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Caption: Large Indian Civet Viverra zibetha, Tricoloured Munia Lonchura malaccana and Hoya wightii (Medium—pencil crayon on watercolour paper) © Supriya Samanta.
Comprehensive checklist of algal class Chlorophyceae (sensu Fritsch, 1935) for Uttar Pradesh, India, with updated taxonomic status

Sushma Verma1 1, Kiran Toppo2 2 & Sanjeeva Nayaka3 3

1-3 Plant Diversity, Systematics and Herbarium Division, CSIR – National Botanical Research Institute, Rana Pratap Marg, Lucknow, Uttar Pradesh 226001, India.

Abstract: Uttar Pradesh is an active center for algal research in India, but regional checklists are not available. Checklists of algae reported from class Chlorophyceae (sensu Fritsch, 1935) are presented here, with taxonomic status updated per AlgaeBase. The checklist covers algae from 17 types of habitats and includes 749 species, 166 varities and six forma, belonging to four phyla, 11 classes, 26 orders, 64 families and 161 genera. Charophyta is the dominant phylum with 519 infrageneric taxa (species, varities, forma), while Chlorophyta is represented by 389 taxa. Zygnematophyceae is the dominant class with 465 infrageneric taxa under two orders, six families and 29 genera. Cosmarium is the most speciose genus with 163 taxa, followed by Oedogonium (79), Spirogyra (72), and Closterium (54). Our study revealed that of 75 districts in Uttar Pradesh only 40 are explored for algae, with Prayagraj and Lucknow recording 266 and 144 taxa respectively.

Keywords: Asia, aquatic organism, biodiversity, enumeration, gangatic plains, green algae.
INTRODUCTION

Algae are defined as “oxygenic photosynthesisers other than embryophyte land plants” by Cavalier-Smith (2016). They are predominantly aquatically photosynthetic organisms, and are the major primary producers. Algae are ubiquitous in distribution and occur in a wide variety of shapes and sizes. Fristch (1935) classified algae into 11 classes under the plant kingdom, mostly based on the pigments, reserve food and flagella. Modern classification uses few kingdoms and several phyla (Ruggiero et al. 2015). Although Fristch’s classification is obsolete, it is still popular and followed by many authors. AlgaeBase (www.algaebase.org, Guiry & Guiry 2019) currently lists 155,155 species and infraspecific taxa, under 15 phyla and 54 classes. According to Guiry (2012) there are 72,500 species of algae in the world, of which >20,000 are diatoms. From India so far 7,411 taxa of algae are known, which is 15% of the total Indian flora (Mao & Dash 2019).

Freshwater algal studies in India date back 170 years, when Griffith (1849) first reported species of Chara from West Bengal. Several workers thereafter explored the algal flora of different water bodies across India. Uttar Pradesh, the fourth largest and most populous state of India, lies between the geo-coordinates 23.866–30.416N and 77.05–84.15E. The state covers a geographical area of 2,40,922 km² and is divided into 75 districts. Himalayan foothills form the northern border, and the state is largely covered by plains characterized by hard rock strata and plateaus. About 7% (16,826 km²) of the geographical area is covered by forests, which include tropical thorn forest, deciduous and semi-evergreen. A total of 5,712 km² is protected under 24 wildlife sanctuaries, three tiger reserves and one national park. The Ganga, Yamuna, Ramganga, Gomti, Ghaghar, Gandak, Chambal, Betwa, Ken, and Son are some of the major rivers flowing through Uttar Pradesh. The state has at least 36 prominent lakes and numerous ponds. It is notable that 11 wetlands of the state are largely covered by plains characterized by hard rock strata and plateaus. About 7% (16,826 km²) of the geographical area is covered by forests, which include tropical thorn forest, deciduous and semi-evergreen.

Checklist of algal class Chlorophyceae for Uttar Pradesh

Uttar Pradesh state has been explored extensively for green algae, and major works include Rao 1937, 1948; Singh 1938, 1939, 1941, 1945; Randhawa 1946; Mitra 1947; Gupta & Pandey 1950a,b, 1951a;b; Gupta 1956a,b; Venkataraman 1957, 1959; Sarma 1962, 1963; Lakshminarayana 1963; Prasad 1964, 1965, 1978; Prasad & Srivastava 1964; Pandey 1966, 1969; Ahmed 1967; Hortobagyi 1969; Prasad & Dutta 1970a,b; Shukla 1971; Khan & Rawat 1972; Prasad et al. 1973; Sarma & Shyam 1974; Bendre & Kumar 1975; Chaturvedi 1975; Kumar 1975; Prasad & Asthana 1975a,b; Rai & Kumar 1976; Chadha & Pandey 1977; Pal 1977; Chadha & Pandey 1978; Prasad & Jain 1978; Gupta & Pandey 1979; Pandey & Chaturvedi 1979; Prasad & Kumari 1979; Tiwari et al. 1979; Pandey et al. 1981; Prasad & Fatima 1981a,b,c.

The present checklist is based on an extensive review of literature involving over 126 research papers, 10 books, monographs and chapters, 18 dissertations and Ph.D. theses deposited at various universities and research institutes. The entire list is appended as a bibliography. Taxa identified up to species, variety or forma level are included. Taxonomic identities of the taxa were checked on AlgaeBase (www.algaebase.org). Taxa are arranged alphabetically (Table 1) and their hierarchical position is provided separately (Table 2). AlgaeBase is followed for arranging taxa as per their hierarchy, which in turn mostly follows the classification system proposed by Ruggiero et al. (2015). A map of Uttar Pradesh indicating the districts explored for Chlorophyceae is provided in Figure 1.
RESULTS

The compilation of available literature resulted in 979 taxa, reduced to 921 after considering synonyms and deleting unverifiable names. It is notable that Class Chlorophyceae of Fritsch (1935) now falls under four phyla: Charophyta, Chlorophyta, Glaucophyta and Ochrophyta. 921 taxa are distributed under these four phyla, 11 classes, 26 orders, 64 families and 161 genera, 749 species, 166 varieties, and six forma (Table 1). Five names are excluded from the list, as their status were could not be ascertained from Algaebase (pers. com. with Guiry MDR): Arnoldiella glomerata Fritschi; Cladophora furotosa (Griff) Harvey; Draparnaldia indica J.P.Sinha &
Noor; Spirogyra hyalina var. gracilis (Hassall) Kützing; and S. reservoirensis R.N.Singh. The study revealed that phylum Charophyta is most dominant in Uttar Pradesh with 519 infrageneric taxa (species, varieties, forma) under four classes, six orders, 10 families, and 37 genera. Whereas Chlorophyceae is the most diverse phylum with 389 infrageneric taxa under four classes, 17 orders, 51 families, and 120 genera (Table 2). Among the 11 classes Ulovophyceae of phylum Chlorophyta is diverse with six orders followed by Chlorophyceae and Trebouxiophyceae with five orders each. However, Zygnematophyceae of phylum Charophyta is the most dominant class with maximum infrageneric taxa totaling up to 465 under two orders, six families, and 29 genera. It is followed by Chlorophyceae with 305 infrageneric taxa under five orders, 33 families, and 76 genera. Order Chlamydomonadales of phylum Chlorophyta is the most diverse in the state with 17 families, 27 genera, and 61 species and varieties, followed by Sphaeropleales with nine families, 33 genera, and 112 species and varieties. Desmidiaceae (phylum Charophyta) is the diverse family with 16 genera and 277 species and varieties, followed by Hydrodictyaceae with nine genera and 21 taxa, and Chaetophoraceae with seven genera and 29 species and varieties. Cosmarium is the most speciose genera with 163 taxa followed by Oedogonium (79), Spirogyra (72), Closterium (54) while several genera had less than five taxa.

It is observed that algal samples were collected from as many as 17 habitats including ditches, tanks to river. Among them maximum number of Chlorophycean algae belonged to ponds with 621 taxa, followed by lakes (394 taxa) and river (236 taxa). The study revealed that out of 75 districts in Uttar Pradesh, algal exploration has been carried out only in 40 districts (Figure 1). The district Prayagraj (= Allahabad) recorded the maximum number of taxa (266 nos.) followed by Lucknow (144 nos.), Gonda (141 nos.), and Saharanpur (139 nos.). The species, variety or forma epithet of following taxa are based on the prominent localities in the state - Bulbochaete allahabadensis, Cosmarium awadhense, Oedogonium areolatum var. gorakhporense, Pleurotaenium varanasiense, Scenedesmus arcuatus var. allahabadensis, Spirogyra chakiaoisens var. lucknowensis, S. daedalea f. oudhensis, S. oudhensis, Volvox rousseletii var. lucknowensis, Zygnema gorakhporense, and Z. oudhense.

It is clear from the study that 35 districts of Uttar Pradesh are either unexplored or the literature unavailable. The major algal research centres in Uttar Pradesh are mostly located in Banaras Hindu University, Varanasi; University of Allahabad, Allahabad; University of Lucknow and CSIR-NBRI, Lucknow. Therefore, much attention was paid to easily accessible region in and around Allahabad, Lucknow, and Prayagarj while other districts are neglected. Among unexplored districts Lakhimpur, Siddarth Nagar, and Maharajganj are in the Tarai region of the state, which are wetter regions due to monsoon flooding. The district Sonbhadra located in the south-east of Uttar Pradesh is a biodiversity rich part of the state but so far no records of algae available from here. The south-western part of Uttar Pradesh can be considered as potential region under explored for algal flora. This region consists of districts such as Agra, Etawah, and Kannauj with wetlands declared as protected areas such as Patna Wildlife Sanctuary, Sarasai Nawar Wetland, Lakh Bahosi Sanctuary, National Chambal Wildlife Sanctuary, and Sursarvarov Sanctuary. Currently, one each species is reported from Agra and Kannauj districts.

CONCLUSION

The enumeration of 921 taxa under phylum Chlorophyta covering only 40 districts of Uttar Pradesh in the present study is certainly remarkable indicating the presence of rich diversity of this phylum in the state. It can be noted that earlier studies by Gupta et al. (2012) and Suseela et al. (2015) have estimated low number of algae from the state. This rich diversity may be due to the presence of numerous small and large water bodies with diverse physico-chemical characteristics and seasonal variations. Floristic exploration in the unexplored areas of the state could be an important step towards unraveling the true representation of the algal wealth in the state.

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Table 1. Checklist of Chlorophycean (sensu Fritsch, 1935) taxa recorded from Uttar Pradesh. The names in the brackets are originally annotated names which are now synonyms: Habitat: A—Canal | B—Dam | C—Ditch | D—Lake | E—Paddy Field | F—Pond | G—Pool | H—Puddle | I—Reservoir | J—River | K—River Bank | L—Sewage | M—Soil | N—Stone | O—Stream | P—Tank | Q—Water Fall. Localities: AGR—Agra | AYO—Ayodhya | BAH—Bahrain | BBK—Barabanki | BDN—Badaun | BLI—Ballia | BLR—Balrampur | BRY—Bareilly | BST—Basti | DEO—Deoria | FRK—Farrukhabad | GKP—Gorakhpur | GON—Gonda | GZB—Ghaziabad | HMP—Hamirpur | HRD—Hardoi | JHS—Jhansi | JLN—Jalaun | JKN—Kanpur | KNP—Kaushambi | LKO—Lucknow | LTP—Lalitpur | MBH—Mahoba | MAU—Mau | MRD—Moradabad | MRT—Meerut | MZP—Mirzapur | PLB—Pilibhit | PRG—Prayagraj | PRT—Pratapgarh | RBL—Raebareli | SHP—Shahjahanpur | SHR—Saharanpur | SKN—Sant Kabir Nagar | STP—Sitapur | SVT—Shravasti | SUL—Sultanpur | VRN—Varanasi.

