva* | Chlorophyta | ES |
| green alga | *Oocystis pusilla* | Chlorophyta | ES |
| green alga | *Oocystis* sp. | Chlorophyta | ES |
| green alga | *Pandorina* sp. | Chlorophyta | ES |
| green alga | *Pandorinamorum* | Chlorophyta | ES |
| green alga | *Pediastrum boryanum* | Chlorophyta | ES |
| green alga | *Pediastrum duplex* | Chlorophyta | ES |
| green alga | *Pediastrum duplex* var. *duplex* | Chlorophyta | ES |

## ALGAL FLORA (continued)

| COMMON NAME | SCIENTIFIC NAME | DIVISION | LOCATION |
|---|---|---|---|
| green alga | *Pediastrum duplex* var. *reticulatum* | Chlorophyta | ES |
| green alga | *Pediastrum simplex* | Chlorophyta | ES |
| green alga | *Pediastrum simplex* var. *biwaense* | Chlorophyta | ES |
| green alga | *Pediastrum simplex* var. *echinulatum* | Chlorophyta | ES |
| green alga | *Pediastrum simplex* var. *sturmii* | Chlorophyta | ES |
| green alga | *Pediastrum* sp. | Chlorophyta | ES |
| green alga | *Pediastrum tetras* | Chlorophyta | ES |
| green alga | *Pediastrum tetras* var. *tetraodon* | Chlorophyta | ES |
| green alga | *Pedinopera* sp. | Chlorophyta | ES |
| green alga | *Phacotus lenticularis* | Chlorophyta | ES |
| green alga | *Phacotus* sp. | Chlorophyta | ES |
| green alga | *Pseudosphaerocystis lacustris* | Chlorophyta | CK,ES |
| green alga | *Pteromonas angulosa* | Chlorophyta | ES |
| green alga | *Pteromonas* sp. | Chlorophyta | ES |
| green alga | *Quadrigula closteroides* | Chlorophyta | ES |
| green alga | *Quadrigula lacustris* | Chlorophyta | ES |
| green alga | *Radiofilum conjunctivum* | Chlorophyta | CK |
| green alga | *Rhizoclonium hieroglyphicum* | Chlorophyta | CK |
| green alga | *Scenedesmus acuminatus* | Chlorophyta | ES |
| green alga | *Scenedesmus acuminatus* var. *minor* | Chlorophyta | ES |
| green alga | *Scenedesmus armatus* | Chlorophyta | ES |
| green alga | *Scenedesmus bicaudatus* | Chlorophyta | ES |
| green alga | *Scenedesmus bijuga* | Chlorophyta | ES |
| green alga | *Scenedesmus bijuga* var. *alternans* | Chlorophyta | ES |
| green alga | *Scenedesmus brevispina* | Chlorophyta | ES |
| green alga | *Scenedesmus denticulatus* | Chlorophyta | ES |
| green alga | *Scenedesmus dimorphus* | Chlorophyta | CK,ES |
| green alga | *Scenedesmus hystrix* | Chlorophyta | ES |
| green alga | *Scenedesmus longispina* | Chlorophyta | ES |
| green alga | *Scenedesmus opoliensis* | Chlorophyta | CK,ES |
| green alga | *Scenedesmus quadricauda* | Chlorophyta | ES |
| green alga | *Scenedesmus quadricauda* var. *longispina* | Chlorophyta | ES |
| green alga | *Scenedesmus sempervirens* | Chlorophyta | ES |
| green alga | *Scenedesmus serratus* | Chlorophyta | ES |
| green alga | *Scenedesmus smithii* | Chlorophyta | ES |
| green alga | *Scenedesmus soor*? | Chlorophyta | ES |
| green alga | *Scenedesmus subspicatus* | Chlorophyta | ES |
| green alga | *Scenedesmus verrucosus* | Chlorophyta | ES |
| green alga | *Schroederia indica* | Chlorophyta | LE |
| green alga | *Schroederia robusta* | Chlorophyta | ES |
| green alga | *Schroederia setigera* | Chlorophyta | ES |
| green alga | *Schroederia spiralis* | Chlorophyta | ES |
| green alga | *Selenastrum capricornutum* | Chlorophyta | ES |
| green alga | *Selenastrum* sp. | Chlorophyta | ES |
| green alga | *Spirogyra* sp. | Chlorophyta | CK,ES |
| green alga | *Stigeoclonium farctum* | Chlorophyta | ES |
| green alga | *Stigeoclonium* sp. | Chlorophyta | ES |
| green alga | *Stigeoclonium tenue* | Chlorophyta | ES |
| green alga | *Tetraedron caudatum* | Chlorophyta | ES |
| green alga | *Tetraedron incus* | Chlorophyta | ES |
| green alga | *Tetraedron minimum* | Chlorophyta | CK,ES |
| green alga | *Tetraedron muticum* | Chlorophyta | ES |
| green alga | *Tetraedron regulare* | Chlorophyta | ES |
| green alga | *Tetraedron trigonum* var. *gracile* | Chlorophyta | ES |
| green alga | *Tetrastrum elegans* | Chlorophyta | ES |
| green alga | *Tetrastrum glabrum* | Chlorophyta | CK,ES |
| green alga | *Tetrastrum heteracanthum* | Chlorophyta | ES |
| green alga | *Tetrastrum heteracanthum* (*elegans* f.) | Chlorophyta | ES |
| green alga | *Tetrastrum punctatum* | Chlorophyta | ES |
| green alga | *Tetrastrum staurogeniaeforme* | Chlorophyta | ES |
| green alga | *Treubaria quadrispina* | Chlorophyta | ES |
| green alga | *Treubaria schmidlei* | Chlorophyta | ES |
| green alga | *Treubaria triappendiculata* | Chlorophyta | ES |
| green alga | *Ulothrix* sp. | Chlorophyta | ES |
| green alga | *Ulothrix tenerrima* | Chlorophyta | CK |
| green alga | *Ulothrix tenuissima* | Chlorophyta | CK |

## ALGAL FLORA (continued)

| COMMON NAME | SCIENTIFIC NAME | DIVISION | LOCATION |
|---|---|---|---|
| green alga | *Volvox* sp. | Chlorophyta | ES |
| green alga | *Willea irregularis* | Chlorophyta | ES |
| green algae | *Chlamydomonas* spp. | Chlorophyta | CK,ES,LE |
| green algae | *Nephrochlamys* spp. | Chlorophyta | ES |
| green algae | *Scenedesmus* spp. | Chlorophyta | CK,ES |
| green algae | *Sphaerellopsis* spp. | Chlorophyta | ES |
| green alga, desmid | *Closterium aciculare* var. *aciculare* | Chlorophyta | ES |
| green alga, desmid | *Closterium acutum* var. *acutum* | Chlorophyta | ES |
| green alga, desmid | *Closterium acutum* var. *variabile* | Chlorophyta | ES |
| green alga, desmid | *Closterium gracile* var. *gracile* | Chlorophyta | ES |
| green alga, desmid | *Closterium intermedium* | Chlorophyta | CK |
| green alga, desmid | *Closterium limneticum* var. *limneticum* | Chlorophyta | ES |
| green alga, desmid | *Closterium macilentum* var. *macilentum* | Chlorophyta | ES |
| green alga, desmid | *Closterium moniliferum* var. *moniliferum* | Chlorophyta | ES |
| green alga, desmid | *Cosmarium formosulum* | Chlorophyta | ES |
| green alga, desmid | *Cosmarium granatum* | Chlorophyta | ES |
| green alga, desmid | *Cosmarium granatum* var. *granatum* | Chlorophyta | ES |
| green alga, desmid | *Cosmarium granulatum*? | Chlorophyta | ES |
| green alga, desmid | *Staurastrum gracile* | Chlorophyta | ES |
| green algae, desmids | *Closterium* spp. | Chlorophyta | ES |
| green algae, desmids | *Cosmarium* spp. | Chlorophyta | ES |
| red alga | *Bangia atropurpurea* | Rhodophyta | LE |
| yellow-green alga | *Centritractus ellipsoideus* | Chrysophyta | ES |
| yellow-green alga | *Goniochloris fallax* | Chrysophyta | ES |
| yellow-green alga | *Ophiocytium capitatum* var. *longispina* | Chrysophyta | ES |
| yellow-green alga | *Pseudostaurastrum hastatum* | Chrysophyta | ES |
| yellow-green alga | *Stipitococcus vasiformis* | Chrysophyta | ES |
| yellow-green alga | *Vaucheria* sp. | Chrysophyta | ES |