| Currently accepted name | Habitat | Localities |
|-------------------------|---------|------------|
| Actinastrum fluviatile (J.L.B. Schröder) Fott (=Actinastrum hantzschii var. fluviatile J.B.L. Schroder) | F | HMR |
| 2 Actinastrum hantzschii Lagerheim | F, D | BDN, BLR, MHB, MRD, RMP, SHP, FRK |
| 3 Actinotaenium colpoptera (Brébisson ex W. Archer) Compère (=Cosmarium viride Joshua) | D, F | PRG |
| 4 Actinotaenium cucurbitinum (Bisset) Teiling (=Cosmarium cucurbitinum (Bisset) Lütkemüller) | D, F | PRG |
| 5 Actinotaenium globosum (Bulnheim) Kurt Förster ex Compère (=Cosmarium globosum Bulnheim) | D, F | PRG |
| 6 Actinotaenium inconspicuum (West & G.S. West) Teiling | G | BRY |
| 7 Actinotaenium turgidum (Brébisson ex Ralfs) Teiling (=Cosmarium turgidum Brébisson ex Ralfs) | F, K, D, J | BBK, BRY, JLN |
| 8 Acutodesmus acutiformis (Schröder) Tsarenko & D.M. John (=Scenedesmus acutiformis Schröder) | B, D, F, J | KNP, LKO, SHR |
| 9 Aegagropila calcicola (F.E. Fritsch) C. Boedeker (=Cladophorella calcicola Fritsch) | A, D, F, H | BLR |
| 10 Aegagropila linnaei Kützing (=Cladophora aegagropila (Linnaeus) Trevisan; Cladophora profunda var. nordstedtiana Brand) | A, D, F, H | PRG |
| 11 Aegagropilopsis clavuligera (Grunow) Boedeker (=Cladophora clavuligera Grunow) | A, D, F, H | BLR |
| 12 Ankistrodesmus densus Korshikov (=Ankistrodesmus spiralis var. fasiculatus G.M. Smith) | D, F, J, K, I | MHB, SHR |
| 13 A. folcatus (Corda) Rafls | I, F, M | PRG, JLN, LKO, LTP, MHB, SHR |
| 14 A. folcatus var. radiatus Lemmermann | M | PRG, BBK, JLN, KSM, KNP, LKO, SUL, VRN |
| 15 A. sigmoideus (Rabenhorst) Brühl & Biswas | D | LTP |
| 16 A. spiralis (W.B. Turner) Lemmermann | J, F, K, I | BAH, LKO, LTP, MHB, SHR |
| 17 Aphanochaete magnum Godward | F | KNP, LKO |
| 18 A. polychaete (Hansgirg) F.E. Fritch | F | DEO, GKP |
| 19 A. repens A. Braun | F | PRG, HMR, LKO, VRN, |
| 20 Arnoldiella chelonum (Collins) C. Boedeker (=Basicladia chelonum (Collins) W.E. Hoffmann & Tilden) | J | KNP |
| 21 Arthrodesmus arcaucus var. minus Scott & Prescott | F, D | KLD |
| 22 Asterococcus limneticus G.M. Smith | K | BAH |
| 23 Balticola droebakensis (Wollenweber) Droop (=Haematococcus droebakensis Wollenweber) | F, J | VRN |
| 24 Batryococcus braunii Kützing | I, F | PRG, BAH, LKO, SHR, STP |
| 25 Bulbochaete affinis Hirn | D | PRT |
| 26 B. allahabadensis G.L. Tiwari | A, C | PRG |
| 27 B. indicus P. Sarma (=Bulbochaete pseudoreolata Kargupta) | A, K, J | BAH, GON |
| 28 B. intermedia De Bary ex Hirn | D | PRT |
| 29 B. johnsoensis Wittrock ex Hirn | D | PRT |
| 30 B. nana Wittrock ex Hirn | F | PRG |
| 31 B. polyandria Cleve ex Hirn | D | PRT |
| 32 B. rectangularis Wittrock ex Hirn | D | PRT |
| 33 B. repanda Wittrock ex Hirn | D | PRT |
| 34 B. reticulata Nordstedt | D | PRT |
| 35 B. triangularis C.-C. Jao | D | PRT |
| 36 B. varians Wittrock ex Hirn | C, D | PRT, RBL |
| Currently accepted name                                                                 | Habitat | Localities |
|-----------------------------------------------------------------------------------------|---------|------------|
| 37 B. nordstedtii Wittrock ex Hirn                                                      | F, A, P | BAH, GON   |
| 38 *Carteria intermedia* A.K. Mitra                                                      | E, F    | PRG        |
| 39 C. junzensis Pascher & Jahoda                                                        | E, J    | PRG        |
| 40 *Cephalaeuros viriscens* Kunze ex E.M. Fries                                         | J       | LKO        |
| 41 *Chaetopeltis orbicularis* Berthold                                                   | A, J    | MHB        |
| 42 *Chaetophora lobata* Schrank (=Chaetophora incrassata Hazen)                         | B, F    | DEO, GKP   |
| 43 *Chaetophoropsis attenuata* (Hazen) B. Wen Liu, Qian Xiong, X. Dong Liu, Z. Yu Hu & G. Xiang Liu (=Chaetophora attenuata Hazen) | F       | PRG, BAH, DEO, GKP, LKO |
| 44 C. elegans (Roth) B. Wen Liu, Qian Xiong, X. Dong Liu, Z. Yu Hu & G. Xiang Liu (=Chaetophora elegans (Roth) C. Agardh) | F, K    | PRG, BBK, HRD, MALU, RBL, BRY, SUL, VRN |
| 45 C. pisiformis (Roth) B. Wen Liu, Qian Xiong, X. Dong Liu, Z. Yu Hu & G. Xiang Liu (=Chaetophora pisiformis (Roth) C. Agardh) | K, D, P | KNP, LKO, MHB |
| 46 C. pisiformis var. hamata (C.-C. Jao) B. Wen Liu, Qian Xiong, X. Dong Liu, Z. Yu Hu & G. Xiang Liu (=Chaetophora pisiformis var. hamata C.-C. Jao) | K, F, D, P | DEO, GKP |
| 47 *Chaetosphaeridium globosum* (Nordstedt) Klebahn                                    | F, J    | MHB        |
| 48 C. ovalis G.M. Smith                                                                  | F, J    | MHB        |
| 49 C. pringsheimii Klebahn                                                              | F       | DEO, GKP   |
| 50 *Chara bharadwaiae* Y.S.R.K. Sarma & M. Khan                                         | D, F, O, J | SUL    |
| 51 C. braunii C.C. Gmelin                                                               | D, F, O, J | BRY    |
| 52 C. contraria A. Braun ex Kützing                                                      | D, F, O, J | BRY    |
| 53 C. corallina Klein ex C.L. Willdenow                                                  | D, F, O | SUL        |
| 54 C. diaphana (F.J.F. Meyen) R.D. Wood (=Chara zeylanica var. diaphana (F. Meyen) R.D. Wood) | D, F, O, J | BRY    |
| 55 C. fibrosa C. Agardh ex Bruzelius                                                     | A, D, F, O, J | BRY, SUL |
| 56 C. globularis Thullier                                                                | D, F, O, J | BRY, SUL |
| 57 C. hookeri A. Braun (=Chara fibrosa var. hookeri (A. Braun) R.D. Wood)               | D, F, I  | SUL        |
| 58 C. hydropithys Reichenbach (=Chara fibrosa var. hydropithys (Reichenbach) R.D. Wood) | B, D, F, O, J | BRY, SUL |
| 59 C. nudo B.S. Pal                                                                     | D, O, J  | BRY        |
| 60 C. setosa Klein ex C.L. Willdenow                                                     | D, F, O, J | BRY    |
| 61 C. vulgaris Linnaeus                                                                  | D, F, O, J | BRY, SUL |
| 62 C. zeylanica Willdenow                                                               | D, O, J  | BRY, MRD, SUL |
| 63 *Characiellopsis anophelesis* (M.O.P. Iyengar & M.O.T. Iyengar) M.O.P. Iyengar (=Charium anopheles M.O.P. Iyengar) | A, O    | PRG        |
| 64 *Characium acuminatum* A. Braun                                                      | F, J, O  | PRG        |
| 65 C. orissicum Philippine                                                             | A, O    | PRG        |
| 66 C. pringsheimii A. Braun                                                             | J, P    | KNP        |
| 67 *Chlamydocapsa planctonica* (West & G.S. West) Fott (=Gloecystis gigas (Kützing) Lagerheim, Gloecystis planctonica (West & G.S. West) Lemmermann) | D, F, P | KSM, LKO, MHB |
| 68 *Chlamydomonas angulosa* E.O. Dill                                                   | E, F, H  | PRG        |
| 69 C. debaryana var. atactogama (Korshikov) Gerloff (=Chlamydomonas atactogama Korshikov) | A, J, F, L | KNP    |
| 70 C. globosa J.W. Snow                                                                  | J, F, D  | LKO, VRN   |
| 71 C. gloerogama Korshikov                                                              | F       | PRG        |
| 72 C. grandistigma A.K. Mitra                                                           | E, J, F  | PRG        |
| 73 C. indica A.K. Mitra                                                                 | E, F, A  | PRG        |
| 74 C. intermedia Chodat                                                                  | E, J     | PRG        |
| 75 C. iyengarii A.K. Mitra                                                              | D       | PRG        |
| 76 C. pertusa Chodat                                                                    | C, F     | KNP        |
| 77 C. reinhardti P.A. Dangeard                                                          | F, L     | KNP        |
| 78 C. sphagnicola (F.E.Fritsch) F.E. Fritsch & H. Takeda                               | D, F     | KNP        |
| Currently accepted name        | Habitat | Localities                        |
|-------------------------------|---------|-----------------------------------|
| C. sphagnophila Pascher       | F, J    | SUL                               |
| C. sphagnophila var. indica   | E, F    | PRG                               |
| Chlorella vulgaris Beyerinck   | F, K, J  | PRG, JHS, JLN                     |
| Chlorochytrium immane Cohn    | J       | PRG                               |
| Chlorococcus infusionum       | D, F, J  | BAH, JLN, PRG, AYO, MHB           |
| C. vitosum Printz             | K       | FRK                               |
| Chlorogonium elongatum        | F, H    | MRZ                               |
| C. spirales Scherffel & Pascher| J      | VRN                               |
| Choricystis parasitica        | F       | PRG                               |
| Cladophora cristata Kützing   | A, D, F, H| PRG, BLR, SUL                    |
| C. flexuosa (O.F. Müller) Kützing| J     | BLR                               |
| C. fructo (O.F. Müller ex Vahl) Kützing| J | PRG, JLN, VRN                   |
| C. glomerata (Linnaeus) Kützing| J, A  | PRG, BDN, BRY, BAH, BLR, SHR, SUL, VRN |
| C. gracilis Kützing           | A, D, F, H| BLR                               |
| C. intermedia Foslie          | A, D, F, H| BLR                               |
| C. rivularis (Linnaeus) Kützing| A, D, F, H, P| PRG, LKO, VRN, BLR               |
| Closteriopsis longissima      | F       | PRG                               |
| C. acerosum Ehrenberg ex Ralfs| K, J, F, D| PRG, BAH, LTP, LKO, PLB, MRT, VRN |
| C. acerosum var. elongatum    | D, E, F, J| PRG                               |
| C. acutum Brébisson           | C, F    | GZB, PLB, SHR                      |
| C. baiyiyamum (Brébisson ex Ralfs) Brébisson| F | BRY                               |
| C. braunii Reinsch            | F       | PLB                               |
| C. calosporum var. malus      | D, B, K, J| PRG, BAH, LTP, LKO               |
| C. calosporum Wittrock        | D, B, F, J| PRG, BAH, LTP, LKO               |
| C. closterioides (Ralfs) A. Louis & Peeters (=Closterium libellula Focke ex Nordstedt) | E | PRG                               |
| C. cornu Ehrenberg ex Ralfs   | F       | BRY                               |
| C. cornu var. javanicum Gutwinski| F | BRY                               |
| C. croasdaleae A.K.M.N. Islam | D       | BRY                               |
| C. delpontei (Klebs) Wolle    | J, D    | BRY                               |
| C. diamae Ehrenberg ex Ralfs  | F, D    | PRG, BAH, BRY, MHB                |
| C. diamae var. arcuatum       | A       | BBK                               |
| C. diamae var. minus F. Ducellier| F, D  | MHB                               |
| C. diamae var. pseudoliana J. Roy Willi Krieger (=Closterium pseudoliana J. Roy) | D, F | MHB                               |
| C. ehrenbergii Meneghini ex Ralfs| D, F  | PRG, BAH, BBK, GZB, VRN           |
| C. gracile Brébisson ex Ralfs | C, D, F | MHB                               |
| C. incurrvum Brébisson        | B, I, F | SHR                               |
| C. intermedium Ralfs          | F, D    | BRY                               |
| C. intermedium var. erectum   | F, D    | BRY                               |
| C. jenneri var. cythia De Notaris Petlovany (=Closterium cythia De Notaris) | K, F | BBK, BRY, PLB                     |
| C. juetzingii Brébisson       | F, B, K | PRG, MFB, LTP, LKO                |
| C. lagoense Nordstedt         | F, A    | BRY                               |
| Currently accepted name | Habitat | Localities |
|-------------------------|---------|------------|
| 121 C. lanceolatum Kützing ex Ralfs | B, K, J | LKO |
| 122 C. lanceolatum var. parvum West & West | B, K, J | LKO |
| 123 C. jebleinii Kützing ex Ralfs | K, D, F, F | PRG, GON, GKP |
| 124 C. lineatum Ehrenberg ex Ralfs | F | BAH |
| 125 C. littorale F. Gay | D, B, K, F, J | GON, JHS, LKO |
| 126 C. longissima var. tropica West & G.S. West | F | PRG |
| 127 C. lunula Ehrenberg & Hemprich ex Ralfs | J | LKO |
| 128 C. lunula var. biconvexus Schimidie | J | BRY |
| 129 C. lunula var. massartii (De Wild.) Willi Krieger | J | BRY |
| 130 C. moniliferum Ehrenberg ex Ralfs | K, A, D, F, J | PRG, GZB, GKP, MHB, BRY, BDN, RMP, SHP |
| 131 C. navicula (Brébisson) Lütkemüller | H | SUL |
| 132 C. nematosides var. tumidum G.S. West | F, J | SHP |
| 133 C. parvulum Nägeli | D, J, P | GON, KNP, LKO, VRN, |
| 134 C. parvulum var. angustatum West & G.S. West | D, P | GON, KNP, LKO |