## FUNGI AND LICHENS (Kingdom Fungi)

| COMMON NAME | SCIENTIFIC NAME | DIVISION | LOCATION |
|---|---|---|---|
| agaricus | *Agaricus comtulus* | Basidiomycota | RE |
| amanitopsis, sheathed | *Amanitopsis vaginata* | Basidiomycota | RE |
| anthracnose, dogwood | *Elsinoë corni* | Ascomycota | CK |
| anthracnose, sycamore | *Apiognomonia veneta* | Ascomycota | CK |
| bird's nest, fluted | *Cyathus striatus* | Basidiomycota | RE |
| black knot | *Apiosporina morbosa* | Ascomycota | CK |
| black rot, apple | *Botryosphaeria obtusa* | Ascomycota | CK |
| black rot, grape | *Guignardia bidwellii* | Ascomycota | CK,RE |
| blight, chestnut | *Cryphonectria parasitica* | Ascomycota | CK |
| blight, raspberry cane | *Coniothyrium* sp. | Deuteromycota | CK |
| bolete, edible | *Boletus piperatus* | Basidiomycota | RE |
| bolete, golden-flesh or red-crack | *Boletus chrysenteron* | Basidiomycota | RE |
| bracket, spit-gilled | *Schizophyllum commune* | Basidiomycota | RE |
| brittle gills | *Russula pectinata* | Basidiomycota | RE |
| brittle gills, compact | *Russula compacta* | Basidiomycota | RE |
| brittle gills, crab-scented | *Russula xerampelina* | Basidiomycota | RE |
| brittle gills, fetid | *Russula ftens* | Basidiomycota | RE |
| brittle gills, red | *Russula alutacea* | Basidiomycota | RE |
| brown rot, stone fruits | *Monilinia fructicola* | Ascomycota | CK |
| canker, nectria | *Nectria galligena* | Ascomycota | CK |
| canker, peach | *Leucostoma* sp. | Ascomycota | CK |
| claviceps, ergot | *Claviceps purpurea* | Ascomycota | RE |
| clitocybe, funnel | *Clitocybe infundibuliformis-membranacea* | Basidiomycota | RE |
| collybia | *Collybia delicatella* | Basidiomycota | RE |
| collybia, broad-gilled | *Collybia platyphylla* | Basidiomycota | RE |
| collybia, conifer | *Collybia myriadophylla* | Basidiomycota | RE |
| collybia, oak-loving | *Collybia dryophila* | Basidiomycota | RE |
| dead man's fingers | *Xylaria polymorpha* | Ascomycota | RE |
| death cup | *Amanita phalloides* | Basidiomycota | RE |
| disease, Dutch elm | *Ophiostoma ulmi* | Ascomycota | CK |
| downy mildew | *Cystopus bliti* | Phycomycota | RE |
| downy mildew | *Cystopus candidus* | Phycomycota | RE |
| downy mildew | *Peronospora geranii* | Phycomycota | RE |
| downy mildew | *Peronospora parasitica* | Phycomycota | RE |

## FUNGI AND LICHENS (continued)

| COMMON NAME | SCIENTIFIC NAME | DIVISION | LOCATION |
|---|---|---|---|
| downy mildew | *Phytophthora undulatum* | Phycomycota | LE,RE |
| downy mildew | *Plasmopara sordida* | Phycomycota | RE |
| downy mildew | *Pythium aphanidermatum* | Phycomycota | LE,RE |
| downy mildew | *Pythium cystosiphon*? | Phycomycota | LE,RE |
| downy mildew | *Pythium debaryanum* | Phycomycota | LE,RE |
| downy mildew | *Pythium proliferum* | Phycomycota | LE,RE |
| downy mildew | *Pythium pulchrum* | Phycomycota | LE,RE |
| downy mildew | *Pythium* sp. | Phycomycota | LE,RE |
| downy mildew | *Pythium ultimum* | Phycomycota | LE,RE |
| downy mildew | *Sphærotheca castagnei* | Ascomycota | RE |
| downy mildew of grape | *Plasmopara viticola* | Phycomycota | CK,ES,RE |
| earth ball, common | *Scleroderma citrinum* | Basidiomycota | CK |
| earthstar, water measuring | *Geaster hygrometricus* | Basidiomycota | RE |
| entoloma | *Entoloma* sp. | Basidiomycota | RE |
| fiber cap | *Inocybe* sp. | Basidiomycota | RE |
| flyspeck, apple | *Zygophiala jamaicensis* | Deuteromycota | CK |
| fomes, artist's | *Fomes applanatus* | Basidiomycota | RE |
| fungus, artist's shelf | *Ganoderma applanatum* | Basidiomycota | CK |
| fungus, artist's type | *Fomes everhartii* | Basidiomycota | CK |
| fungus, artist's type | *Fomes ohioensis* | Basidiomycota | CK |
| fungus, birch mazegill | *Lenzites betulina* | Basidiomycota | CK |
| fungus, cup | *Patella setosa* | Ascomycota | CK |
| fungus, currycomb bracket | *Daedalea confragosa* | Basidiomycota | CK |
| fungus, Dryad's saddle | *Polyporus squamosus* | Basidiomycota | CK |
| fungus, edible coral | *Clavaria pyxidata* | Basidiomycota | RE |
| fungus, false turkeytail | *Stereum frustulosum* | Basidiomycota | CK |
| fungus, finger | *Xylaria digitata* | Ascomycota | RE |
| fungus, flask | *Diaporthe ailanthi* | Ascomycota | RE |
| fungus, hydnum tooth | *Steccherinum ochraceum* | Basidiomycota | CK |
| fungus, imperfect | *Cercospora chenopodii* | Deuteromycota | RE |
| fungus, imperfect | *Cercospora clavata* | Deuteromycota | RE |
| fungus, imperfect | *Cercospora helianthi* | Deuteromycota | RE |
| fungus, imperfect | *Cercospora maianthemi* | Deuteromycota | RE |
| fungus, imperfect | *Cercospora monoica* | Deuteromycota | RE |
| fungus, imperfect | *Cercospora osmorhizæ* | Deuteromycota | RE |
| fungus, imperfect | *Cercospora oxybaphi* | Deuteromycota | RE |
| fungus, imperfect | *Cercospora tuberosa* | Deuteromycota | RE |
| fungus, imperfect | *Cicinnobolus cesatii* | Deuteromycota | RE |
| fungus, imperfect | *Cylindrosporium padi* | Deuteromycota | RE |
| fungus, imperfect | *Didymaria ungeri* | Deuteromycota | RE |
| fungus, imperfect | *Drechslera teres* | Deuteromycota | RE |
| fungus, imperfect | *Gleosporium irregulare* | Deuteromycota | RE |
| fungus, imperfect | *Gleosporium nervisequum* | Deuteromycota | RE |
| fungus, imperfect | *Gleosporium septorioides* | Deuteromycota | RE |
| fungus, imperfect | *Macrosporium saponariæ* | Deuteromycota | RE |
| fungus, imperfect | *Macrosporium solani* | Deuteromycota | RE |
| fungus, imperfect | *Marsonia toxicodendri* | Deuteromycota | RE |
| fungus, imperfect | *Ovularia obliqua* | Deuteromycota | RE |
| fungus, imperfect | *Phoma uvicola* | Deuteromycota | RE |
| fungus, imperfect | *Phyllosticta cruenta* | Deuteromycota | RE |
| fungus, imperfect | *Phyllosticta iridis* | Deuteromycota | RE |
| fungus, imperfect | *Phyllosticta palustri* | Deuteromycota | RE |
| fungus, imperfect | *Phyllosticta phaseolina* | Deuteromycota | RE |
| fungus, imperfect | *Ramularia arvensis* | Deuteromycota | RE |
| fungus, imperfect | *Ramularia celastiri* | Deuteromycota | RE |
| fungus, imperfect | *Ramularia variabilis* | Deuteromycota | RE |
| fungus, imperfect | *Rhinotrichum curtisii* | Deuteromycota | RE |
| fungus, imperfect | *Septoria ægopodii* | Deuteromycota | RE |
| fungus, imperfect | *Septoria aquilegiæ* | Deuteromycota | RE |
| fungus, imperfect | *Septoria erigerontis* | Deuteromycota | RE |
| fungus, imperfect | *Septoria lactucicola* | Deuteromycota | RE |
| fungus, imperfect | *Septoria littorea* | Deuteromycota | RE |
| fungus, imperfect | *Septoria lophanthi* | Deuteromycota | RE |
| fungus, imperfect | *Septoria musiva* | Deuteromycota | RE |
| fungus, imperfect | *Septoria ochroleuca* | Deuteromycota | RE |
| fungus, imperfect | *Septoria oenotheræ* | Deuteromycota | RE |