| 135 C. permerosum F. Gay | D, K, B | JHS, LKO, SKN |
| 136 C. pleurodermatum West & G.S. West | J | BRY |
| 137 C. porrectum Nordstedt | F, P | BBK, BRY, KNP |
| 138 C. porrectum var. angustatum West & G.S. West | F, P | LKO |
| 139 C. praekomum Frébisson | F, H | BRY |
| 140 C. pritchardianum W. Archer | D, F, J, K | GZB, GKP, JHS, LKO |
| 141 C. pusillum Hantzsch (=Closterium pusillum var. monolithum Wittrock) | J, M | BRY, VRN |
| 142 C. ralfsii Frébisson ex Ralfs | F | BRY |
| 143 C. ralfsii var. hybridum Rabenhorst | F | BRY |
| 144 C. retemarginatum A.M. Scott & Prescott | D, J | LKO |
| 145 C. rectimarginatum var. maius N.D. Kamat | D, J | JHS, MHB |
| 146 C. recurvum Prescott | D | GON |
| 147 C. striposum Frébisson | F, H, D | BRY |
| 148 C. tumidum L.N. Johnson | K | PRG, GON, VRN |
| 149 C. turgidum Ehrenberg ex Ralfs | F, J | BAH, JHS |
| 150 C. venus Kützing ex Ralfs | F, J | PRG, LKO |
| 151 Coccomyxa subsphaerica Chodat & Jaag | F | PRG |
| 152 C. subsphaerica var. terrestris A. Mitra | F | PRG |
| 153 Coelastrum astroides De Notaris | F | SHR |
| 154 C. cambricum var. intermedium (Bohlin) G.S. West | B, D, J | JHS, LTP, MHB, SHR |
| 155 C. cambricum W. Archer | D | AGR, BST, KSM, LTP, MHB, SHR |
| 156 C. microporum Nägeli | F | PRG, GZB, JHS, KNP |
| 157 C. proboscideum Bohlin | K, F, D, P | JHS, LKO |
| 158 C. verrucosum (Reinsch) Reinsch (=Coelastrum morus West & G.S. West) | I, F | SHR |
| 159 Coenocyrtis asymmetrica Komárek | I | SHR |
| 160 Coleochaete conchata K. Möbius | F | DEO, GKP |
| 161 C. irregularis Pringsheim | A | PRG, BBK |
| 162 C. nitellum Jost | J | MHB |
| 163 C. orbicularis E.G. Pringsheim | J, A, F | PRG, LKO |
| 164 C. pseudosulcata Gauthier-Liebre | D, P | BBK, MHB |
| 165 C. pulvinata A. Braun | D, F | DEO, GKP |
| Currently accepted name | Habitat | Localities |
|-------------------------|---------|------------|
| C. pulvinata var. minor A. Braun | F | DEO, GKP |
| C. scutata Brébisson | F | BAH, GKP, KNP, MHB, SUL |
| C. solute (Brébisson) Pringsheim | D | BRY, GON, MHB |
| C. soluta var. minor Hansgirg | D, F | DEO, GKP |
| Comasiella arcuata var. platydisca (G.M. Smith) E. Hegewald & M. Wolf (=Scenedesmus arcuatus var. platydisca G.M. Smith) | J | KNP |
| Conochaete comosa Klebahn | F, J | PRT |
| Cosmarium abbreviatum Raciborski | B | LTP |
| C. amoenum Brébisson ex Ralfs | F | PRG |
| C. amoenum var. medioaeve Nordstedt | D, F | PRG |
| C. anceps P. Lundell | F, J | BRY, PLB |
| C. angulatum (Perty) Rabenhorst | D | PRG |
| C. angulosum Brébisson | F, D, J, K | PRG |
| C. angulosum var. concinnum (Rabenhorst) West & G.S. A673West | F, D, K | BST, LTP, SKN |
| C. angulosum var. eustroides (Delporte) Krieger & Gerloff | D | PRG |
| C. askenasyi Schmidie | D, J | GON, SHR |
| C. auriculatum Reinsch | D, P | PRG, BAH, GON, LKO |
| C. auriculatum var. bogoriense C. Bernard (=Cosmarium subauriculatum (C. Bernard) Bourrely; Cosmarium subauriculatum var. bogoriense (C. Bernard) Bourrely) | D | PRG |
| C. awadhense B.N. Prasad & R.K. Mehrotra | F, J | GZH, GON, JHS, LKO, SKN |
| C. baileyi Wolle (=Cosmarium depressum Bailey) | B, D, F, J | PRG, BBK, GKP, LKO |
| C. bengalense W.B. Turner | D, F, J | PRG |
| C. bioculatum Brébisson ex Ralfs | D, F | PRG |
| C. bioculatum var. hians West and G.S. West | F | PRG |
| C. biretum Brébisson ex Ralfs | F, D | PRG |
| C. bituberculatum F.E. Fritsch & Rich | D, J | PRG, SHP |
| C. blyti Wille | J | PRG, BST, MAU, DEO |
| C. botryts Meneghini ex Ralfs | J | BBK |
| C. botryts var. medioaeve West | I, J | SHR |
| C. botryts var. paxillosporum West & G.S. West | D | PRG |
| C. braunii Reinsch | F, J | BRY |
| C. broomei Thwaites ex Ralfs | J, I | PRG, HMR |
| C. circulare Reinsch (=Cosmarium lundelii var. circulare (Reinsch) Willi Krieger) | A, D, F | GKP, PRG, MRT, PLB |
| C. constrictum Brébisson ex Ralfs | D, J | PRG, LKO, SHP |
| C. connatum var. depressum Irene-Marie | D | PRG |
| C. conservum Rafs | F | PRG |
| C. conservum var. latum (Brébisson) West & G.S. West | D, F | PRG |
| C. conservum var. scotti Crosdale & A.M. Scott | F | PRG |
| C. constrictum Delporte | D | PRG |
| C. contractum O. Kirchner | F, J | KNP |
| C. contractum var. minutum (Delporte) Coesel | J | SHP |
| C. contractum var. pachydermum A.M. Scott & Prescott | F, J | JHS |
| C. crenatum Rafs ex Ralfs (=Cosmarium ordinatum E. Larsen; Euastrum sinuosum Kößling) | C, F | BST, PRG, SHR |
| C. cucumis Corda ex Ralfs | F, D | GKP |
| C. cucurbitinum var. truncatum Willi Krieger | D, F | BST, JHS |
| C. cuneatum Joshua | D, F | BRY |
| Currently accepted name                        | Habitat | Localities |
|-----------------------------------------------|---------|------------|
| C. cyclicum P. Lundell                         | C, D    | SHR        |
| C. cyclicum var. nordstedtiarius (Reinsch)     | D, J    | BRY        |
| C. decoratum West & G.S. West                 | I, D, F | BST, GON, SHR, SKN |
| C. depressum var. apertum (W.B. Turner) M. Hirano | J, H, B | JHS        |
| C. difficilie Lütkemüller                     | F       | SHR        |
| C. divergens Krieger                          | D, F, J | PRG        |
| C. dubium O. Borge                            | F       | MHB        |
| C. formosulum Hoff                            | F, D    | PRG, GON   |
| C. formosulum var. nathorstii (Boldt) West & G.S. West | F, D    | GKP        |
| C. furcataspernum West & G.S. West            | I, K    | BBK        |
| C. garrense J. Roy & Bisset                   | F       | SHR        |
| C. gonioides West & G.S. West                 | B, F    | GZB, MRD   |
| C. granatum Brébisson ex Ralfs                | K, D, J | PRG, BRY, HMR, LKO |
| C. granatum var. nordsdthii Hansgirg          | H       | MRD        |
| C. granatum var. occelatum West & G.S. West   | K, D, J | PRG        |
| C. granatum var. rotundatum Willi Krieger     | B, F    | SHR        |
| C. hammeri Reinsch                           | F       | PRG, GKP, BRY, MAU, DEO |
| C. hammeri var. homalodermum (Nordstedt) West & G.S. West | A, F    | BAH        |
| C. hammeri var. Schmilouci Grönblad & A.M. Scott | F       | PRG, GKP   |
| C. humile (Nordstedt) De Toni                 | B, F    | BBK        |
| C. impressulum Elfving                       | B, K, D, F | PRG, BAH, SHR |
| C. isthmochondrium Nordstedt                 | B, F    | BRY        |
| C. javanicum Nordstedt (=Cosmarium macculatum W.B. Turner) | K, D, J | GKP, HMR, STP |
| C. javaneve Rabenhorst                       | D, J    | PRG, SHR   |
| C. logiense Bisset                           | D, B    | PRG        |
| C. lundellii Delponte                        | D, F    | PRG, GZB, LTP, PRT |
| C. lundellii var. coruptum (W.B. Turner) West & G.S. West (=Cosmarium corruptum W.B. Turner) | F, J    | LKO, MHB, PRG |
| C. lundellii var. ellipticum West & G.S. West | D       | PRG, LKO   |
| C. lundellii var. subellipticum Messikommer   | D, F    | PRG, BST, BBK, GKP, LKO |
| C. mangeratum (P. Lundell) J. Roy & Bisset    | K, D, F | PRG, LKO   |
| C. medioscrobiculatum var. egranulatum Gutwinski | D       | PRG        |
| C. meneghinii Brébisson ex Ralfs              | C, D    | PRG, SHP   |
| C. miniota B.N. Prasad & R.K. Mehrotra        | D       | MHB        |
| C. miscellum Skuja                           | K, F    | BAH        |
| C. moniliforme Ralfs                          | D, F    | PRG, GZB, LKO, MHB, SKN |
| C. moniliforme var. indentatum A.M. Scott & Grönblad | D       | PRG        |
| C. nitidulum De Notaris                       | A, D, F | BAH, GKP, JHS |
| C. nitidulum var. minutum Prescott            | D       | PRG        |
| C. norimbergense Reinsch                     | K, D, F | PRG, BAH   |
| C. notabile Brébisson                         | F       | BRY        |
| C. notabile var. medium (Gutwinski) Willi Krieger & Gerloff | F       | BRY        |
| C. nymannianum Grunow                         | F       | PLB        |
| C. oselotum (Hantsch) Reinsch                 | A, K, D, F | PRG, BAH   |
| C. oselotum var. sitvense Gutwinski           | A, K, F, J | PRG, BAH   |
| C. obtusatum (Schmidle) Schmidle              | D, F    | PRG        |
| Currently accepted name | Habitat | Localities |
|-------------------------|---------|------------|
| C. obtusatum var. undulatum | D | PRG |
| C. ordinatum var. borgei | B, F | LTP |
| C. pachydermum | D, J | PRG |
| C. pachydermum var. aethiopicum (West & G.S. West) | D, J | BST, BAH, HM, LKO |
| C. pachydermum var. minus | D | PRG |
| C. phaseolus Brébisson ex Rafs | D | BBK |
| C. phaseolus var. amphalum (Schaarschmidt) | D | SHR |
| C. phaseolus var. subireme | F | BRY |
| C. polygonum (Nägeli) | D, F | BST, LKO, MHB |
| C. porteannum var. mojac Scott & Prescott | D, F | BST |
| C. porteannum var. nephroideum Wittrock | D, F | BST, JHS, SKN |
| C. porteannum W. Archer | D, F | PRG, BST, MHB |
| C. pseudobirenum Boldt | D, J | PRG |
| C. pseudobroomei var. compressum G.S. West | D, J | PRG |
| C. pseudobroomei var. madagascariense West and G.S. West | D, J | PRG |
| C. pseudobroomei Wolle | D, J | PRG |
| C. pseudoconnatum Nordstedt | D, F | BST |
| C. pseudogranatum Nordstedt | F | LKO, SHR |
| C. pseudopachydermum Nordstedt | F | STP |
| C. pseudopachydermum var. incrassatum Fritsch & M.F. Rich | F | STP |
| C. pseudopachydermum var. angustius Nordstedt | D, F | PRG |
| C. pseudopyramidatum P. Lundell | C, D | BST |
| C. pseudopyramidatum var. lentiferum W.R. Taylor | D | SHR |
| C. punctulatum Brébisson | K, D | BAH, BST, MHB, MRZ, SKN |
| C. pyramidatum Brébisson ex Rafs | C, K, F, D | BAH, BST, JHS |
| C. quadrum Rafs ex Rafs | D, F | SHR |
| C. quadriforme P. Lundell | D, H | BRY |
| C. quadrum P. Lundell | D, F | BST, GKP, PLB, SKN |
| C. quadrum var. subulatum (Nordstedt) West & G.S. West (=Cosmarium morganitatum var. subulatum (Nordestedt) Krieger) | K, D, F | SHR |
| C. quinarium Nordstedt | D, F | PRG, BST |
| C. radiosum Wolle | A, D, F | MRT, PLB |
| C. ralfsi Brébisson ex Rafs | A | BRY |
| C. regnellii | F | BRY |
| C. reniforme (Raf) W. Archer | D, F, J | PRG, BAH, BST, SKN |
| C. reniforme var. compressum Nordstedt | D | PRG |
| C. retusiforme var. elevatum West & G.S. West | A, K, D | BAH, GZB |
| C. repandum Nordstedt | F, J | SHR |
| C. retusiforme (Will) Gutwinski | K, F | BAH |
| C. scabrum W.B. Turner | D, F | PRG, PLB |
| C. seelyanum Wolle | K, I, F | SHR |
| C. sexangulare P. Lundell | K, F | PRG, BAH |
| C. sexnotatum Gutwinski | K, J, F | JHS, PLB |
| C. speciosum P. Lundell | F, J | BST, GON, PLB |
| Currently accepted name | Habitat | Localities |
|-------------------------|---------|------------|
| 300 C. striolatum (Nägeli) W. Archer | D | PRG |
| 301 C. subalatum West & G.S. West | B, D, F | JHS, LKO |
| 302 C. subasculatulum var. truncatum West & G.S. West | D | PRG |
| 303 C. subcostatum Nordstedt | B, D | PRG, LKO |
| 304 C. subcrenatum Hanzsch | D, F | PRG, BST, LKO, MHB |
| 305 C. subimpressulum Borge | D, F | PRG |
| 306 C. subporrectum Nordstedt | D, F | PRG, PLB |
| 307 C. subspeciosum Nordstedt | D, F | PRG |
| 308 C. subtransiens Croasdale | F, H | BRY |
| 309 C. subtumidum Nordstedt | D | PRG |
| 310 C. subtumidum var. klebsii (Gutwinski) West & G.S. West | D | PRG |
| 311 C. tenue W. Archer | F, J | JLN, MHB |
| 312 C. tinctum Ralfs | D, F | BRY |
| 313 C. tinctum var. intermedium Nordstedt | D, F | BRY |
| 314 C. tinctum var. subretusum Nordstedt | F | BRY |
| 315 C. trachypleurum P. Lundell | D, F | PRG |
| 316 C. trilobulatum Reinsch | D, F, J | PRG, SHR |
| 317 C. tumidum P. Lundell | D | GKP |
| 318 C. turpinii Brébisson | D, F | MHB, SKN, STP |
| 319 C. undulatum Corda ex Ralfs | F | PRG |
| 320 C. undulatum var. minutum Wittrock | D, F | PRG |
| 321 C. venustum (Brébisson) W. Archer | D | PRG |
| 322 C. vermae B.N. Prasad & R.K. Mehrotra | F | BST |
| 323 C. vexatum (Schmidle) Migula | D | PRG |
| 324 C. viride var. compressum Taft | F | PRG |
| 325 C. vittosum Scott & Grönlund | D | BBK |
| 326 C. vittosum var. orientale A.M. Scott and Grönlund | D | LKO |
| 327 C. westii C. Bernard (=Cosmarium turigida var. westii (C. Bernard) Krieger & Gerloff) | B | PRG, BAH |
| 328 C. blythii var. novae-sylvarum West & G.S. West | B, D, J | PRG, LTP |
| 329 C. impressum var. cremulatulatum (Nägeli) Willi Krieger & Gerloff | B, K, F | BAH |
| 330 C. mediocroscubulatum West & G.S. West | D | PRG |
| 331 C. ochthodes Nordstedt | J | BST, SHR |
| 332 C. quadrum var. andamanicum B.N. Prasad & P.K. Misra | D | BBK, BST, HMR |
| 333 C. subaspectiosum var. validius Nordstedt | D, F | PRG |
| 334 C. subturgidum f. minus Schmidle (=Cosmarium turigidi var. minus (Reinsch) Schmidle) | F | VRN |
| 335 Cosmolacium constrictum (W. Archer) W. Archer ex Joshua | D | LKO |
| 336 Crucigenia fenestrata (Schmidle) Schmidle | F | GBZ, MRT, SHR |
| 337 C. mitrill G.L. Tiwari & D.C. Pandey | F, L | PRG |