## FUNGI AND LICHENS (continued)

| COMMON NAME | SCIENTIFIC NAME | DIVISION | LOCATION |
|---|---|---|---|
| fungus, imperfect | *Septoria podophyllina* | Deuteromycota | RE |
| fungus, imperfect | *Septoria polygonorum* | Deuteromycota | RE |
| fungus, imperfect | *Septoria rubi* | Deuteromycota | RE |
| fungus, imperfect | *Septoria scrophulariæ* | Deuteromycota | RE |
| fungus, imperfect | *Septoria violæ-palustris* | Deuteromycota | RE |
| fungus, imperfect | *Tuberculina persicina* | Deuteromycota | RE |
| fungus, jelly | *Exidia spiculosa* | Basidiomycota | CK |
| fungus, jelly | *Tremella candida* | Basidiomycota | RE |
| fungus, military orange caterpillar | *Cordyceps militaris* | Ascomycota | RE |
| fungus, oak mazegill | *Daedalea quercina* | Basidiomycota | CK |
| fungus, orange peel | *Aleuria aurantia* | Ascomycota | CK |
| fungus, pore | *Bjerkandera adusta* | Basidiomycota | CK |
| fungus, pore | *Favolus alveolaris* | Basidiomycota | CK |
| fungus, pore | *Oligoporus tephroleucus* | Basidiomycota | CK |
| fungus, pore | *Polyporus elegans* | Basidiomycota | CK |
| fungus, pore | *Poria unita* | Basidiomycota | CK |
| fungus, pore | *Trametes conchifer* | Basidiomycota | CK |
| fungus, pore, fleshy or bolete | *Gyrodom merulioides* | Basidiomycota | CK |
| fungus, red leather | *Hydrochaete olivacea* | Basidiomycota | CK,RE |
| fungus, soft coral | *Clavaria flaccida* | Basidiomycota | RE |
| fungus, turkeytail or pore | *Trametes versicolor* | Basidiomycota | CK |
| fungus, white leather | *Irpex lacteus* | Basidiomycota | RE |
| fungus, zoned black | *Daldinia cingulata* | Ascomycota | RE |
| galerina, deadly | *Galera* sp. | Basidiomycota | RE |
| gomphidius | *Gomphidius* sp. | Basidiomycota | RE |
| ink-cup | *Coprinus fuscescens* | Basidiomycota | RE |
| ink-cup, glistening | *Coprinus micaceus* | Basidiomycota | RE |
| knight-cap | *Tricholoma albo-flavidum* | Basidiomycota | RE |
| leaf curl, peach | *Taphrina deformans* | Ascomycota | CK |
| leaf spot | *Pseudopeziza medicaginis* | Ascomycota | RE |
| leaf spot, cherry | *Blumeriella jaapii* | Ascomycota | CK |
| leaf spot, strawberry | *Mycosphaerella fragariae* | Ascomycota | CK |
| lentinus | *Lentinus sulcatus* | Basidiomycota | RE |
| lepiota | *Lepiota illinita* | Basidiomycota | RE |
| lepiota, Adirondacks | *Lepiota adirondackensis* | Basidiomycota | RE |
| lepiota, crested | *Lepiota cristata* | Basidiomycota | RE |
| lepiota, ermine | *Lepiota erminea* | Basidiomycota | RE |
| lichen | *Alectoria nidulifera* | Mycophycophyta | RE |
| lichen | *Anaptychia echinata* | Mycophycophyta | RE |
| lichen | *Anaptychia hypoleuca* | Mycophycophyta | RE |
| lichen | *Anaptychia leucomelaena* | Mycophycophyta | RE |
| lichen | *Anaptychia palmulata* | Mycophycophyta | RE |
| lichen | *Anaptychia speciosa* | Mycophycophyta | RE |
| lichen | *Arthonia punctiformis* | Mycophycophyta | RE |
| lichen | *Arthonia radiata* | Mycophycophyta | RE |
| lichen | *Arthopyrenia alba* | Mycophycophyta | RE |
| lichen | *Arthothelium spectabile* | Mycophycophyta | RE |
| lichen | *Bacidia fuscorubella* | Mycophycophyta | RE |
| lichen | *Bacidia schweinitzii* | Mycophycophyta | RE |
| lichen | *Bilimbia sabuletorum* | Mycophycophyta | RE |
| lichen | *Bilimbia trachona* | Mycophycophyta | RE |
| lichen | *Buellia parasema* | Mycophycophyta | RE |
| lichen | *Caloplaca aurantiaca* | Mycophycophyta | RE |
| lichen | *Caloplaca cerina* | Mycophycophyta | RE |
| lichen | *Candelaria concolor* | Mycophycophyta | RE |
| lichen | *Candelaria fibrosa* | Mycophycophyta | RE |
| lichen | *Cladonia arbuscula* | Mycophycophyta | RE |
| lichen | *Cladonia bacillaris* | Mycophycophyta | RE |
| lichen | *Cladonia caespiticia* | Mycophycophyta | RE |
| lichen | *Cladonia capitata* | Mycophycophyta | RE |
| lichen | *Cladonia coniocraea* | Mycophycophyta | RE |
| lichen | *Cladonia conista* | Mycophycophyta | RE |
| lichen | *Cladonia cryptochlorophaea* | Mycophycophyta | RE |
| lichen | *Cladonia fimbriata* | Mycophycophyta | RE |
| lichen | *Cladonia furcata* | Mycophycophyta | RE |
| lichen | *Cladonia grayi* | Mycophycophyta | RE |

## FUNGI AND LICHENS (continued)

| COMMON NAME | SCIENTIFIC NAME | DIVISION | LOCATION |
|---|---|---|---|
| lichen | *Cladonia nemoxyna* | Mycophycophyta | RE |
| lichen | *Cladonia parasitica* | Mycophycophyta | RE |
| lichen | *Cladonia squamosa* | Mycophycophyta | RE |
| lichen | *Cladonia subcariosa* | Mycophycophyta | RE |
| lichen | *Collema subfurvum* | Mycophycophyta | RE |
| lichen | *Coniocybe furfuracea* | Mycophycophyta | RE |
| lichen | *Conotrema urceolatum* | Mycophycophyta | RE |
| lichen | *Lecanora dispersa* | Mycophycophyta | RE |
| lichen | *Lecanora pallida* | Mycophycophyta | RE |
| lichen | *Lecanora subfusca* | Mycophycophyta | RE |
| lichen | *Lecanora varia* | Mycophycophyta | RE |
| lichen | *Lepraria* sp. | Mycophycophyta | RE |
| lichen | *Leptogium lichenoides* | Mycophycophyta | RE |
| lichen | *Leptogium tenuissimum* | Mycophycophyta | RE |
| lichen | *Leptogium tremelloides* | Mycophycophyta | RE |
| lichen | *Microthelia micula* | Mycophycophyta | RE |
| lichen | *Ochrolechia tartarea* | Mycophycophyta | RE |
| lichen | *Opegrapha lichenoides* | Mycophycophyta | RE |
| lichen | *Opegrapha pulicaris* | Mycophycophyta | RE |
| lichen | *Opegrapha viridis* | Mycophycophyta | RE |
| lichen | *Peltigera aphthosan* | Mycophycophyta | RE |
| lichen | *Peltigera canina spuria* | Mycophycophyta | RE |
| lichen | *Peltigera horizontalisn* | Mycophycophyta | RE |
| lichen | *Peltigera spuria* | Mycophycophyta | RE |
| lichen | *Pertusaria leioplaca* | Mycophycophyta | RE |
| lichen | *Pertusaria multipuncta* | Mycophycophyta | RE |
| lichen | *Pertusaria pertusa* | Mycophycophyta | RE |
| lichen | *Pertusaria pustulata* | Mycophycophyta | RE |
| lichen | *Physcia adscendens* | Mycophycophyta | RE |
| lichen | *Physcia aguila detonsa* | Mycophycophyta | RE |
| lichen | *Physcia aipolia* | Mycophycophyta | RE |
| lichen | *Physcia ciliata* | Mycophycophyta | RE |
| lichen | *Physcia elaeina* | Mycophycophyta | RE |
| lichen | *Physcia grisea* | Mycophycophyta | RE |
| lichen | *Physcia hypoleuca* | Mycophycophyta | RE |
| lichen | *Physcia millegrana* | Mycophycophyta | RE |
| lichen | *Physcia orbicularis* | Mycophycophyta | RE |
| lichen | *Physcia stellaris* | Mycophycophyta | RE |
| lichen | *Physcia syncolla* | Mycophycophyta | RE |
| lichen | *Physcia tribacia* | Mycophycophyta | RE |
| lichen | *Physcia tribacoides* | Mycophycophyta | RE |
| lichen | *Placynthium nigrum* | Mycophycophyta | RE |
| lichen | *Pyrenula leucoplaca* | Mycophycophyta | RE |
| lichen | *Ramalina farinacea* | Mycophycophyta | RE |
| lichen | *Ramalina sinensis* | Mycophycophyta | RE |
| lichen | *Rinodina tephraspis* | Mycophycophyta | RE |
| lichen | *Sarcogyne simplex* | Mycophycophyta | RE |
| lichen | *Sticta pulmonaria* | Mycophycophyta | RE |
| lichen | *Teloschistes chrysophthalmus* | Mycophycophyta | RE |
| lichen | *Trypethelium virens* | Mycophycophyta | RE |
| lichen | *Usnea strigosa* | Mycophycophyta | RE |
| lichen | *Xanthoria candelaria* | Mycophycophyta | RE |
| lichen | *Xanthoria fallax* | Mycophycophyta | RE |
| lichen | *Xanthoria polycarpa* | Mycophycophyta | RE |
| lichen, boulder | *Parmelia aspera* | Mycophycophyta | RE |
| lichen, boulder | *Parmelia aurulenta* | Mycophycophyta | RE |
| lichen, boulder | *Parmelia borreri* | Mycophycophyta | RE |
| lichen, boulder | *Parmelia caperata* | Mycophycophyta | RE |
| lichen, boulder | *Parmelia crozalsiana* | Mycophycophyta | RE |
| lichen, boulder | *Parmelia flaventior* | Mycophycophyta | RE |
| lichen, boulder | *Parmelia livida* | Mycophycophyta | RE |
| lichen, boulder | *Parmelia margaritata* | Mycophycophyta | RE |
| lichen, boulder | *Parmelia perlata* | Mycophycophyta | RE |
| lichen, boulder | *Parmelia rudecta* | Mycophycophyta | RE |
| lichen, boulder | *Parmelia saxatilis* | Mycophycophyta | RE |
| lichen, boulder | *Parmelia sulcata* | Mycophycophyta | RE |