| 338 C. quadrata Morren | D, J | PRG, LKO |
| 339 C. tetraptera (Kirchner) Kuntze | D, F, J | LKO, LTP, SHR |
| 340 Ctenocephalus circinatus Borriz (=Gongrosira circinata (Borzili) Schmidle) | F | LKO |
| 341 Cylindrocapsa geminella var. minor Hansgirig | F | SHR |
| 342 C. geminella Wolle | D, F, P | PRG, MHB |
| 343 C. involuta Rein | F | PRG |
| 344 C. oedogonioides M.S. Randhawa | D, F | BLR |
| Currently accepted name                      | Habitat | Localities |
|---------------------------------------------|---------|------------|
| *Cylindrocystis brebissonii* (Ralfs) De Bary | D, F    | STP        |
| *Desmidium baileyi* (Ralfs) Nordstedt        | I, F, J | PRG, BAH, SHIR |
| *D. suboccidentale* A.M. Scott & Prescott   | D, F, P | PRG, MHB   |
| *D. swartzii* C. Agardh ex Rafs              | D, F    | MHB        |
| *Desmococcus oliaceous* (Persoon ex Acharius) J.R. Laundon (=*Pleurococcus naegelii Chodat*) | F       | PRG        |
| *Desmodesmus abundans* (Kirchner) E.H. Hegewald (=*Scenedesmus abundans* (D. Kirchner) Chodat; *Scenedesmus quadrigaule* var. *parvus* G.M. Smith; *Scenedesmus quadrigaule* var. *quadrispina* G.M. Smith) | B, F, J, P | KNP, PRG, SHIR, STP |
| *D. abundans* var. *brevicula* (G.M. Smith) Taskin & Alp (=*Scenedesmus abundans* var. *brevicula* G.M. Smith) | J       | KNP        |
| *D. aculeolatus* (Reinsch) P.M. Tsarenko (=*Scenedesmus aculeolatus* Reinsch) | F       | LTP        |
| *D. armatus* (Chodat) E.H. Hegewald (=*Scenedesmus armatus* (Chodat) Chodat) | D, F, J | PRG, KNP, LKO |
| *D. armatus* var. *asymmetricus* (Philipp) Taśkin & Alp (=*Scenedesmus armatus* var. *asymmetricus* Philipp) | D, F    | MHB        |
| *D. armatus* var. *langispa* (Chodat) E. Hegewald (=*Scenedesmus armatus* var. *langispa* Philipp) | F, J    | PRG, JHS, KNP, MHB |
| *D. asymmetricus* (Schröder) E. Hegewald (=*Scenedesmus abundans* var. *asymmetricus* [Schröder] G.M. Smith) | B, J    | JHS, SHIR  |
| *D. bicecellaris* (Chodat) S.S. An, T. Friedl & E. Hegewald (=*Scenedesmus bijugatus* var. *bicecellaris* Philipp) | B, I, D, F J | PRG, JHS, MHB |
| *D. brasiliensis* (Bohlin) E. Hegewald (=*Scenedesmus brasiliensis* Bohlin) | I, J    | GZB, KNP, MRT, SHIR |
| *D. denticulatus* (Lagerheim) S.S. An, T. Friedel & E. Hegewald (=*Scenedesmus denticulatus* Lagerheim) | D       | PRG, BRY, BST |
| *D. denticulatus* var. *linearis* (Hansgirg) Hegewald (=*Scenedesmus denticulatus* var. *linearis* Hansgirg) | D, F, J | PRG, BRY, BST |
| *D. diapta* (Brébisson) E. Hegewald (=*Scenedesmus dispar* Brébisson) | K, D, F J | BST, LKO |
| *D. granulatus* (West & G.S. West) Tsarenko (=*Scenedesmus granulatus* West & G.S. West) | K, J    | LKO        |
| *D. hystrix* (Lagerheim) E. Hegewald (=*Scenedesmus hystrix* Lagerheim) | D, F    | MHB        |
| *D. lefevrei* (Defandre) S.S. An, T. Friedel & E.H. Hegewald (=*Scenedesmus lefevrei* Defandre) | I       | GZB, MRT, SHIR |
| *D. maximus* (West & G.S. West) Hegewald (=*Scenedesmus quadrigaule* var. *maximus* West & G.S. West) | A, B, D, I, P | SHIR |
| *D. opolensis* (P.G. Richter) E. Hegewald (=*Scenedesmus opolensis* P.G. Richter) | I       | LKO, SHIR  |
| *D. opolensis* var. *carinatus* (Lemmermann) E. Hegewald (=*Scenedesmus carinatus* Lemmermann) Chodat) | D       | PRG, GZB, MRT, SHIR |
| *D. opolensis* var. *manonensis* (Chodat) E. Hegewald (=*Scenedesmus opolensis* var. *manonensis* Chodat) | I       | PRG, GZB, MRT, SHIR |
| *Dichotomosiphon tuberosus* (A. Braun ex Küting) A. Ernst | M       | SUL        |
| *Dictychosphaerium ohrenbergianum* Nägeli | F       | VRN        |
| *D. indicum* M.O.P. Iyengar & Ramanathan | F, P    | GON        |
| *D. pulchellum* var. *minutum* Deflandre | F       | BBK, MHB   |
| *Dimorphococcus lunatus* A. Braun | I, D    | MHB, SHIR  |
| *Diplonema chodati* Bialosuknia (=*Strichococcus chodati* (Bialosuknia) Heering) | F       | PRG, LKO   |
| *Docidium baculum* Brébisson ex Rafs | F       | BAH        |
| *Draparnaldia acuta* (C. Agardh) Küting | D, P    | PRG, LKO   |
| *D. champlainensis* P.W. Cook | E       | PRG        |
| *D. desikacharyi* R.N. Yadava | E, F    | PRG        |
| *D. indic* (Y. Bharadwaja) Manasi Mandal & D. Malty (=*Draparnaldia indica* Bharadwaja) | F       | PRG, KNP   |
| *D. iyengarii* G.L. Tiwari, D.C. Pandey & R.S. Pandey | E       | PRG        |
| *D. mutabilis* (Roth) Bory (=*Draparnaldia plumosa* [Vaucher] C. Agardh) | E       | PRG        |
| *Elongatocystis ecbloclystiformis* (Iyengar) L. Krienitz & C. Bock (=*Oocystis ecbloclystiformis* M.O.P. Iyengar) | K, I, F, J | JHS |
| *Enteromorpha flexuosa* subsp. *pilifera* (Kützing) Biding (=*Enteromorpha intermedia* C.B. Biding) | D, J    | LKO        |
| Currently accepted name | Habitat | Localities |
|-------------------------|---------|------------|
| **Epibolium polysporum** | D, F | DEO, GKP |
| **Eremosphera gigas** (W. Archer) Fott & Kalina (=Oscyctis gigas W. Archer) | D, F, J, P | JHS, MHB, SHR |
| **Euastrum amoenum** F. Gay (=Euastrum denticulatum F. Gay) | D, F | PRG |
| **E. bidentatum** f. bidentatum Nägeli (=Euastrum rostratum Ralfs ex Ralfs) | F | BRY |
| **E. bidentatum** Nägeli | F, J | SHR |
| **E. binae Ehrenberg ex Ralfs** | F | PRG |
| **E. binale var. juvae** Croasdale | D, F | PRG |
| **E. binale var. unicorne** W.B. Turner | D, F | PRG |
| **E. ceylanicum** (West & G.S. West) Willi Krieger (=Euastrum sinuosum var. ceylanicum West & G.S. West) | A, B, D, F, J, K | BAH, PRG, BST |
| **E. denticulatum** var. rectangulare West & G.S. West | D, F | PRG, MHB, SHR |
| **E. divergens** Joshua | A, F, J | GKP, SHR |
| **E. elegans** | D | GKP, LKO |
| **E. elegans var. planum** W.B. Turner | D, F | LKO, SHR |
| **E. evolutum** (Nordstedt) West & G.S. West | D, F | MHB, PRG, SHR |
| **E. johnsonii** West & G.S. West | D | MHB |
| **E. platycerum** Reinsch | D, F | MHB, SHR |
| **E. quadriceps** Nordstedt | D, F | BRY |
| **E. quadriceps** var. minus Fritsch & M.F. Rich | D, F | BRY |
| **E. radiatum** W.B. Turner | F | BRY, MRD |
| **E. rostratum** var. bioculatum A.M. Scott & Prescott | F | BRY |
| **E. sinuosum** Lenormand ex W. Archer (=Euastrum sinuosum var. reductum West & G.S. West) | D, F, J | SKN |
| **E. solum** (Nordstedt) Grönblad & A.M. Scott | D, F | BRY |
| **E. sphyroides** Nordstedt | K, F, J | BBK, BST, MHB |
| **E. sphyroides** var. intermedium Lütkemüller | D, F | BRY, MHB |
| **E. spinulosum** Delponte | D, F | PRG, BAH, BBK, BST, HMR, MHB, PLB, SHR |
| **E. spinulosum** var. bellum A.M. Scott & Prescott | D, F, J | BRY |
| **E. spinulosum** var. burmense (West & G.S. West) Willi Krieger (=Euastrum inermius var. burmense West & G.S. West) | D, F | MHB, PRG |
| **E. spinulosum** var. inermius (Nordstedt) C. Bernard | B, D, F | GKP |
| **E. spinulosum** var. vaasii A.M. Scott & Prescott | C, I, D, F | GON, PRT |
| **E. subalpinum** Messikommer | F | BRY |
| **E. subhexalobum** var. scrobiculatum Grönblad | F | BRY |
| **E. subhexalobum** West & G.S. West | F | BRY |
| **E. sublobatum** Breisson ex Ralfs | D | LKO, MHB |
| **E. sublobatum** var. sumatranum A.M. Scott & Prescott | D | LKO, MHB |
| **E. subsinuosum** W.B. Turner | D, F, P | MHB |
| **Euastrum substellatum** Nordstedt | D | MHB |
| **E. uniforme** (West & G.S. West) Y. Okada (=Xanthidium uniforme (West & G.S. West) A.M. Scott & Croasdale) | F | SHP |
| **E. verrucosum** Ehrenberg ex Ralfs | F | PRG |
| **E. verrucosum** var. alpinum (Huber-Pestalozzi) Willi Krieger (=Euastrum verrucosum var. vallesiacum L. Viret) | D, F | PRG |
| **Eudorina elegans** Ehrenberg | D, F, J | LKO, SHR, VRN |
| **Fritschiella tuberosa** M.O.P. Iyengar | F | PRG |
| Currently accepted name | Habitat | Localities |
|-------------------------|---------|------------|
| *Gemenella interrupta* Turpin | F | PRG |
| *Glaucocystis cingulata* Bohlin | J | SHR |
| *G. nostochinearum* Itzigsohn | D | LKO, MHB |
| *G. reniformis* B.N. Prasad & P.K. Misra | D | MHB |
| *Gloeocystis major* Gerneck ex Lemmermann | K | MHB |
| *G. vesiculosa* Nägeli | D | GON |
| *Gloeotaxium lithobryum* Hansgirg | D | BAH, BBK, GON, MHB, SHR |
| *Gloeotetris planctonica* M.O.P. Iyengar & Philipose | F | SUL |
| *Gonatozygon aculeatum* W.N. Hastings | D, F | PRG |
| *Goniochloris mutica* (A. Braun) Fott (=*Tetraedron muticum* (A. Braun) Hansgirg) | K, D, F | KNP |
| *Goniochloris compactum* M.O.P. Iyengar | D, F | LKO |
| *G. pectorale* O.F. Müller | D, F | VRN |
| *Haematococcus droebakensis* var. *fastigiatus* Wollenweber | F, J | VRN |
| *Hariotina reticulata* P.A. Dangeard (=*Coelastrum reticulatum* (P.A. Dangeard) Senn) | D | MHB |
| *H. dissiliens* Brébisson ex Ralfs | K, D | MHB |
| *Hydrodictyon reticulatum* (Linnaeus) Bory | A, D, J, P | PRG, JLN, KNP, LKO, LTP, MRT, SHR |
| *Iwanoffia terrestris* (Iwanoff) Pascher | F | LKO |
| *Kirchneriella dianae* (Bohlin) Comas (=*Kirchneriella lunaris* var. *dianae* Bohlin) | I, D, F | SHR |
| *K. lunaris* (Kirchner) Möbius | I, D, F | LKO, SHR, VRN |
| *K. obesa* (West) & G.S. West (=*Selenastrum bibracianum* obesa West) | F, K, D, J | BAH, MHB, VRN |
| *Klebsormidium rivulare* (Kützing) M.O. Morison & Sheath (=*Hormidium rivulare* Kützing) | C, F, J | KNP |
| *K. subtile* (Kützing) Mikhailyuk, Glaser, Holzinger & Karsten | M | PRG |
| *Lacunastrum gracillimum* (West & G.S. West) H. McManus (=*Pediastrum duplex* var. *gracillimum* West & G.S. West) | F | PRG |
| *Lemmermannia triangularis* (Chodat) C. Bock & Krienitz (=*Crucigenia triangularis* (Chodat) Schmidle) | A, K, D, F | PRG |
| *Leptosiropsis tonilosa* C.-C. Jao | F | DEO, GKP |
| *Lycometrocosm drobokensis* var. *fastigiatus* Wollenweber | F, J | VRN |
| *M. foliacea* Bailey ex Rafls | D, E | BST, LKO, MHB |
| *Microspora pinnatifida* Rafls | D, F, J | BAH, LKO, MHB, SHR |
| *M. radians* var. *bogoriensis* (C. Bernard) Willi Krieger | A, F | BST, MHB |
| *M. radians* W.B. Turner | A, D, F | BST, LKO, MHB, SHR |
| *M. tropica* Coesel & Van Geest | F | BST, KNP |
| *M. zeylanica* F.E. Fritsch | K, F | BAH |
| *Microglena brauni* (Goroschankin) Demchenko, Mikhailyuk & Proschold (=*Chlamydomonas brauni* Goroschankin [Gorozhankin]) | A, F | BHI, STP |
| *M. monadina* Ehrenberg (=*Chlamydomonas monadina* (Ehrenberg) F. Stein) | F, K, J | SUL |
| *Microspora amoena* (Kützing) Rabenhorst | K, F | BAH, GON, KNP, SVT |
| *M. floccosa* (Vaucher) Thuret | C, F | KNP |
| Currently accepted name | Habit | Localities |
|------------------------|-------|------------|
| M. tumidula | F | PRG |
| M. willocenza Lagerheim | F | PRG |
| M. wittrockii (Wille) Lagerheim | K, F | BAH, KNP |
| Microthamnion curvatum West & G.S. West | F | LKO |
| M. kuetzingianum Nägeli ex Kützing | F | PRG |
| M. strictissimum Rabenhorst | F | PRG |
| Monococcus simplex (Meyen) Corda (=Pediasstrum simplex Meyen) | D, F, J | GZB, JHS, JLN |
| Monoraphidium minutum (Nägeli) Komárková-Legnerová (=Selenastrum bibraianum minutum (Nägeli) Collins) | D, F | MHB |
| Mougeotia genuflexa (Roth) C. Agardh | A, K, P | STP |
| M. gotlandica (Cleve) Wittrock | C, P | AYO |
| M. indica Randhawa | D | AYO |
| M. quadrate Randhawa | F | AYO |
| M. recurva (Hassall) De Toni | D, F | AYO, KSM, GKP, STP |
| M. scalaris Hassall | F | AYO |
| M. sinensis L.C. Li | D, F, P | LKO, SUL |
| M. sphaerocarpa Wolle | K, F | BBK, BRY, AYO, MRP, SHP |
| M. transeausi Collins | C | BLR, KNP |
| M. varions (Wittrock) Czurda | D, P | KNP, LKO |
| M. floridana Transeau | F | AYO |
| Mucidosphaerium pulchellum (H.C. Wood) C. Bock, Proschold & Krienitz (=Dictyosphaerium pulchellum H.C. Wood) | D, F | MHB |
| Nephrocytium solitarium (Nägeli) Stenclová & Kastovsky (=Oocystis crassa Wittrock; Oocystis solitaria Wittrock) | C, K, F, J | JHS, PRG, BRY, RBL |
| Netrium digitus (Brébisson ex Ralfs) Itzigsohn & Rothe | D, J | LKO |
| Nitella acuminata A. Braun | D, F, P | BRY, KNP |
| N. agharkarii Kundu | D, F, P | VRN |
| N. axillaris A. Braun | D, F | MRD |
| N. confervacea (Brebisson ex Ralfs) Itzigsohn & Rothe | D, F, P | SUL, VRN |
| N. dualis Nordstedt | D | BRY |
| N. flagellifera var. patula (J. Groves & G.O. Allen) Raam (=Nitella patula J. Groves & G.O. Allen) | D, F, O | MRD |
| N. flagelliformis A. Braun | D, F, P | VRN |
| N. furcata (C. Roxburgh ex Brzelius) C. Agardh | D, F | BRY |
| N. furcata f. polycarpa (B.P. Pal) R.D. Wood (=Nitella polycarpa B.P. Pal) | D, F | MRD |
| N. gracilis (J.E. Smith) C. Agardh | D, F, O | SUL, VRN |
| N. hyalina (De Candolle) C. Agardh | D, F, P | PRG, BRY |
| N. leptodactyla J. Groves (=Nitella pseudoflagellata var. leptodactyla (J. Groves) R.D. Wood) | D, F, J | MRD |
| N. microcarpa A. Braun | D, F, P | SUL |
| N. microcarpa var. sieberi (A. Braun) Raam (=Nitella furcata var. sieberi (A. Braun) R.D. Wood) | F | BRY |
| N. mirabilis Nordstedt ex Groves | D, F, P | BRY |
| N. mucronata (A. Braun) F. Miquel | D, F | MRD |
| N. oligospora A. Braun | D, F, P | MRD |
| N. opaca (C. Agardh ex Brzelius) C. Agardh | D, F, P | VRN |
| N. pseudoflagellata A. Braun | D, F, P | MRD |
| Currently accepted name | Habitat | Localities |
|-------------------------|---------|------------|
| N. pulchella T.F. Allen (=Nitella dualis var. pulchella (T.F. Allen) R.D. Wood) | D | BRY |
| N. superba B.P. Pal | D, F | SUL |
| N. tenuissima (Desvaux) Kützing | D, F | BRY |
| N. translucens (Persoon) C. Agardh | D, F | BRY |
| Oedocladium prescottii Islam | P | BRY |
| Oedogonium acrandrium Elifving ex Hinn | K, J | PRG, BBK, VRN |
| O. acrosorum De Bary ex Hinn | J | BU |
| O. acrosorum var. floridense Wolfe ex Hinn | J | BU |
| O. alterans Wittrock & P. Lundell | I | BAH |
| O. areolatum (Singh) Mrozinska | J | GKP |
| O. areolatum var. gorakhporense (R.H. Singh) Gonzalves (=Oedogonium gorakhporense R.H. Singh) | B, D, K | GKP |
| O. armigerum Hirn | F | GKP |
| O. bharuchae N.D. Kamat | C, F | VRN |
| O. borsianum var. crassa R.H. Singh | A, K, I, F | BAH, GKP |
| O. borsianum Wittrock ex Hinn | K, J | BAH, GKP |
| O. boscii Wittrock ex Hinn | D | PRT |
| O. calosporum C.-C. Jao (=Oedogonium asiaticum Gonzalves; Oedogonium asiaticum var. majus Gonzalves) | C, F | GZB |
| O. calvum Wittrock | F | PRG |
| O. capilliforme Kützing ex Hinn | F | GKP, LKO |
| O. cardiacum Wittrock ex Hinn | D | LKO |
| O. crassisculum var. indica Venkataraman | D | AYO |
| O. crassisculum Wittrock ex Hinn | A | AYO |
| O. crassum f. amplum Hinn (=Oedogonium amplum Magnus & N. Wille) | K | GON |
| O. crispum var. gracilesens Wittrock ex Hinn | F | VRN |
| O. crispum Wittrock ex Hinn | F | VRN |
| O. cryptoporum Wittrock ex Hinn (=Oedogonium vulgare (Wittrock) L.H. Tiffany) | F | PRG |
| O. curvum Pringsheim ex Hinn | F | AYO |
| O. cymatosporum Wittrock & Norstedt | F | PRG |
| O. ellipsosporum R.N. Singh | F | GKP |
| O. epiphyticum Transeau & Tiffany | D | LKO |
| O. franklinianum Wittrock ex Hinn | F | GKP |
| O. globosum Nordstedt ex Hinn (=Oedogonium vulgare (Wittrock) L.H. Tiffany) | F | VRN |
| O. globosum var. nanophyse C.-C. Jao | F, J, M | MRT |
| O. gracilissem Wittrock & P. Lundell ex Hinn | D, F | RBL |
| O. grande Kützing ex Hinn | D | PRT |
| O. hians Nordstedt & Hinn | F | VRN |
| O. hindustanense Kamat | F | PRG |
| O. hirni Gutwinski ex Hinn | J | VRN |
| O. howardii var. formosum (Kamat) Mrozinska (=Oedogonium howardii G.S. West) | F | GKP |
| O. idiosporum Nordstedt & Wittrock ex Hinn | K | SUL |
| O. idiosporum var. minus Tiffany | K | BBK |
| O. inerme Hinn | K, F, J | BAH |
| O. intermedium Wittrock ex Hinn | F | BST, GKP, MRZ, VRN |
| O. irregularare var. condensatum (Hallas) Hinn | F | AYO |
| Currently accepted name | Habitat | Localities |
|-------------------------|---------|------------|
| O. irregulare var. tenuis Venkataraman | F | VRN |
| O. irregulare Wittrock ex Hirn | F | AYO |
| O. kirtikari N.D. Kamat | F | VRN |
| O. kushmiense R.N. Singh | F | GKP |
| O. landsboroughii var. norvegicum Wittrock ex Hirn | D, F | DEO, MAU |
| O. landsboroughii Wittrock ex Hirn | D, F | DEO, MAU |
| O. longatum Kützing ex Hirn | F | VRN |
| O. mexicanum Wittrock ex Hirn | D | PRT |
| O. minus Wittrock ex Hirn | D | AYO |
| O. mirandrium Skuja | F, D | GKP |
| O. mitratum | F | GKP |
| O. mitratum var. minus R.N. Singh | K, I | GKP |
| O. nanum Wittrock ex Hirn | F | PRG, BRY, SHP, VRN |
| O. oblongum Wittrock ex Hirn | D, F, J | PRG, HMR, LKO, SHR, VRN |
| O. oboviforme Wittrock ex Hirn | A | BBK |
| O. obturcatum var. completum Hirn (=Oedogonium completum (Hirn) Tiffany) | K, D, F | GON |
| O. obturcatum Wittrock ex Hirn | K, I, F, J | GON |
| O. oviforme var. minus (Pandey) Mrozinska (=Oedogonium patulum var. minus Pandey) | J | BLI |
| O. patulum Tiffany | J | BLI |
| O. peipingense C.-C. Jao | J | BAH |
| O. praenormum Hallas | D | PRT |
| O. pringsheimii C.E. Cramer ex Hirn | C | BBK |
| O. pringsheimii var. nordsteadi Wittrock ex Hirn | C | BBK |
| O. pseudoureum C.-C. Jao | J | BRY, SHP |
| O. punctatostratum De Bary ex Hirn | F | SHR |
| O. punctatum Wittrock ex Hirn | C | BBK |
| O. pusillum Kirchner | F | PRG |
| O. rufescens f. exiguum Hirn (=Oedogonium rufescens var. exiguum (Hirn) Tiffany) | F | VRN |
| O. rufescens Wittrock ex Hirn | D, F | LKO, VRN |
| O. silvaticum Hall | F | GKP |
| O. silvicatum var. idioandrosporum R.N. Singh | F | GKP |
| O. sociale var. kanwense R.N. Singh | F | VRN |
| O. sociale Wittrock ex Hirn | F | VRN |
| O. terrestrre Randhawa | M | AYO |
| O. tungarensense Gonzalves & S.C. Jain | F | PRG |
| O. varians Wittrock & Lundell ex Hirn | A, F, J, M | PRG, BAH |
| O. vaucheri A. Braun ex Hirn (=Oedogonium vaucheri var. parvum Gonzalves & Sonnad) | K, D | GON |
| O. inconspicuum Hirn | F | BLI |
| O. plurisporum Arnoldi & Y.V. Roll | H | BAH |
| Oocystaenium elegans Gonzales & Mehra | P | PRG |
| Oocystis bispora Komárek | I, F | SHR |
| O. borgeti J.W. Snow | D, F | PRG, BAH, KNP, LKO, MHB |
| O. elegans Gonzalves & K.R. Mehra | F | VRN |
| O. elliptica W. West | A, F, J | PRG, LKO, MHB |
| Currently accepted name | Habitat | Localities |
|-------------------------|---------|------------|
| 602 O. irregularis (Pettkoff) Printz | A, K, F, P | PRG, SHR |
| 603 O. naegelii A. Braun | K, I, F | KNP, MRT, SHR |
| 604 O. pusillo Hansgirg | A | HMR |
| 605 Oogamochlamys gigantea (O. Dill) Proschold, B. Marin, U.W. Schlosser & Melkonian (=Chlamydomonas capensis Pocock) | C | PRG |
| 606 Denehris obsia (West & G.S. West) Fett (=Nephrocytum obses West & G.S. West) | F, P, D, J | PRG, KNP |
| 607 Palmella miniotata Leiblein | K, F, J | LKDO |
| 608 P. mucosa Kützing | P | BAH |
| 609 Pandorina cylindrical M.O.P. Iyengar | D | GON |
| 610 P. morum (O.F. Müller) Bory | K, D, J | KNP, LKO, LTP, MHB, SHIR STP, VRN |
| 611 Papenfusiosmonas cordata (Pascher & Jahoda) Desikachary | C | VRN, MRZ |
| 612 Parapediastrella biradiatrum (Meyen) E. Hegewald (=Pediasstrum biradiatum Meyen) | C, F | MHB |
| 613 Pediasstrum angulosum Ehrenberg ex Meneghini (=Pediasstrum araneosum (Raciborski) G.M. Smith) | K, D, F, J, P | GKP, MHB, SHIR |
| 614 P. angulosum var. laevigatum Raciborski | D, J | MRT, SHIR |
| 615 P. conutatum (Raciborski) Troitskaya | D, F | GKP |
| 616 P. duplex Meyen (=Pediasstrum duplex var. genuinum (A. Braun) Hansgirg; Pediasstrum duplex var. reticulatum Lagerheim) | A, C, K, I, D, F, J | GZB, LKO, PRG, AYO, KNP, MRT, LTP, SHIR |
| 617 P. duplex var. regulosum Raciborski | A, C, K, I, D, F, J | JHS |
| 618 P. simplex Meyen (=Pediasstrum simplex var. duodenarium (Bailey) Rabenhorst) | A, J | LKD |
| 619 P. subgranalatum (Raciborski) J. Komárek & V. Jankovsk (=Pediasstrum duplex var. subgranalatum Raciborski) | A, C, K, I, D, F, J | BAH, MHB |
| 620 Penium cucurbitinum var. subpolymorphum Nordstedt (=Cosmarium cucurbitinum var. subpolymorphum (Nordstedt) Lükkenmüller) | F, J | BST, SHIR |
| 621 P. morganitaceum Bérbisson | D | PRG |
| 622 Phacotus lenticularis (Ehrenberg) Diesing | F | STP |
| 623 P. lenticularis var. undulata R. Shyam & Y.S.R.K. Sarma | F | VRN |
| 624 Pithophora roettleri (Roth) Wittrock (=Pithophora clevena Wittrock; Pithophora moreea Collins; Pithophora oedogonia (Montagne) Wittrock; Pithophora polymorpha Wittrock; Pithophora sumatranosa (Wittrock) Mont; Pithophora varia Willie) | A, C, D, F, H, K, J, P | AYO, BAH, BLR, KNP, LKO, PRG, SUL, STP, VRN |
| 625 Pleodorina indica (Iyengar) H. Nozaki (=Eudorina indica M.O.P. Iyengar) | D, F | GON |
| 626 Pleurostrum terricola (Bristol) D.M. John (=Gangrasira terricola Bristol; Pleurostrum terrestrum F.E. Fritsch & R.P. John) | M | LKO, PRG |
| 627 Pleurotaenium boculoides (J. Roy & Bisset) Playfair | D, F | PRG |
| 628 P. caldense var. cristatum (W.B. Turner) Willi Krieger (=Pleurotaenium cristatum (W.B. Turner) O. Borge) | D, F | LKO |
| 629 P. coronatum (Brébisson) Robenhorst | F | PRG |
| 630 P. coronatum var. fluctuatrum West | D, F | PRG, VRN |
| 631 P. cylindricum (W.B. Turner) Schmidle | D, F | BBK, BRY |
| 632 P. ehrenbergii (Ralfs) De Bary | D, F | PRG, BBK, GON, IHS, SHIR |
| 633 P. ehrenbergii var. undulatum Schaarschmidt | D, F | PRG, BBK, GON, IHS, SHIR |
| 634 P. elatum O. Borge | F | PRG |
| 635 P. eugeneum (W.B. Turner) West & G.S. West | K, D | BRY, GON |
| 636 P. indicum (Grunow) P. Lundell | F | BRY |
| 637 P. nodulosum (Brébisson ex Ralfs) Rabenhorst (=Pleurotaenium coronatum var. nodulosum (Brébisson ex Ralfs) West) | D | PRG |
| 638 P. subcoronatum (W.B. Turner) West & G.S. West | K, D | LKO |
| 639 P. trabeacula Nägeli | K, D, F | PRG, BAH, BST, JHS, PLB |
| 640 P. voranasiense Lakshminarasimhan | F | VRN |
| 641 P. cylindricum var. stuhlmannii (Hieronymus) Willi Krieger | D, F | BBK |
| 642 Protosiphon botryoides (Kützing) Klebs | F | SUL |
| Currently accepted name | Habitat | Localities |
|-------------------------|---------|------------|
| *Pseudagloë* polychloris (Pascher) K.I. Meyer | E, J | PRG |
| *Pseudopediastrum* boryanum (Turpin) E. Hegewald (=*Pediastrum* boryanum var. longicorne Reinsch) | K, D, J | PRG, GZB, KNP, LKO, STP |
| *P. boryanum* var. *longicorne* (Reinsch) Tsarenko | K, D, J | GZB |
| *P. boryanum* var. *longicorne* (Reinsch) K, D, J GZB, KNP, LKO, STP |
| *Pseudorhizoclonium* africanum (Kützing) Boedeker (=*Rhizoclonium hookeri* Kützing) | A, C, D, F, J | PRG |
| *Pseudostaurastrum* limneticum (Borge) Couté & Rousselin (=*Tetraëdron* limneticum O. Borge) | J | PRG, VRN |
| *Pseudulvella* americana (J.W. Snow) Wille | F | DEO, GKP, LKO, MHB |
| *P. americana* var. *indica* Philipose | F | DEO, GKP |
| *Pyrobotrys* acuminata Y.S.R.K. Sarma & R. Shyam | F | VRN |
| *P. casinoensis* (Playfair) P. C. Silva (=*Pyrobotrys* gracilis (Korshikov) Korshikov) | F, L | KNP, VRN |
| *P. casinoensis* var. *intermedius* Y.S.R.K. Sarma & R. Shyam | F, L | VRN |
| *P. desikacharyi* Y.S.R.K. Sarma & R. Shyam | C | VRN |
| *P. korschikoffi* (L.A. Schkorbatov) Korshikov | K, H | VRN |
| *P. stellatus* (Korshikov) Korshikov | F | VRN |
| *Radiofilum* flavescens G.S. West | A, F | SUL |
| *Raphidocelis* danubiana (Hindák) Marvan, Komárek & Comas (=*Kirchneriella contorta* (Schmidle) Bohlin) | K, D | MHB |
| *Rhizoclonium* crassipellitum West & G.S. West | D, F | BST, BLR, SKN |
| *R. hieroglyphicum* (C. Agardh) Kützing | A, C, D, F, J | BRY, BDN, BLR, FRK, KNP, LKO, MRD, RMP, SHP, STP, SUL, VRN |
| *R. pachydermum* Kjeillmann | A, D, F, H | BLR |
| *R. profundum* Brand | A, D, F, H | BLR |
| *Scenedesmus* abundans var. longicauda G.M. Smith | J | KNP |
| *S. apiculatus* (West & G.S. West) Chodat | K, P | LTP |
| *S. apiculatus* var. *indicis* (Hortobagyi) Hortobagyi | K, P | HMR |
| *S. arcuatus* (Lemmermann) Lemmermann | D, F, J | PRG, BAH, KNP, LTP, MHB |
| *S. arcuatus* var. *allahabadensis* Chadha & D.C. Pandey | D, F, J | PRG |
| *S. brevispinus* (G.M. Smith) Chodat | D, F, J | SHR |
| *S. denticulatus* var. *australis* Playfair | D, F, J | SHR |
| *S. elongatus* Corda (=*Scenedesmus* linearis Komárek) | D | SHR |
| *S. irregularis* Roll | K, I, F, J | BST, GKP, SKN |
| *S. lefevrei* var. *manguini* Lefevre & Bourrelly | I | JHS |
| *S. magnus* Meyen (=*Scenedesmus* longus Meyen) | P, J | PRG, KNP |
| *S. maximus* (West & G.S. West) Chodat (=*Scenedesmus quadricauda* var. *westii* G.M. Smith) | F | PRG, JHS, STP |
| *S. monomorphus* Chadha & D.C. Pandey | F | PRG |
| *S. naegelii* Brébisson (=*Scenedesmus* longus var. *naegelii* (Brébisson) G.M. Smith) | P, J | PRG, KNP |
| *S. obtusus* Meyen (=*Scenedesmus* bjugatus var. *alternans* (Reinsch) Hansgirg; *Scenedesmus* avatelernus Brébisson) | B, I, D, F, J | LKO, LTP, SHR |
| *S. philiposei* Chadha & D.C. Pandey | A, B, C, K, I, D | PRG, LKO |
| *S. platydicus* (G.M. Smith) Chodat | F, J | SHR |
| *S. prismaticus* Brühl & Biswas | D, P | PRG, BST |
| *S. quadricauda* (Turpin) Brébisson | F, J | PRG, HMR, JLN, KNP, LKO, MHB, SHR |
| *S. quadricauda* var. *bicaudatus* Hansgirg | F | PRG |
| *S. quadricauda* var. *eualteternus* C.N. Proschkina-Lavrenko | F | PRG |
| *S. raciborskii* Woloszynska (=*Scenedesmus* arcuatus var. *capitatus* G.M. Smith; *Scenedesmus* incrassatulus var. *monone* G.M. Smith) | D, F, J | KNP, LKO, LTP |
| Currently accepted name | Habitat | Localities |
|-------------------------|---------|------------|
| S. semicristatus Uherkovitch | P | LTP |
| S. smithii Chodat | J | LKO |
| Schizomeris irregularis Fritsch and Rich | F | PRG |
| S. leibeniini Kützing | B, C, F | BAH, BLR, AYO, JHS, LKO |
| Schroederia indica Philippine | N | MHB |
| Scotinophora paradoxo Klebs (=Kentrosphaera bristolae G.M. Smith) | F | PRG |
| Sellenastrum libraianum Reinsch (=Ankistrodesmus libraianus (Reinsch) Korshikov) | D, J, F | MHB SHR |
| Sirocladium kumaonense Randhawa | D, F | SUL |
| Sirogonium ceylanicum Wittrock | F | SHR |
| S. indicum Singh | F | GKP |
| S. melanolomorum (Randhawa) Transeau | F | AYO |
| S. reticulatum Randhawa | F | SHR SUL |
| S. stricticum (Smith) Kützing | D, F | SHR SUL |