## FUNGI AND LICHENS (continued)

| COMMON NAME | SCIENTIFIC NAME | DIVISION | LOCATION |
|---|---|---|---|
| lichen, boulder | *Parmelia ulophyllodes* | Mycophycophyta | RE |
| lichen, British soldiers or red crest | *Cladonia cristatella* | Mycophycophyta | RE |
| lichen, dog | *Peltigera canina* | Mycophycophyta | RE |
| lichen, ladder | *Cladonia verticillata* | Mycophycophyta | RE |
| lichen, pitted | *Verrucaria muralis* | Mycophycophyta | RE |
| lichen, pixie cup | *Cladonia pyxidata* | Mycophycophyta | RE |
| lichen, reindeer | *Cladonia rangiferina* | Mycophycophyta | RE |
| lichen, script | *Graphis scripta* | Mycophycophyta | RE |
| lichen, shield | *Cetraria ciliaris* | Mycophycophyta | RE |
| lichen, shield | *Cetraria ericetorum* | Mycophycophyta | RE |
| lichen, spoon | *Cladonia gracilis* | Mycophycophyta | RE |
| lichen, whitewash | *Lecidea albocaerulescens* | Mycophycophyta | RE |
| lichen, whitewash | *Lecidea myriocarpoides* | Mycophycophyta | RE |
| lichen, whitewash | *Lecidea parasema* | Mycophycophyta | RE |
| lichen, whitewash | *Lecidea viridescens* | Mycophycophyta | RE |
| marasmius | *Marasmius albiceps* | Basidiomycota | RE |
| marasmius | *Marasmius candidus* | Basidiomycota | RE |
| marasmius | *Marasmius nigripes* | Basidiomycota | RE |
| marasmius | *Marasmius trullisatipes* | Basidiomycota | RE |
| milk cap | *Lactarius rimosellus* | Basidiomycota | RE |
| milk cap, dull | *Lactarius subdulcis* | Basidiomycota | RE |
| milk cap, yellow -straining | *Lactarius theiogalus* | Basidiomycota | RE |
| mold | *Aspergillus herbariorum* | Ascomycota | RE |
| mold | *Aspergillus niger* | Ascomycota | RE |
| mold | *Empusa grylli* | Phycomycota | RE |
| mold | *Mucor stolonifer* | Phycomycota | RE |
| mold | *Penicillium crustaceum* | Ascomycota | RE |
| mold, apple sooty blotch | *Peltaster fructicola* | Deuteromycota | CK |
| mold, blue | *Penicillium* sp. | Ascomycota | CK |
| mold, bread | *Rhizopus* sp. | Phycomycota | CK |
| mold, raspberry | *Botrytis cinerea* | Deuteromycota | CK |
| molds, pear sooty | dothidean spp. | Ascomycota | CK |
| morel, common | *Morchella esculenta* | Ascomycota | CK |
| moss, reindeer | *Cladonia* sp. | Mycophycophyta | CK |
| mushroom, bonnet | *Mycena capillaris* | Basidiomycota | RE |
| mushroom, coral | *Clavaria* sp. | Basidiomycota | CK |
| mushroom, fairy-ring | *Marasmius oreades* | Basidiomycota | CK |
| mushroom, field type | *Clitopilus abortivus* | Basidiomycota | CK |
| mushroom, field type | *Panus strypticus* | Basidiomycota | CK |
| mushroom, honey | *Armillaria mellea* | Basidiomycota | CK |
| mushroom, meadow | *Agaricus campestris* | Basidiomycota | CK |
| mushroom, parasol | *Macrolepiota procera* | Basidiomycota | CK |
| mushroom, scalecap | *Pholiota unicolor* | Basidiomycota | CK |
| mushroom, wavy Catherinea | *Atrichum undulatum* | Basidiomycota | CK |
| old-man-of-the-woods | *Strobilomyces strobilaceus* | Basidiomycota | RE |
| panus, rudy | *Panus rudis* | Basidiomycota | RE |
| patella | *Lachnea scutellata* | Ascomycota | RE |
| paxina | *Macropodia semitosta* | Ascomycota | RE |
| pepper box | *Myriostoma coliformis* | Basidiomycota | RE |
| pin-wheel, orange | *Marasmius siccus* | Basidiomycota | RE |
| pleurotus, lavender-spored | *Pleurotus sapidus* | Basidiomycota | CK,RE |
| plum pockets | *Taphrina communis* | Ascomycota | CK |
| pluteus, fawn-colored | *Pluteus cervinus* | Basidiomycota | RE |
| polypore | *Phaeolus schweinitziie* | Basidiomycota | RE |
| polypore | *Phellinus gilvus* | Basidiomycota | CK,RE |
| polypore | *Polyporus arcularius* | Basidiomycota | CK,RE |
| polypore | *Polyporus carneus* | Basidiomycota | RE |
| polypore | *Polystictus hirsutus-albiporus* | Basidiomycota | RE |
| polypore, cinnabar | *Pyenoporus cinnibarinus* | Basidiomycota | RE |
| polypore, gill | *Lenzites sepiaria* | Basidiomycota | RE |
| polypore, sulfur | *Laetiporus sulphurous* | Basidiomycota | RE |
| powdery mildew | *Erysiphe cichoracearum* | Ascomycota | RE |
| powdery mildew | *Erysiphe communis* | Ascomycota | RE |
| powdery mildew | *Erysiphe montagnei* | Ascomycota | RE |
| powdery mildew | *Microsphæra diffusa* | Ascomycota | RE |
| powdery mildew | *Microsphæra ravenellii* | Ascomycota | RE |

## FUNGI AND LICHENS (continued)

| COMMON NAME | SCIENTIFIC NAME | DIVISION | LOCATION |
|---|---|---|---|
| powdery mildew | *Microsphaera viburni* | Ascomycota | CK |
| powdery mildew | *Podosphæra oxyacanthæ* | Ascomycota | RE |
| powdery mildew, apple | *Podosphaera leucotricha* | Ascomycota | CK |
| powdery mildew, black locust | *Erysiphe polygoni* | Ascomycota | RE |
| powdery mildew, grape | *Uncinula necator* | Ascomycota | CK |
| powdery mildew, lilac | *Microsphæra alni* | Ascomycota | CK,RE |
| powdery mildew, tree | *Phyllactinia corylea* | Ascomycota | RE |
| psilocybe | *Psilocybe ammophila* | Basidiomycota | RE |
| puffball, buried-stalk | *Tulostoma fimbriatum* | Basidiomycota | RE |
| puffball, common | *Bovista pila* | Basidiomycota | CK |
| puffball, gem | *Lycoperdon perlatum* | Basidiomycota | CK |
| puffball, giant | *Calvatia gigantea* | Basidiomycota | CK |
| puffball, mini | *Lycoperdon pusillum* | Basidiomycota | CK,RE |
| puffball, pear-shaped or stump | *Lycoperdon pyriforme* | Basidiomycota | CK,RE |
| rot | *Plowrightia morbosa* | Ascomycota | RE |
| rot, apple bitter | *Glomerella cingulata* | Ascomycota | CK |
| rot, corn ear | *Diplodia maydis* | Deuteromycota | CK |
| rot, crown | *Phytophthora cactorum* | Phycomycota | CK |
| rot, rind | *Sclerotinia fructigena* | Ascomycota | ES |
| rot, white apple | *Botryosphaeria dothidea* | Ascomycota | CK |
| rust | *Aecidium cimicifugatum* | Basidiomycota | RE |
| rust | *Aecidium compositatum* | Basidiomycota | RE |
| rust | *Aecidium fraxini* | Basidiomycota | RE |
| rust | *Aecidium grossulariæ* | Basidiomycota | RE |
| rust | *Aecidium impatientis* | Basidiomycota | RE |
| rust | *Aecidium nesææ* | Basidiomycota | RE |
| rust | *Aecidium oenotheræ* | Basidiomycota | RE |
| rust | *Aecidium pammelii* | Basidiomycota | RE |
| rust | *Aecidium pustulatum* | Basidiomycota | RE |
| rust | *Coleosporium sonchi-arvensis* | Basidiomycota | RE |
| rust | *Gymnoconia peckiana* | Basidiomycota | RE |
| rust | *Gymnosporangium globosum* | Basidiomycota | RE |
| rust | *Gymnosporangium nidus-avis* | Basidiomycota | RE |
| rust | *Phragmidium obtusum* | Basidiomycota | RE |
| rust | *Puccinia fraxinata* | Basidiomycota | RE |
| rust | *Puccinia glechomatis* | Basidiomycota | RE |
| rust | *Puccinia helianthi* | Basidiomycota | RE |
| rust | *Puccinia malvacearum* | Basidiomycota | RE |
| rust | *Puccinia menthæ* | Basidiomycota | RE |
| rust | *Puccinia osmorhizæ* | Basidiomycota | RE |
| rust | *Puccinia podophylli* | Basidiomycota | RE |
| rust | *Puccinia polygoni-amphibii* | Basidiomycota | RE |
| rust | *Puccinia seymeriæ* | Basidiomycota | RE |
| rust | *Puccinia simplex* | Basidiomycota | RE |
| rust | *Puccinia taraxaci* | Basidiomycota | RE |
| rust | *Puccinia xanthii* | Basidiomycota | RE |
| rust | *Pucciniastrum agrimoniæ* | Basidiomycota | RE |
| rust | *Uromyces euphorbiæ* | Basidiomycota | RE |
| rust | *Uromyces phaseoli* | Basidiomycota | RE |
| rust | *Uromyces striatus* | Basidiomycota | RE |
| rust | *Uromyces toxicodendri* | Basidiomycota | RE |
| rust | *Uromyces trifolii* | Basidiomycota | RE |
| rust, blackberry | *Kunkelia nitens* | Basidiomycota | CK |
| rust, buckthorn crown | *Puccinia coronata* | Basidiomycota | RE |
| rust, cedar-apple | *Gymnosporangium juniperi-virginianae* | Basidiomycota | CK |
| rust, current | *Puccinia caricis* | Basidiomycota | RE |
| rust, grape | *Puccinia graminis* | Basidiomycota | RE |
| rust, Jack in the pulpit | *Negrido caladii* | Basidiomycota | CK |
| rust, May-apple | *Allodus podophylli* | Basidiomycota | CK |
| rust, melampsora | *Melampsora salicis-capreæ* | Basidiomycota | RE |
| rust, orange | *Gymnoconia* sp. | Basidiomycota | CK |
| scab, apple | *Venturia crataegi* | Ascomycota | CK |
| scab, peach | *Cladosporium carpophilum* | Deuteromycota | CK |
| scab, pear | *Venturia pyrina* | Ascomycota | CK |
| sereum | *Stereum candidum* | Basidiomycota | RE |
| sereum | *Stereum disciforme* | Basidiomycota | RE |