| S. strictum (Smith) Kützing | F | PRG SUL VRN |
| S. vandalurense M.O.P. Iyengar | F, P | SHR SUL |
| S. ventersicum Transeau | D, F | GKP SHR |
| Sorastrum spinulosum Nägeli | F, P | PRG, BAH, SHR, VRN |
| Sphaerellocystis ampla (Kützing) Nováková (=Gloeocystis ampla (Kützing) Rabenhorst) | F, J | SHR |
| Sphaerocystis Schroeteri Chodat | B, D, F | KNP, SHR |
| Sphaeroplea annulina (Roth) C. Agardh | B, A, D, F | GZB, KNP, MRT, SHR |
| Sphaeropoma laeve (Nordstedt) Thomasson (=Onychonema laeve Nordstedt) | I, F | SHR |
| S. laeve var. microcantha (Nordstedt) Thomasson (=Onychonema laeve var. microcanthus Grönbild) | I, F | GON |
| S. nitens (Wallich) De Toni (=Spondylosium nitens (G.C. Wallich) Lundell) | C, K, D | PRG, BAH |
| S. wallachii var. borgei Grönbild | F | PRG |
| Spirogyra acanthophora (Skuja) Czurda | F | SHR |
| S. affinis (Hassall) Pettit | F | SHR |
| S. africana (F.E. Fritsch) Czurda | J | BRY, BDN, FRK, MRD, RMP, SHP |
| S. anomalia Bhashyakarla Rao | F | PRG, AYO, KNP, MHB, KSM, SHR, VRN |
| S. azygospora R.N. Singh | F | GKP, SHR |
| S. baileyi Schmidle | F | SHR |
| S. biformis C.-C. Jao | F | SHR |
| S. borgeana Transeau | F | BAH, AYO |
| S. brunnnea Czurda | F | SHR |
| S. bullata C.-C. Jao | F | SHR |
| S. ctenidiformis (Hassall) Kützing | F, J | SHR |
| S. chakiaensis (Bhashyakarla Rao) Wille Krieger | F | SHR, VRN |
| S. chakiaensis var. Lucknowensis B.N. Prasad & S. Dutta | F | SHR |
| S. circumlineato Transeau | F, J | HMR, LKO |
| S. communis (Hassall) Kützing | J | BLR, GKP, JLN, SHR, SUL |
| S. condensata (Vaucher) Dumortier | C, F, J | BLR, JLN, SHR |
| S. crosso (Kützing) Kützing | F | LKO, STP |
| S. crenulatus R.N. Singh | F | GKP |
| S. cylindrica Czurda | D, F | SUL |
| Currently accepted name | Habitat | Localities |
|-------------------------|---------|------------|
| *S. daedalea f. oudhensis* (Randhawa) V. Poljansky (=*Spirogyra oudhensis* Randhawa) | F | AYO, SHR |
| *S. daedalea* Lagerheim | F | AYO |
| *S. decimina* (O.F. Müller) Dumortier | D | GKP, LKO |
| *S. decimina var. juergensii* (Kützing) Petlovany (=*Spirogyra juergensii* Kützing) | F | GKP, SHR |
| *S. diluta* H.C. Wood | C | BLR |
| *S. dubia* Kützing | F | BRY, MRT, SHP, VRN |
| *S. ellipsospora* Transeau | D | GKP |
| *S. elliptica C.-C. Jao* | B, D | MRT, SUL |
| *S. emilianensis* Bonhomme | F, J | SUL |
| *S. flavescens* (Hassall) Kützing | F | SHR, VRN |
| *S. fluviatilis* Hilde | J, D | SHR, VRN |
| *S. foveolata* (Transeau) Czurda | D, F | AYO |
| *S. gangoensis* Lakshminarasimhan | D | VRN |
| *S. ghosei* R.N. Singh | B | GKP |
| *S. gibberosa* C.-C. Jao | F | SHR |
| *S. gracilis* Kützing | F | SHR |
| *S. hassallii* (Jenn) Petit | F | SHR |
| *S. hattilensis* Transeau | K, F | LKO, KNP |
| *S. hyalina* Cleve | F | LKO |
| *S. hymerae* Britton & B.H. Smith | F | AYO, LKO, MRT |
| *S. irregularis* Nägeli ex Kützing | F | SHR |
| *S. joensii* Randhawa | F, J | AYO |
| *S. lagerheimii* Wittrock | J | SHR |
| *S. lambertiana* Transeau | J | AYO |
| *S. macrospora* (C.B. Rao) Krieger | F | SHR |
| *S. margaritata* Wollny | F | BRY, BST |
| *S. neglecta* (Hassall) Kützing | F | GKP, VRN |
| *S. neglecta var. fuelleborniae* (Schmidle) Petlovany (=*Spirogyra fuelleborniae* Schmidle) | D | VRN |
| *S. nitsa* (O.F. Müller) Leiblein | F, P | KNP, VRN |
| *S. paradoxa* Rao | G, P | VRN |
| *S. parvula* (Transeau) Czurda (=*Spirogyra cateniformis var. parvula* Transeau) | F, J, K | BAH, SHR |
| *S. perforans* Transeau | J | SHR |
| *S. plana* (West & G.S. West) Czurda | D, F | GKP |
| *S. pratensis* Transeau | P | VRN |
| *S. puncticulata* C.-C. Jao | F | SHR |
| *S. randhawae* Krieger | F | BLR, GON |
| *S. reticulata* Randhawa | J | AYO |
| *S. reticuliana* Randhawa | J | AYO |
| *S. rhizobrachialis* C.-C. Jao | B, D, F | SHR |
| *S. rivularis* (Hassall) Rabenhorst | F, J | MRT, SHR |
| *S. setiformis* Kützing | B, J | SHR |
| *S. singularis* Nordstedt (=*Spirogyra silvicola* M.E. Britton) | A, F | PRG, SHR, SUL, VRN |
| *S. skujei* Randhawa | F | AYO |
| *S. submaxima* Transeau | F | PRG, BRY |
| *S. subsalina* Cedercreutz | F | SHR |
| Currently accepted name | Habitat | Localities |
|-------------------------|---------|------------|
| S. subsalis Kützing     | F       | SHR        |
| S. szechwanensis C.-C. Jao | F       | GKP, RLB, SUL |
| S. tandoe Randhawa      | F       | AYO        |
| S. unduliseptum Randhawa | F       | AYO        |
| S. varians (Hassail) Kützing | F       | SHR, VRN   |
| S. velata Nordstedt     | J       | SHR        |
| S. rhizoides Randhawa   | F       | AYO        |
| Spirotaenia condensata Brébisson | C, J   | KNP        |
| Spondylosium planum (Wolle) West & G.S. West | D, F   | PRG        |
| S. anatinoides A.M. Scott & Prescott | K, I, F | SHR        |
| S. bieneanum Randhorst  | F, J    | LKO        |
| S. columnboides West & G.S. West | D, F   | BRY        |
| S. aliatatum Ehrenberg ex Rafs | D, F    | PRG        |
| S. gracile Rafs ex Rafs | D, F, J | PRG, HMR   |
| S. gracile var. coronulatum Boltz | F       | PRG, BST, VRN |
| S. hexaceltum Witrock   | D, F    | PRG        |
| S. lapponicum var. ellipticum (Wille) Grönnblad (=Staurastrum bieneanum var. ellipticum Wille) | F, J   | BAH, LKO, SHR |
| S. oxyacanthum W. Archer | I, D    | LKO        |
| S. pachyrhynchum Nordstedt | D       | BBK, VRN   |
| S. paradoxum var. parvum (West) N. Carter | F       | BRY        |
| S. perundulatum Grönblad | C, J    | LKO        |
| S. pinnatum var. subpinnatum (Schmidle) West & G.S. West | I, F   | PLB        |
| S. pinnatum W.B. Turner | I, F    | PLB        |
| S. pseudotetracerum (Nordstedt) West & G.S. West | I, D    | SHR        |
| S. sebaldi Reinsch      | D, F    | PRG        |
| S. sebaldi var. ventriovulcaum A.M. Scott & Prescott | F       | PRG        |
| S. setigerum Cleve      | D, F    | PRG        |
| S. sexangularis (Bulnheim) Rabenhorst | K       | GON        |
| S. sexangularis var. productum Nordstedt | K       | GON        |
| S. tetracerum Rafs ex Rafs | D, F    | PRG        |
| S. wildemani Gutwinski  | F       | PRG        |
| S. wildemani var. horizontale A.M. Scott & Prescott | D, F    | PRG        |
| S. zonatum Børgesen     | D       | BST        |
| S. zonatum var. majus A.M. Scott & Prescott | C, D    | BST        |
| S. cyclacanthum West & G.S. West | D, F    | PRG        |
| Staurastrum alternans Brébisson ex Rafs | D, F   | PRG        |
| S. tetras var. tetrodon (Corda) J.D. Hall & Karol (=S. tetrodon var. tetrodon (Corda) A. Braun; Pediostrum tetrodon var. tetrodon (Corda) A. Braun; Pediostrum tetrodon var. tetrodon (Corda) A. Braun; Pediostrum tetrodon var. tetrodon (Corda) A. Braun; Pediostrum tetrodon var. tetrodon (Corda) A. Braun; Pediostrum tetrodon var. tetrodon (Corda) A. Braun; Pediostrum tetrodon var. tetrodon (Corda) A. Braun) | F, J   | BBK, BST, GZB, KNP, LKO, LTP, MRT |
| Staurodesmus arcuatus (Jochua) Teiling (=Arthrodesmus arcuatus Joshua) | F, D    | LKO        |
| S. convergens (Ehrenberg ex Rafs) S. Lilleroth (=Arthrodesmus convergens Ehrenberg ex Rafs) | F, D    | LKO        |
| S. curvatus (W.B. Turner) Goesel & Van Geest (=Arthrodesmus curvatus W.B. Turner) | F, K    | LKO        |
| S. pachyrhynchus var. pseudopachyrhynchus (Wolle) Teiling (=Staurastrum pseudopachyrhynchum Wolle) | F       | PLB        |
| Currently accepted name | Habitat | Localities |
|-------------------------|---------|------------|
| **Stigeoclonium aestivale** (Hazen) Collins | F | GKP |
| **S. amoenum** Kützing | F, J | DEO, GKP, SUL |
| **S. attenuatum** (Hazen) Collins | F | LKO |
| **S. elongatum** (Hassal) Kützing | F | LKO |
| **S. forctum** Berthold | D | PRG, BAH, AYD, JHS |
| **S. fasciculare** Kützing | F | LKO |
| **S. fasciculare** var. **glomeratum** (Hazen) A.K.M. Islam (= **Stigeoclonium glomeratum** (Hazen) Collins) | F, P | KNJ, KNP, LKO |
| **S. flagelliferum** Kützing | F | LKO |
| **S. lubricum** (Dillwyn) Kützing | C | BRY, MNB, SHP |
| **S. nanum** (Dillwyn) Kützing | F | LKO |
| **S. nudiusculum** (Kützing) Rabenhorst | F | LKO |
| **S. polymorphum** (Franke) Heering | K, D | PRG, BAH, AYD, F |
| **S. stagnatile** (Hazen) Collins | I, J | BAH |
| **S. subsecundum** (Kützing) Kützing | F | PRG |
| **S. tenue** (C. Agardh) Kützing | F | PRG, BAH, BKR, DEO, GKP, JHS, MRT |
| **Teilingia granulata** (J. Roy & Bisset) Bourrelly (= **Sphaerozum granulatum** (J. Roy & Bisset)) | A, B, D, F | PRG, STP |
| **T. wallichii** (J.P. Jacobsen) Bourrelly (= **Sphaerozum wallichii** (J.P. Jacobsen)) | D, F | PRG |
| **Tetraedron hymomum** West & G.S. West | F | SUL |
| **Tetraedron bifurcatum** (Wille) Lagerheim | F | BBK |
| **T. caudatum** (Corda) Hansgirg | C, F | BBK |
| **T. gracile** (Reinsch) Hansgirg | F | BBK |
| **T. lunula** (Reinsch) Hansgirg (= **Closteridium lunula** Reinsch) | A | KSM |
| **T. trigonum** (Nägeli) Hansgirg | F | BBK |
| **T. tumidulum** (Reinsch) Hansgirg | J | BBK |
| **Tetraedron lagerheimi** Teiling | D, P | KNP, MHB, STP |
| **Tetraedron cordiformis** (H.J. Carter) F. Stein (= **Carteria cordiformis** (H.J. Carter) Diesing) | C, F, J | KNP |
| **Tetraspora lubrica** (Roth) C. Agardh | D | MHB |
| **T. apiocystoides** Chowdary, Suryanarayan & Y.S.R.K. Sarma | F | KNP |
| **T. gekotinosa** (Vaucher) Desvaux | F, P | KNP, STP |
| **Tolyphile glomerata** (Desvaux) Leonhardi (= **Tolyphile nidiflora** var. **glomerata** (Desvaux) R.D. Wood) | D, F | BRY, LKO |
| **T. nidifica** (O.F. Müller) Leonhardi | F | BRY |
| **Transeaulia costata** (Rahdawwa) Guiry (= **Dabarya costata** Randhawa) | A, F, D | AYD, KNP, MHB, SUL |
| **Trebouxia arboricola** Pymaly (= **Trebouxia humicola** G.S. West & F.E. Fritsch) | J | LKO |
| **Tetrapeltia aurea** (Linnaeus) C. Martius | F | LKO |
| **T. umbrina** (Kützing) Bornet | F | LKO |
| **Ulothrix aequosus** Kützing | F | BRY, SHP |
| Currently accepted name | Habitat | Localities |
|------------------------|---------|------------|
| 859 U. albicans Kützing (=Ullothrix moniliformis (Kützing) Kützing) | F, P | KNP |
| 860 U. bipyrrenoidosa F.E. Fritsch & M.F. Rich | K, I | BAH |
| 861 U. fimbriata Bold | K | BAH |
| 862 U. gigas (Vischer) K.R. Mattox & Bold (=Uronema gigas Vischer) | F | PRG, BST, GON, GKP, AYO, LKO, MHB, SUL |
| 863 U. oscillana Kützing | F | BAH |
| 864 U. tenerissima (Kützing) Kützing (=Ullothrix variabilis (Kützing) Kützing) | F, J | AGR, BDN, BRY, FRK, MRD, RMP, SHP, VRN |
| 865 U. bipyrenoidosa F.E. Fritsch & M.F. Rich | K, I | BAH |
| 866 U. fimbriata Bold | K | BAH |
| 867 Ulva flexuosa Wulfen (=Enteromorpha tubulosa (Kützing) Kützing) | F | PRG |
| 868 U. prolifera O.F. Müller (=Enteromorpha prolifera (O.F. Müller) J. Agardh) | J | PRG |
| 869 Uronema confervicola Lagerheim | D, F | LKO, MHB, KNP |
| 870 Vaucheria amphibia Randhawa | E | VRN |
| 871 V. avena Hassall | A | VRN |
| 872 V. borealis Hernandez | F | VRN |
| 873 V. bursata (O.F. Müller) C. Agardh (=Vaucheria sessilis (Vaucher) De Candolle) | M | VRN |
| 874 V. bursata var. major (B.H. Smith) Q.X. Wang & W-M. Bao (=Vaucheria sessilis var. major (B.H. Smith) Ventkataraman) | M | VRN |
| 875 V. cruciata (Vaucher) De Candolle (=Vaucheria debaryana Woronin) | K, D, J | KSM, LTP, MAU, MRZ |
| 876 V. geminata (Vaucher) De Candolle | A, F, M | BRY, MRZ |
| 877 V. geminata var. verticillata (Meneghini) Rabenhorst | A | SUL |
| 878 V. hamata (Vaucher) De Candolle | K | VRN |
| 879 V. nasuta W.R. Taylor & Bornatowicz | A | SUL, VRN |
| 880 V. uncinata Kützing | A | VRN |
| 881 V. undulata C.-C. Jao | M | VRN |
| 882 Volvox africanus G.S. West | C, F, G, P, Q | LKO, MRZ |
| 883 V. aureus Ehrenberg | F | LKO, LTP, SHP |
| 884 V. carteri F. Stein | C, F, G, P, Q | LKO, MRZ |
| 885 V. globator Linnaeus | C, F | BBK, LKO, VRN |
| 886 V. mevillii W.R. Shaw | F | LKO |
| 887 V. rousseletii G.S. West | F | LKO |
| 888 V. rousseletii var. lucknowensis M.O.P. Iyengar | F | LKO |
| 889 V. spermatosphaera J.H. Powers | F | AYO |
| 890 Willoea apiculata (Lemmernann) D.M. John, M.J. Wynne & P.M. Tsarenko (=Cruccigenia apiculata (Lemmernann) Schmidle) | D, F | MHB |
| 891 W. crucifer (Wolle) D.M. John, M.J. Wynne & P.M. Tsarenko (=Cruccigenia crucifer (Wolle) O. Kuntze) | D, F | MHB |
| 892 W. rectangularis (A. Braun) D.M. John, M.J. Wynne & P.M. Tsarenko (=Cruccigenia rectangularis (Nägel) Komárk) | F | PRG |
| 893 Wirtrockiella sundaranensis (A.K. Islam) C. Boedeker (=Cladophorella sundaranensis A.K. Islam) | A, D, F, H | BLR |
| 894 Xanthidium antilopaeum Kützing | D, N | PRG |
| 895 Zygnema chalybeospermum Hansgirg (=Zygnema melanosporum Lagerheim) | D, F | KSM, KNP, MHB, PRG |
| 896 Z. collinsianum Transeau | F | AYO |
| 897 Z. cylindricum Transeau | K, J | MHB, LKO |
| 898 Z. cylindrosorum CZurda | F | PRG |
| 899 Z. czurdae Randhawa | F | PRG |
| 900 Z. gangeticum Bhaskar Rao | F | SHR, VRN |
| 901 Z. globosum CZurda | F | KNP |
Checklist of algal class Chlorophyceae for Uttar Pradesh

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| Currently accepted name | Habitat | Localities |
|-------------------------|---------|------------|
| Z. gorakhporense R.N. Singh | F | GKP, SHR |
| Z. inconspicuum Czurda | J, M | SHR |
| Z. indicum J.N. Misra | D, F | KNP, LKO, SKN |
| Z. insigne (Hassall) Kützing | F | BAH, KNP, SHR, SKN |
| Z. mucigeno Randhawa | F | AYO |
| Z. normoni Taft | F | VRN |
| Z. oudhense Randhawa | F | GON |
| Z. stellinum (O.F. Müller) C. Agardh | F | SHR |
| Z. terrestre Randhawa | F, M | AYO, SUL |
| Z. vaucheri C. Agardh | F | BBK, GON |
| Zygnemopsis globosa Randhawa (= Zygnemopsis globosum Czurda) | F | GKP |
| Z. grocilis Randhawa | M, O | AYO |
| Z. indice (Randhawa) Randhawa | M | PRG, SUL |
| Z. iyengari (Randhawa) Randhawa | C | SUL |
| Z. jamaliflora Randhawa | M | AYO |
| Z. minuta Randhawa | M | AYO |
| Z. sphaerospora Randhawa | F, M | AYO |
| Z. splendens Randhawa | F | AYO, BMP |
| Z. transeuana Randhawa | F | AYO |
| Z. vermaii B.N. Prasad & V. Kumari | M | LKO |