## FUNGI AND LICHENS (continued)

| COMMON NAME | SCIENTIFIC NAME | DIVISION | LOCATION |
|---|---|---|---|
| sereum | *Stereum fasciatum* | Basidiomycota | RE |
| sereum | *Stereum versicolor* | Basidiomycota | RE |
| slime mold | *Acryodes incarnata* | Myxomycota | RE |
| slime mold | *Arcyria cinerea* | Myxomycota | RE |
| slime mold | *Arcyria incarnata* | Myxomycota | RE |
| slime mold | *Arcyria nutans* | Myxomycota | RE |
| slime mold | *Badhamia affinis* | Myxomycota | RE |
| slime mold | *Calonema aureum* | Myxomycota | RE |
| slime mold | *Comatichia laxa* | Myxomycota | RE |
| slime mold | *Comatichia pulchella* | Myxomycota | RE |
| slime mold | *Comatricha stemonitis* | Myxomycota | RE |
| slime mold | *Craterium minimum* | Myxomycota | RE |
| slime mold | *Cribraria intricata* | Myxomycota | RE |
| slime mold | *Diderma crustaceum* | Myxomycota | RE |
| slime mold | *Diderma hemisphericum* | Myxomycota | RE |
| slime mold | *Diderma reticulatum* | Myxomycota | RE |
| slime mold | *Didymium crustaceum* | Myxomycota | RE |
| slime mold | *Didymium iridis* | Myxomycota | RE |
| slime mold | *Didymium melanospermum* | Myxomycota | RE |
| slime mold | *Didymium squamulosum* | Myxomycota | RE |
| slime mold | *Fuligo cinerea* | Myxomycota | RE |
| slime mold | *Fuligo violacea* | Myxomycota | RE |
| slime mold | *Hemitrichia intorta* | Myxomycota | RE |
| slime mold | *Hemitrichia stipitata* | Myxomycota | RE |
| slime mold | *Hemitrichia vesparium* | Myxomycota | RE |
| slime mold | *Lachnobolus globosus* | Myxomycota | RE |
| slime mold | *Lamproderma arcyrionema* | Myxomycota | RE |
| slime mold | *Lindbladia tubulina* | Myxomycota | RE |
| slime mold | *Lycogala flavo-fuscum* | Myxomycota | RE |
| slime mold | *Mucilago spongiosa* | Myxomycota | RE |
| slime mold | *Ophiotheca wrightii* | Myxomycota | RE |
| slime mold | *Perichæna quadrata* | Myxomycota | RE |
| slime mold | *Physarella oblonga* | Myxomycota | RE |
| slime mold | *Physarum nutans* | Myxomycota | RE |
| slime mold | *Physarum vernum* | Myxomycota | RE |
| slime mold | *Physarum viride* | Myxomycota | RE |
| slime mold | *Physarum viride* var. *incanum* | Myxomycota | RE |
| slime mold | *Reticularia splendens* | Myxomycota | RE |
| slime mold | *Stemonitis fenestrata* | Myxomycota | RE |
| slime mold | *Stemonitis fusc* | Myxomycota | RE |
| slime mold | *Stemonitis herbatica* | Myxomycota | RE |
| slime mold | *Stemonitis maxima* | Myxomycota | RE |
| slime mold | *Stemonitis smithii* | Myxomycota | RE |
| slime mold | *Tilmadoche alba* | Myxomycota | RE |
| slime mold | *Trichia inconspicua* | Myxomycota | RE |
| slime mold | *Tubifera microsperma* | Myxomycota | RE |
| slime, carnival candy | *Arcyria denudata* | Myxomycota | RE |
| slime, Japanese-lantern | *Dictydium cancellatum* | Myxomycota | RE |
| slime, red raspberry | *Tubifera ferruginosa* | Myxomycota | RE |
| slime, white-footed | *Diachea leucopodia* | Myxomycota | RE |
| slime, wolf's-milk | *Lycogala epidendrum* | Myxomycota | RE |
| slime, yellow-fuzz cone | *Hemitrichia clavata* | Myxomycota | RE |
| smut | *Entyloma menispermi* | Basidiomycota | RE |
| smut | *Ustilago avenæ* | Basidiomycota | RE |
| smut | *Ustilago hordei* | Basidiomycota | RE |
| smut | *Ustilago zeæ* | Basidiomycota | CK,RE |
| smut, corn | *Ustilago maydis* | Basidiomycota | CK |
| spot, maple tar | *Rhytisma* sp. | Ascomycota | CK |
| stinkhorn, dog | *Mutinus caninus* | Basidiomycota | CK |
| stumpfoot, spotted | *Crepidotus malachius* | Basidiomycota | CK |
| tuning fork, clublike | *Calocera cornea* | Basidiomycota | RE |
| tylostoma, field | *Tulostoma campestre* | Basidiomycota | RE |
| water mold | *Achlya americana* | Phycomycota | LE,RE |
| water mold | *Achlya bisexualis* | Phycomycota | LE,RE |
| water mold | *Achlya debaryana* | Phycomycota | LE,RE |
| water mold | *Achlya dubia* | Phycomycota | LE,RE |

## FUNGI AND LICHENS (continued)

| COMMON NAME | SCIENTIFIC NAME | DIVISION | LOCATION |
|---|---|---|---|
| water mold | *Achlya flagellata* | Phycomycota | LE,RE |
| water mold | *Achlya klebsiana* | Phycomycota | LE,RE |
| water mold | *Achlya polyandra* | Phycomycota | LE,RE |
| water mold | *Achlya prolifera* | Phycomycota | LE,RE |
| water mold | *Achlya proliferoides* | Phycomycota | LE,RE |
| water mold | *Achlya rodrigueziana* | Phycomycota | LE,RE |
| water mold | *Achlya* sp. | Phycomycota | LE,RE |
| water mold | *Allomyces arbuscula* | Phycomycota | LE,RE |
| water mold | *Aphanomyces euteiches* | Phycomycota | LE,RE |
| water mold | *Aphanomyces laevis* | Phycomycota | LE,RE |
| water mold | *Aphanomyces scaber* | Phycomycota | LE,RE |
| water mold | *Aphanomyces* sp. | Phycomycota | LE,RE |
| water mold | *Apodachlya brachynema* | Phycomycota | LE,RE |
| water mold | *Blastocladia globosa* | Phycomycota | LE,RE |
| water mold | *Blastocladia pringsheimii* | Phycomycota | LE,RE |
| water mold | *Blastocladia ramosa* | Phycomycota | LE,RE |
| water mold | *Blastocladia simplex* | Phycomycota | LE,RE |
| water mold | *Blastocladia tenuis* | Phycomycota | LE,RE |
| water mold | *Dictyuchus anomalus* | Phycomycota | LE,RE |
| water mold | *Dictyuchus missouriensis* | Phycomycota | LE,RE |
| water mold | *Dictyuchus monosporus* | Phycomycota | LE,RE |
| water mold | *Dictyuchus pseudodictyon* | Phycomycota | LE,RE |
| water mold | *Dictyuchus* sp. | Phycomycota | LE,RE |
| water mold | *Entophlyctis aurea* | Phycomycota | LE,RE |
| water mold | *Geolegnia inflata* | Phycomycota | LE,RE |
| water mold | *Gonapodya prolifera* | Phycomycota | LE,RE |
| water mold | *Isoachlya* sp.? | Phycomycota | LE,RE |
| water mold | *Leptolegnia subterranea* | Phycomycota | LE,RE |
| water mold | *Monoblepharis* sp. | Phycomycota | LE,RE |
| water mold | *Olpidiopsis saprolegniae* | Phycomycota | LE,RE |
| water mold | *Olpidiopsis varians* | Phycomycota | LE,RE |
| water mold | *Protoachlya paradoxa* | Phycomycota | LE,RE |
| water mold | *Rozella allomycis* | Phycomycota | LE,RE |
| water mold | *Saprolegnia diclina* | Phycomycota | LE,RE |
| water mold | *Saprolegnia ferax* | Phycomycota | LE,RE |
| water mold | *Saprolegnia monoica* | Phycomycota | LE,RE |
| water mold | *Saprolegnia parasitica* | Phycomycota | LE,RE |
| water mold | *Saprolegnia* sp. | Phycomycota | LE,RE |
| water mold | *Synchytrium decipiens* | Phycomycota | LE,RE |
| wood-wart | *Hypoxylon* sp. | Ascomycota | RE |

## MOSSES, HORSETAILS, AND FERNS (Kingdom Plantae)

| COMMON NAME | SCIENTIFIC NAME | DIVISION | LOCATION |
|---|---|---|---|
| beech-fern, broad | *Phegopteris hexagonoptera* | Filicophyta | CK |
| brachythecium, rivulet | *Brachythecium rivulare* | Bryophyta | RE |
| clubmoss, tree | *Lycopodium obscurum* | Lycopodiophyta | CK |
| clubmoss, tree-like | *Lycopodium dendroideum* | Lycopodiophyta | CK |
| fern | *Osmunda claytoniana* | Filicophyta | CK,ES |
| fern, bulblet | *Cystopteris bulbifera* | Filicophyta | CK |
| fern, Christmas | *Polystichum acrostichoides* | Filicophyta | CK,ES |
| fern, cinnamon | *Osmunda cinnamomea* | Filicophyta | ES |
| fern, fragile | *Cystopteris tenuis* | Filicophyta | CK |
| fern, northern maidenhair | *Adiantum pedatum* | Filicophyta | CK,ES |
| fern, rattlesnake | *Botrychium virginianum* | Filicophyta | CK,ES |
| fern, sensitive | *Onoclea sensibilis* | Filicophyta | CK,ES |
| fern, subarctic lady | *Athyrium filix-femina* | Filicophyta | CK,ES |
| grapefern, cut-leaf | *Botrychium dissectum* | Filicophyta | CK |
| grapefern, leathery | *Botrychium rugulosum* | Filicophyta | CK |
| horsetail, field or common | *Equisetum arvense* | Equisetophyta | CK,ES |
| horsetail, rough or scouring rush | *Equisetum hyemale* | Equisetophyta | CK |
| liverwort | *Lophocolea heterophylla* | Bryophyta | CK |
| liverwort, common | *Conocephalum conicum* | Bryophyta | CK |
| moss | *Amblystegium serpens* | Bryophyta | RE |
| moss | *Amblystegium serpens* var. *juratzkanum* | Bryophyta | RE |
| moss | *Amblystegium varium* | Bryophyta | CK,RE |

## MOSSES, HORSETAILS, AND FERNS (continued)

| COMMON NAME | SCIENTIFIC NAME | DIVISION | LOCATION |
|---|---|---|---|
| moss | *Anacamptodon splachnoides* | Bryophyta | RE |
| moss | *Anomodon attenuatus* | Bryophyta | RE |
| moss | *Anomodon minor* | Bryophyta | RE |
| moss | *Anomodon rostratus* | Bryophyta | RE |
| moss | *Anomodon rugelii* | Bryophyta | RE |
| moss | *Aulacomnium heterostichum* | Bryophyta | RE |
| moss | *Aulacomnium palustre* | Bryophyta | RE |
| moss | *Barbula convoluta* | Bryophyta | RE |
| moss | *Barbula unguiculata* | Bryophyta | RE |
| moss | *Brachythecium acuminatum* | Bryophyta | RE |
| moss | *Brachythecium campestre* | Bryophyta | RE |
| moss | *Brachythecium oxycladon* | Bryophyta | RE |
| moss | *Brachythecium rutabulum* | Bryophyta | RE |
| moss | *Brachythecium salebrosum* | Bryophyta | RE |
| moss | *Bruchia flexuosa* | Bryophyta | RE |
| moss | *Bryhnia graminicolor* | Bryophyta | RE |
| moss | *Bryhnia novae-angliae* | Bryophyta | RE |
| moss | *Bryoandersonia illecebra* | Bryophyta | RE |
| moss | *Bryoerythrophyllum recurvirostre* | Bryophyta | RE |
| moss | *Callicladium haldanianum* | Bryophyta | RE |
| moss | *Calliergon stramineum* | Bryophyta | RE |
| moss | *Calliergon trifarium* | Bryophyta | RE |
| moss | *Calliergonella cuspidata* | Bryophyta | RE |
| moss | *Campylium chrysophyllum* | Bryophyta | RE |
| moss | *Campylium hispidulum* | Bryophyta | RE |
| moss | *Campylium polygamum* | Bryophyta | RE |
| moss | *Campylium stellatum* | Bryophyta | RE |
| moss | *Cyrto-hypnum minutulum* | Bryophyta | RE |
| moss | *Desmatodon obtusifolius* | Bryophyta | RE |
| moss | *Desmatodon porteri* | Bryophyta | RE |
| moss | *Didymodon fallax* | Bryophyta | RE |
| moss | *Didymodon rigidulus* | Bryophyta | RE |
| moss | *Discelium nudum* | Bryophyta | RE |
| moss | *Ditrichum lineare* | Bryophyta | RE |
| moss | *Drepanocladus aduncus* var. *aduncus* | Bryophyta | RE |
| moss | *Drepanocladus aduncus* var. *kneiffii* | Bryophyta | RE |
| moss | *Drummondia prorepens* | Bryophyta | RE |
| moss | *Entodon cladorrhizans* | Bryophyta | RE |
| moss | *Entodon seductrix* | Bryophyta | RE |
| moss | *Eurhynchium hians* | Bryophyta | RE |
| moss | *Eurhynchium pulchellum* | Bryophyta | RE |
| moss | *Eurhynchium serrulatum* | Bryophyta | CK |
| moss | *Fissidens adianthoides* | Bryophyta | RE |
| moss | *Fissidens bryoides* | Bryophyta | RE |
| moss | *Fissidens obtusifolius* | Bryophyta | RE |
| moss | *Fissidens taxifolius* | Bryophyta | CK,RE |
| moss | *Grimmia pulvinata* | Bryophyta | RE |
| moss | *Gymnostomum aeruginosum* | Bryophyta | RE |
| moss | *Helodium blandowii* | Bryophyta | RE |
| moss | *Helodium paludosum* | Bryophyta | RE |
| moss | *Herzogiella turfacea* | Bryophyta | RE |
| moss | *Homomallium adnatum* | Bryophyta | RE |
| moss | *Hygroamblystegium fluviatile* | Bryophyta | RE |
| moss | *Hygroamblystegium tenax* | Bryophyta | RE |
| moss | *Hygrohypnum luridum* | Bryophyta | RE |
| moss | *Hymenostylium recurvirostre* | Bryophyta | RE |
| moss | *Hyophila involuta* | Bryophyta | RE |
| moss | *Hypnum cupressiforme* | Bryophyta | RE |
| moss | *Hypnum imponens* | Bryophyta | RE |
| moss | *Hypnum lindbergii* | Bryophyta | RE |
| moss | *Isopterygiopsis muelleriana* | Bryophyta | RE |
| moss | *Leptobryum pyriforme* | Bryophyta | RE |
| moss | *Leptodictyum humile* | Bryophyta | RE |
| moss | *Leptodictyum riparium* | Bryophyta | RE |
| moss | *Leskea gracilescens* | Bryophyta | RE |
| moss | *Leskea obscura* | Bryophyta | RE |

## MOSSES, HORSETAILS, AND FERNS (continued)

| COMMON NAME | SCIENTIFIC NAME | DIVISION | LOCATION |
|---|---|---|---|
| moss | *Leucodon julaceus* | Bryophyta | RE |
| moss | *Limprichtia revolvens* | Bryophyta | RE |
| moss | *Orthotrichum anomalum* | Bryophyta | RE |
| moss | *Orthotrichum pumilum* | Bryophyta | RE |
| moss | *Orthotrichum pusillum* | Bryophyta | RE |
| moss | *Orthotrichum strangulatum* | Bryophyta | RE |
| moss | *Phascum cuspidatum* | Bryophyta | RE |
| moss | *Philonotis fontana* | Bryophyta | RE |
| moss | *Plagiomnium ciliare* | Bryophyta | RE |
| moss | *Plagiomnium cuspidatum* | Bryophyta | RE |
| moss | *Plagiomnium medium* | Bryophyta | RE |
| moss | *Plagiothecium* sp. | Bryophyta | CK |
| moss | *Platydictya confervoides* | Bryophyta | RE |
| moss | *Platygyrium repens* | Bryophyta | RE |
| moss | *Pleuridium subulatum* | Bryophyta | RE |
| moss | *Pleurozium schreberi* | Bryophyta | RE |
| moss | *Pohlia nutans* | Bryophyta | RE |
| moss | *Pylaisiella intricata* | Bryophyta | RE |
| moss | *Pylaisiella selwynii* | Bryophyta | RE |
| moss | *Rauiella scita* | Bryophyta | RE |
| moss | *Rhizomnium punctatum* | Bryophyta | RE |
| moss | *Rhytidium rugosum* | Bryophyta | RE |
| moss | *Schistidium apocarpum* | Bryophyta | RE |
| moss | *Schistidium rivulare* | Bryophyta | RE |
| moss | *Seligeria calcarea* | Bryophyta | RE |
| moss | *Seligeria campylopoda* | Bryophyta | RE |
| moss | *Seligeria pusilla* | Bryophyta | RE |
| moss | *Sematophyllum demissum* | Bryophyta | RE |
| moss | *Steerecleus serrulatus* | Bryophyta | RE |
| moss | *Taxiphyllum taxirameum* | Bryophyta | RE |
| moss | *Thelia asprella* | Bryophyta | RE |
| moss | *Thelia hirtella* | Bryophyta | RE |
| moss | *Ulota crispa* | Bryophyta | RE |
| moss | *Weissia controversa* | Bryophyta | RE |
| moss, apple | *Bartramia pomiformis* | Bryophyta | RE |
| moss, bog | *Sphagnum* sp. | Bryophyta | CK |
| moss, broom | *Dicranum flagellare* | Bryophyta | RE |
| moss, broom | *Dicranum scoparium* | Bryophyta | RE |
| moss, broom | *Dicranum viride* | Bryophyta | RE |
| moss, common fern | *Thuidium delicatulum* | Bryophyta | CK,RE |
| moss, common hair-cap | *Polytrichum commune* | Bryophyta | CK,RE |
| moss, cord | *Funaria hygrometrica* | Bryophyta | CK,RE |
| moss, false hair-cap | *Pogonatum pensilvanicum* | Bryophyta | RE |
| moss, feather | *Hypnum curvifolium* | Bryophyta | CK,RE |
| moss, fern | *Thuidium recognitum* | Bryophyta | RE |
| moss, fork | *Dicranella cerviculata* | Bryophyta | RE |
| moss, fork | *Dicranella varia* | Bryophyta | RE |
| moss, fout-tooth | *Tetraphis pellucida* | Bryophyta | RE |
| moss, hair-cap | *Polytrichum ohioense* | Bryophyta | CK,RE |
| moss, hair-cap | *Polytrichum piliferum* | Bryophyta | RE |
| moss, purple horn-tooth | *Ceratodon purpureus* | Bryophyta | RE |
| moss, rose | *Rhodobryum roseum* | Bryophyta | RE |
| moss, silky fork | *Dicranella heteromalla* | Bryophyta | RE |
| moss, silvery | *Bryum argenteum* | Bryophyta | RE |
| moss, silvery | *Bryum caespiticium* | Bryophyta | RE |
| moss, silvery | *Bryum capillare* | Bryophyta | RE |
| moss, silvery | *Bryum lisae* var. *cuspidatum* | Bryophyta | RE |
| moss, silvery | *Bryum pseudotriquetrum* | Bryophyta | RE |
| moss, slender | *Plagiothecium cavifolium* | Bryophyta | RE |
| moss, slender | *Plagiothecium denticulatum* | Bryophyta | RE |
| moss, spineleaf | *Atrichum altecristatum* | Bryophyta | RE |
| moss, spineleaf | *Atrichum undulatum* | Bryophyta | RE |
| moss, star | *Mnium stellare* | Bryophyta | RE |
| moss, tree | *Climacium americanum* | Bryophyta | CK,RE |
| moss, tree-flooded | *Climacium kindbergii* | Bryophyta | CK,RE |
| moss, twisted | *Tortella humilis* | Bryophyta | RE |