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Table 2. Current taxonomic position of various taxa after segregation of Fritsch’s class Chlorophyceae in Uttar Pradesh.

| Phylum         | Class                | Order          | Family               | Genera                                                                 |
|---------------|----------------------|----------------|----------------------|----------------------------------------------------------------------|
| Charophyta    | Charophyceae         | Charales       | Characeae            | Chara (13), Nitella (23), Tolyella (2)                               |
|               | Coleochaetophyceae   | Coleochaetales | Coleochaetales       | Coleochaeta (10), Conochaeta (1)                                     |
|               | Klebsormidiophyceae  | Klebsormidiales| Klebsormidiaceae     | Klebsormidium (2)                                                    |
|               | Zygmatophyceae       | Desmidiales    | Closteriaceae        | Closterium (54)                                                      |
|               |                      |                | Desmidiaceae         | Actinotaenium (3), Arthrodesmus (1), Cosmarium (163), Cosmocladium (1), Desmidium (3), Dociadium (1), Euastrum (39), Hyalotheca (2), Microsterias (9), Pleurotaenium (15), Sphaerocysta (4), Spondylosoma (2), Staurostrum (27), Staurodesmus (4), Tetlingia (2), Xanthidium (1) |
|               |                      |                |                      |                                                                      |
|               |                      |                |                      |                                                                      |
|               |                      |                |                      |                                                                      |
|               | Gonatozygaceae       |                |                      | Gonatozygyn (2)                                                      |
|               | Peniaceae            |                |                      |                                                                      |
|               |                      |                |                      |                                                                      |
|               | Zygmatales           | Mesotaeniaceae |                      | Cylindrocystis (1), Netrium (1), Spirotenia (1)                      |
|               |                      |                |                      |                                                                      |
|               | Zygmataceae          | Closteriaceae  | Closterium (54)      |                                                                      |
|               | Chlorophyta          | Chlorodendrophyceae | Chlorodendrales     | Tetraselmis (1)                                                      |
|               | Chlorophyceae        | Chaetopeltidales| Chaetopeltidaceae    | Chaetopeltis (1), Pseudulvella (2)                                   |
|               |                      | Chaetophorales  | Aphanochaetae        | Aphanochaeta (3)                                                     |
|               |                      |                |                      |                                                                      |
|               |                      |                |                      |                                                                      |
|               |                      |                |                      |                                                                      |
|               |                      |                |                      |                                                                      |
|               |                      |                |                      |                                                                      |
|               |                      |                |                      |                                                                      |
|               | Chlamydomonadales    | Carteriaceae   | Pseudagloë (1)       |                                                                      |
|               | Chlamydomonadaceae   |                | Carteria (2), Chlamydomonas (13), Microcogonema (2), Ogogamochlamys (2) |
|               | Chlorochrytriaceae   |                | Chlorochrytrium (1)  |                                                                      |
|               | Chlorococcaeae       |                | Chlorococcus (2)     |                                                                      |
|               | Dunaliellaceae       |                | Papenfussimonas (1)  |                                                                      |
|               | Goniaceae            |                | Gonium (2)           |                                                                      |
|               | Haematococcaceae     |                | Batraca (1), Chlorogonium (2), Haematococcus (1)                   |
|               | Palmellaceae         |                | Palmella (2)         |                                                                      |
|               | Palmellopsidaceae    |                | Asteroecoccus (1), Chlamydocapsa (1), Sphaerellocysta (1)          |
|               | Phacotaceae          |                | Phacotus (2)          |                                                                      |
|               | Pleurastraceae       |                | Pleurastrum (1)       |                                                                      |
|               | Protosiphonaceae     |                | Protosiphon (1)       |                                                                      |
|               | Spondylosoraceae     |                | Pyrobotrys (6)        |                                                                      |
|               | Sphaerocystidaceae   |                | Sphaerocysta (1)      |                                                                      |
|               | Tetraebaceae         |                | Tetraebena (1)        |                                                                      |
|               | Tetrasporaceae       |                | Tetraspora (3)        |                                                                      |
|               | Volvocaceae          |                | Eudorina (1), Pandorina (2), Pleodorina (1), Volvox (8)             |
| Class                          | Order                          | Genus                          |
|-------------------------------|--------------------------------|--------------------------------|
| Oedogoniales                  | Oedogoniaceae                  | Bulbochaete (13), Oedocladium (1), Oedogonium (79) |
| Sphaeropleales                | Characiaceae                   | Characiellapis (1), Characium (3) |
|                               | Cylindrocapsaceae              | Cylindrocapsa (4)               |
|                               | Hydrodictyaceae                | Hydrodictyon (1), Lacunastrum (1), Monactinus (1), Parapedastrum (1), Pedastrum (7), Pseudopedastrum (2), Sorastrum (1), Stauridium (1), Tetraedron (6) |
|                               | Radiococcaceae                 | Coenocystis (1), Gloeocystis (2) |
|                               | Scenedesmaceae                 | Actuodesmus (1), Coelastrum (6), Comasiella (1), Desmodesmus (19), Dimorphococcus (1), Harpactinos (1), Scenedesmus (24), Tetradoxus (5), Tetrallantoideus (1) |
|                               | Schroederiaceae                | Microspora (5)                  |
|                               | Trebouxiophyceae               | Actinastrum (2), Chlorella (1), Closteriopsis (1), Dictyosphaera (1), Microcystis (1), Mucicystis (1) |
|                               | Chlorellales                   | Neglectella (1)                 |
|                               | Eremosphaeraceae               | Oocystaceae (1), Eremosphaera (1), Gloeotrichia (1), Nephrocytis (2), Oocystaenium (1), Oocystis (7), Oonephris (1), Willows (3) |
|                               | Microthamniales                | Microthamniaceae (3)            |
|                               | Prasiolales                    | Diplasphaera (1), Desmoecoccus (1) |
|                               | Trebouxiaceae                  | Botryococcus (2)                |
|                               | Trebouxiophyceae ord incertae sedis | Coccocymaceae (1), Coccocymys (2) |
|                               | Ulvophyceae                    | Bryopsis (1), Dichotomosiphonaceae (1) |
|                               | Cladophorales                  | Cladophora (8), Lychnothamnion (1), Pseudorhizoclonium (1), Rhizoclonium (5) |
|                               | Pithophorales                  | Aegagropila (2), Aegagropilopis (1), Arnoldella (1), Pithophora (1), Widdringtonia (1) |
|                               | Scytosphaeroidales             | Scytosphaera (1)                |
|                               | Trentefoliales                 | Cephaleuros (1), Trentofolia (2) |
|                               | Ulvales                        | Enteromorpha (1), Ulva (2)      |
|                               | Glaucophyta                    | Glaucochlorids (1), Pseudostaurastrum (1) |
|                               | Ochrophyta                     | Glaucochlorids (1), Pseudostaurastrum (1) |
|                               | Xanthophyceae                  | Vaucheralles (12)               |
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