**MOSSES, HORSETAILS, AND FERNS (continued)**

| COMMON NAME | SCIENTIFIC NAME | DIVISION | LOCATION |
|---|---|---|---|
| moss, twisted | *Tortella tortuosa* | Bryophyta | RE |
| moss, twisted teeth | *Barbula indica* var. *indica* | Bryophyta | RE |
| moss, urn | *Physcomitrium pyriforme* | Bryophyta | RE |
| moss, wall | *Tortula ruralis* | Bryophyta | RE |
| moss, water | *Fontinalis hypnoides* | Bryophyta | RE |
| moss, water | *Fontinalis hypnoides* var. *duriaei* | Bryophyta | RE |
| moss, water common | *Fontinalis dalecarlica* | Bryophyta | RE |
| moss, white pin-cushion | *Leucobryum glaucum* | Bryophyta | RE |
| moss, white-tipped | *Hedwigia ciliata* | Bryophyta | RE |
| moss, woodsy mnium | *Mnium cuspidatum* | Bryophyta | CK |
| oak-fern | *Gymnocarpium dryopteris* | Filicophyta | CK |
| polypody, common | *Polypodium virginianum* | Filicophyta | CK |
| riccia, purple-fringed | *Ricciocarpus natans* | Bryophyta | ES |
| riccia, slender | *Riccia fluitans* | Bryophyta | ES |
| shield-fern, marginal or woodfern | *Dryopteris marginalis* | Filicophyta | CK |
| slender Catherinea | *Atrichum angustatum* | Bryophyta | RE |
| sphagnum | *Sphagnum compactum* | Bryophyta | RE |
| sphagnum | *Sphagnum lescurii* | Bryophyta | RE |
| sphagnum | *Sphagnum magellanicum* | Bryophyta | RE |
| sphagnum | *Sphagnum russowii* | Bryophyta | RE |
| sphagnum, boat-leaved | *Sphagnum palustre* | Bryophyta | RE |
| woodfern | *Dryopteris* sp. | Filicophyta | ES |
| woodfern, evergreen | *Dryopteris intermedia* | Filicophyta | CK |
| woodfern, spinulose | *Dryopteris carthusiana* | Filicophyta | CK,ES |

## LOCATION CODES:

CK – Old Woman Creek watershed upstream of the estuary

ES – Old Woman Creek estuary (including watershed within boundaries of NERR)

LE – Lake Erie, principally nearshore waters of Erie County and western Lorain County, Ohio

RE – Regional occurrence, principally Lake Erie watersheds of eastern Erie County and western Lorain County, Ohio

# Appendix E

## Synonyms for Algal Flora and Lower Plants of Old Woman Creek Estuary, Watershed, and Adjacent Waters of Lake Erie

# SYNONYMS FOR ALGAL FLORA AND LOWER PLANTS OF OLD WOMAN CREEK ESTUARY, WATERSHED, AND ADJACENT WATERS OF LAKE ERIE

| SOURCE NOMENCLATURE | CURRENT NOMENCLATURE |
|---|---|
| **DIVISION CYANOPHYTA (blue-green algae)** | |
| *Microcystis incerta* | *Aphanocapsa incerta* |
| **DIVISION CHRYSOPHYTA** | |
| **Class Chrysophyceae (golden-brown algae)** | |
| *Chromulina nana* | *?Ochromonas nana* or *Chromulina nannos* |
| *Dinobryon tabellariae* | *Epipyxis tabellariae* |
| **Class Bacillariophyceae (diatoms)** | |
| *Achnanthes pinnata* | *Achnanthes conspicua* |
| *Actinocyclus normanii* var. *subsalsa* | *Actinocyclus normanii* |
| *Amphiprora ornata* | *Entomoneis ornata* |
| *Amphora ovalis* var. *pediculus* | *Amphora pediculus* |
| *Amphora perpusilla* | *Amphora pediculus* |
| *Amphora submontana* | *Amphora montana* |
| *Anomoeoneis serians* var. *brachysira* | *Anomoeoneis brachysira* |
| *Attheya zachariasii* | *Acanthoceras zachariasii* |
| *Caloneis bacillaris* var. *thermalis* | *Caloneis thermalis* |
| *Caloneis lewisii* | *Caloneis schumanniana* |
| *Cyclotella comta* | *Cyclotella radiosa* |
| *Cyclotella kuetzingiana* | *Cyclotella meneghiniana* |
| *Cymbella minuta* var. *silesiaca* | *Cymbella silesiaca* |
| *Cymbella sinuata* | *Reimeria sinuata* |
| *Cymbella tumida* var. *tumida* | *Cymbella tumida* |
| *Cymbella ventricosa* | *Cymbella minuta* |
| *Diatoma tenue* var. *elongatum* | *Diatoma tenuis* |
| *Diatoma vulgare* | *Diatoma vulgaris* |
| *Epithemia emarginata* | *Epithemia turgida* |
| *Eunotia curvata* | *Eunotia bilunaris* var. *bilunaris* |
| *Eunotia curvata* var. *subarcuta* | *Eunotia bilunarius* var. *mucophila* |
| *Eunotia pectinalis* var. *minor* | *Eunotia pectinalis* |
| *Fragilaria construens* var. *venter* | *Fragilaria construens* f. *venter* |
| *Fragilaria vaucheriae* | *Fragilaria capucina* var. *vaucheriae* |
| *Gomphonema affine* var. *insigne* | *Gomphonema affine* |
| *Gomphonema angustatum* var. *productum* | *Gomphonema angustatum* |
| *Gomphonema bohemicum* | *Gomphonema angustum* |
| *Gomphonema intricatum* | *Gomphonema angustum* |
| *Gomphonema intricatum* var. *bohemicum* | *Gomphonema angustum* |
| *Gomphonema parvulum* var. *exilissima* | *Gomphonema parvulum* |
| *Gomphonema spaerophorum* | *Gomphonema augar* var. *spaerophorum* |
| *Gomphonema subclavatum* | *Gomphonema clavatum* |
| *Melosira ambigua* | *Aulacoseira ambigua* |
| *Melosira binderana* | *Stephanodiscus binderanus* |
| *Melosira distans* var. *alpigena* | *Aulacoseira alpigena* |
| *Melosira granulata* | *Aulacoseira granulata* |
| *Melosira granulata* var. *angustissima* | *Aulacoseira granulata* var. *angustissima* |
| *Melosira islandica* | *Aulacoseira islandica* |
| *Melosira islandica* ssp. *helvetica* | *Aulacoseira islandica* |
| *Melosira italica* | *Aulacoseira italica* |
| *Microsphona potamos* | *Skeletonema potamos* |
| *Navicula aquaeductae* | *Navicula pupula* var. *aquaeductae* |
| *Navicula contenta* var. *biceps* | *Navicula contenta* |
| *Navicula cryptocephala* var. *exilis* | *Navicula cryptocephala* |
| *Navicula cryptocephala* var. *veneta* | *Navicula veneta* |
| *Navicula cuspidata* var. *ambigua* | *Navicula cuspidata* |
| *Navicula cuspidata* var. *cuspidata* | *Navicula cuspidata* |
| *Navicula frugalis* | *Navicula bahusiensis* |
| *Navicula halophila* f. *tenuirostris* | *Navicula halophila* |

| SOURCE NOMENCLATURE | CURRENT NOMENCLATURE |
|---|---|
| *Navicula halophila* var. *tenuirostris* | *Navicula halophila* |
| *Navicula heufleri* var. *leptocephala* | *Navicula erifuga* |
| *Navicula hungarica* var. *capitata* | *Navicula capitata* var. *capitata* |
| *Navicula intermedia* | *Pinnularia intermedia* |
| *Navicula mobiliensis* | *Navicula goeppertiana* var. *monita* |
| *Navicula mutica* var. *tropica* | *Navicula goeppertiana* var. *goeppertiana* |
| *Navicula paucivisitata* | *Navicula molestiformis* |
| *Navicula radiosa* var. *tenella* | *Navicula cryptotenella* |
| *Navicula rhynchocephala* var. *germainii* | *Navicula viridula* var. *germainii* |
| *Navicula salinarum* var. *intermedia* | *Navicula capitatoradiata* |
| *Navicula schroeterii* var. *escambia* | *Navicula schroeterii* |
| *Navicula symmetrica* | *Navicula schroeterii* |
| *Navicula tantula* | *Navicula minima* |
| *Navicula terminata* | *Navicula goeppertiana* var. *goeppertiana* |
| *Navicula tripunctata* var. *tripunctata* | *Navicula tripunctata* |
| *Nitzschia accomodata* | *Nitzschia palea* |
| *Nitzschia actinastroides* | *Nitzschia fruticosa* |
| *Nitzschia apiculata* | *Nitzschia constricta* |
| *Nitzschia communis* var. *abbreviata* | *Nitzschia communis* |
| *Nitzschia dissipata* var. *genuina* | *Nitzschia dissipata* |
| *Nitzschia epiphytica* | *Nitzschia inconspicua* |
| *Nitzschia fromana* | *Nitzschia fonticola* |
| *Nitzschia frustulum* var. *perminuta* | *Nitzschia acidoclinata* |
| *Nitzschia kuetzingiana* | *Nitzschia pusilla* |
| *Nitzschia longissima* | *Nitzschia reversa* |
| *Nitzschia minuta* | *Nitzschia palea* var. *minuta* |
| *Nitzschia parvula* var. *terricola* | *Nitzschia parvula* |
| *Nitzschia philippinarum* | *Nitzschia intermedia* |
| *Nitzschia subrostrata* | *Nitzschia subacicularis* |
| *Nitzschia tarda* | *Nitzschia intermedia* |
| *Nitzschia tryblionella* var. *levidensis* | *Nitzschia levidensis* |
| *Opephora martyi* | *Fragilaria leptostauron* var. *martyi* |
| *Pinnularia brebissonii* | *Pinnularia microstauron* var. *brebissonii* |
| *Pinnularia brebissonii* var. *diminuta* | *Pinnularia microstauron* var. *brebissonii* f. *diminut* |
| *Pinnularia termitina* | *Navicula goeppertiana* var. *goeppertiana* |
| *Rhoicosphenia curvata* | *Rhoicosphenia abbreviata* |
| *Stauroneis phoenicenteron* var. *gracilis* | *Stauroneis phoenicenteron* |
| *Stephanodiscus astraea* | *Stephanodiscus rotula* |
| *Stephanodiscus astraea* var. *minutula* | *Stephanodiscus minutulus* |
| *Stephanodiscus hantzschii* var. *tenuis* | *Stephanodiscus hantzschii* |
| *Stephanodiscus invisitatus* | *Cyclostephanos invisitatus* |
| *Stephanodiscus tenuis* | *Stephanodiscus hantzschii* |
| *Surirella ovata* | *Surirella minuta* |
| *Surirella ovata* var. *pinnata* | *Surirella minuta* |
| *Surirella tenera* var. *nervosa* | *Surirella tenera* |
| *Synedra acus* | *Fragilaria ulna* var. *acus* |
| *Synedra fasciculata* | *Fragilaria fasciculata* |
| *Synedra fasiculata* var. *truncata* | *Fragilaria fasciculata* |
| *Synedra parasitica* var. *subconstricta* | *Fragilaria parasitica* var. *subconstricta* |
| *Synedra pulchella* | *Fragilaria pulchella* |
| *Synedra pulchella* var. *capitata* | *Fragilaria pulchella* |
| *Synedra radians* | *Fragilaria capucina* var. *radians* |
| *Synedra rumpens* | *Fragilaria capucina* var. *rumpens* |
| *Synedra rumpens* var. *familiaris* | *Fragilaria capucina* var. *gracilis* |
| *Synedra tenera* | *Fragilaria tenera* |
| *Synedra ulna* | *Fragilaria ulna* |
| *Synedra ulna* var. 1 | *Fragilaria ulna* var. 1 |
| *Synedra ulna* var. *danica* | *Fragilaria ulna* var. *danica* |
| *Synedra ulna* var. *obtusa* | *Fragilaria ulna* var. *obtusa* |
| *Synedra ulna* var. *oxyrhynchus* | *Fragilaria ulna* var. *oxyrhynchus* |
| *Thalassiosira fluviatilis* | *Thalassiosira weissflogii* |

| SOURCE NOMENCLATURE | CURRENT NOMENCLATURE |
|---|---|
| **DIVISION PYRRHOPHYTA (fire algae)** | |
| **Class Dinophyceae (dinoflagellates)** | |
| *Gymnodinium acidotum* | *Gymnodinium aeruginosun* |
| *Gymnodinium fungiforme* | *Katodinium fungiforme* |
| *Peridinium quadridens* | *Perdiniopsis quadridens* |
| **DIVISION CRYPTOPHYTA (cryptomonads)** | |
| *Sennia parvula* | *Planonephros parvula* |
| **DIVISION CHLOROPHYTA (green algae)** | |
| **Class Chlorophyceae** | |
| *Ankistrodesmus convolutus* | *Monoraphidium convolutum* var. *convolutum* |
| *Ankistrodesmus falcatus* var. *mirabilis* | *Monoraphidium mirabile* |
| *Carteria klebsii* | *Carteria wisconsinensis* |
| *Characium limnetica* | *Korshikoviella limnetica* |
| *Chlamydomonas excavata* | *Chlamydonephris excavata* |
| *Closterium aciculare* | *Closterium aciculare* var. *aciculare* |
| *Crucigenia irregularis* | *Willea irregularis* |
| *Crucigenia rectangularis* | *Crucigeniella rectangularis* |
| *Gloeocystis gigas* | *Chlamydocapsa ampla* |
| *Gloeocystis planctonica* | *Chlamydocapsa planctonica* |
| *Gloeocystis* sp. | *Chlamydocapsa* sp. |
| *Haematococcus lacustris* | *Haematococcus pluvialis* |
| *Kirchneriella subsolitaria* | *Nephrochlamys subsolitaria* |
| *Lagerheimia genevensis* var. *subglobosa* | *Lagerheimia genevensis* |
| *Lagerheimia quadriseta* | *Lagerheimia genevensis* |
| *Pediastrum duplex* var. *clathratum* | *Pediastrum duplex* var. *duplex* |
| *Pediastrum simplex* var. *duodenarium* | *Pediastrum simplex* var. *biwaense* |
| *Pediastrum simplex* var. *simplex* | *Pediastrum simplex* |
| *Protococcus viridis* | *Desmococcus olivaceus* |
| *Scenedesmus abundans* | *Scenedesmus subspicatus* |
| *Scenedesmus abundans* var. *longicauda* | *Scenedesmus subspicatus* |
| *Scenedesmus bijugatus* var. *granulatus* | *Scenedesmus verrucosus* |
| *Scenedesmus ongus* var. *brevispina* | *Scenedesmus brevispina* |
| *Schroederia judayi* | *Ankyra judayi* |
| *Sphaerocystis schroeteri* | *Pseudosphaerocystis lacustris* |
| *Staurastrum gracile* var. *gracile* | *Staurastrum gracile* |
| **DIVISION MYXOMYCOTA (slime molds)** | |
| *Lachnobolus congestus* | *Acryodes incarnata* |
| *Tubifera stipitata* | *Tubifera microsperma* |
| **DIVISION ASCOMYCOTA (ascomycetes)** | |
| *Endothia parasitica* | *Cryphonectria parasitica* |
| *Gnomonia platani* | *Apiognomonia veneta* |
| **DIVISION BASIDIOMYCOTA (basidomycetes)** | |
| *Coriolus versicolor* | *Trametes versicolor* |
| *Irpex cinnamonea* | *Hydrochaete olivacea* |
| *Polyporus adustus* | *Bjerkandera adusta* |
| *Polyporus conchifer* | *Trametes conchifer* |
| *Polyporus gilvus* | *Phellinus gilvus* |
| *Polyporus schweinitzii* | *Phaeolus schweinitzii* |
| *Polyporus sulphureus* | *Laetiporus sulphurous* |
| *Polyporus tephroleucus* | *Oligoporus tephroleucus* |
| *Polyporus versicolor* | *Trametes versicolor* |
| *Polystictus cinnabarinus* | *Pyenoporus cinnibarinus* |
| **DIVISION DEUTEROMYCOTA (imperfect fungi)** | |
| *Helminthosporium teres* | *Drechslera teres* |

| SOURCE NOMENCLATURE | CURRENT NOMENCLATURE |
|---|---|
| **DIVISION MYCOPHYCOPHYTA (lichens)** | |
| *Alectoria chalybeiformis* | *Alectoria nidulifera* |
| *Anaptychia aquila* | *Anaptychia palmulata* |
| *Arthonia radiata swartziana* | *Arthonia radiata* |
| *Biatorella simplex* | *Sarcogyne simplex* |
| *Buellia disciformis* | *Buellia parasema* |
| *Cladonia delicata* | *Cladonia parasitica* |
| *Cladonia silvatica* | *Cladonia arbuscula* |
| *Cladonia sylvatica* | *Cladonia arbuscula* |
| *Lecanora subfusca allophana* | *Lecanora subfusca* |
| *Lecidea enteroleuca* | *Lecidea parasema* |
| *Parmelia borreri rudecta* | *Parmelia rudecta* |
| *Parmelia olivacea* | *Parmelia aspera* |
| *Parmelia quercina* | *Parmelia livida* |
| *Physcia adglutinata* | *Physcia elaeina* |
| *Physcia obscura* | *Physcia ciliata* |
| *Physcia speciosa* | *Anaptychia speciosa* |
| *Physcia tribacia* | *Physcia millegrana* |
| *Placodium aurantiacum* | *Caloplaca aurantiaca* |
| *Placodium cernum* | *Caloplaca cerina* |
| *Pyrenula farrea* | *Pyrenula leucoplaca* |
| *Ramalina calicaris fraxinea* | *Ramalina sinensis* |
| *Ramalina calicaris* | *Ramalina sinensis* |
| *Ramalina fraxinea* | *Ramalina sinensis* |
| *Rinodina sophodes* | *Rinodina tephraspis* |
| *Teloschistes candelarius* | *Xanthoria candelaria* |
| *Teloschistes concolor* | *Candelaria concolor* |
| *Teloschistes polycarpus* | *Xanthoria polycarpa* |
| *Usnea barbata* | *Usnea strigosa* |
| **DIVISION FILICOPHYTA [=POLYPODIOPHYTA] (ferns)** | |
| *Botrychium ternatum* | *Botrychium rugulosum* |
| *Dryopteris austriaca* | *Dryopteris carthusiana* |
| *Dryopteris iaustriaca* var. *intermedia* | *Dryopteris intermedia* |
| *Polypodium vulgara* | *Polypodium virginianum* |