

**Computer Code for Freshwater Life  
Forms of Newfoundland:  
Part 2 — Plants**

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COMPUTER CODE FOR FRESHWATER LIFE FORMS OF NEWFOUNDLAND: PART 2 - PLANTS

by

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This is the eighth Manuscript Report from  
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PREFACE

This is Part 2 of two parts. The first part contains codes for animals and fish stomach content items.

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## ABSTRACT

Ryan, P. M. 1983. Computer code for freshwater life forms of Newfoundland:  
Part 2 - Plants. Can. MS Rep. Fish. Aquat. Sci. 1729: iv + 122 p.

A systematically structured, ten-digit, computer code for use in the study of the freshwater plants of Newfoundland was created. The code consists of two digits in each of five fields, with each field corresponding to a taxonomic rank. Nine hundred and nineteen plant taxa were assigned codes. These plant taxa consist of: 21 divisions or classes; 53 subdivisions, classes, or orders; 151 orders, suborders, or families; 241 genera; and 453 species which have been or might be recorded during freshwater investigations in Newfoundland.

Key words: freshwater plants, Newfoundland, algae, systematics, taxonomy, computer code, species code

## RÉSUMÉ

Ryan, P. M. 1983. Computer code for freshwater life forms of Newfoundland:  
Part 2 - Plants. Can. MS Rep. Fish. Aquat. Sci. 1729: iv + 122 p.

Un code informatique à dix chiffres systématiquement structuré a été créé pour l'étude des plantes d'eau douce de Terre-Neuve. Le code consiste en deux chiffres dans chacun des cinq domaines, chaque domaine correspondant à un rang taxonomique. Des codes ont été assignés à 919 taxons de plantes. Ces taxons de plantes comprennent: 21 divisions ou classes; 53 subdivisions, classes ou ordres; 151 ordres, sous-ordres ou familles; 241 genres; et 453 espèces qui ont été ou pourraient être répertoriées au cours de recherches sur les eaux douces à Terre-Neuve.

Mots-clés: plantes d'eau douce, Terre-Neuve, algues, systématique, taxonomie, code informatique, code d'espèce

## INTRODUCTION

This publication presents a systematically structured, ten-digit, computer code for use in the study of the freshwater plants of Newfoundland. It is a companion to the animal code presented, under separate cover, as Part 1 (Ryan 1983). Its purpose is to facilitate the rapid handling and analyses of large amounts of data obtained during aquatic studies in the Province of Newfoundland by the Department of Fisheries and Oceans and other organizations or individuals.

Originally, a computer code was required to analyze large amounts of data collected from lakes and streams at the headwaters of the Northwest Gander River as part of a long-term study. Numerous computer codes for life forms had been developed but those existing codes examined were not considered acceptable for a variety of reasons. The present code was created to meet a number of criteria. The code had to: accommodate plants, animals, and fish stomach content items; have provision for the commonly used taxonomic groupings; allow for the easy sorting of data by taxonomic group; be practical for use with various levels of specimen identification; have a simple format to minimize coding errors; and have provision for extensive and rapid modification.

The code consists of two digits (00-99) in each of five fields with the identity of a plant, to a given taxonomic group, indicated by 01-99 in one or more of the five fields. This allows for the rapid sorting and analyses of data by taxonomic group and allows for a considerable addition of taxa without alteration of the systematic structure.

As the broad applicability of the code became apparent, the number of taxa assigned codes was increased with provision for: taxa from other areas of the province; taxa found outside the province; and terrestrial taxa customarily found near water. All plants found in or near the freshwaters of Newfoundland are not included in the report. However, codes are available for the inclusion of taxa as required. All taxa included may not, as yet, have been reported from Newfoundland. However, application of the code to data from outside the province is made easier by the inclusion of such taxa.

## MATERIALS AND METHODS

The first field in the code for plants was used to identify the division or class, the second field the subdivision, class or order, and the third field the order, suborder, or family. The fourth and fifth fields were used to identify the genus and species, respectively. This structuring of the code, with potential for entering the class and order in either of two fields, was done to accommodate differing taxonomic schemes encountered in practice.

Plants were assigned codes starting from the non-vascular plants (slime molds, fungi, bacteria, etc.) and ranging to the vascular plants (flowering plants) with the exception of the algae. The more frequently required algae codes were obtained from near the end of the code sequence for ease of use. A systematically structured list of taxa with their corresponding codes was

prepared with spacing and unassigned codes to allow for the addition, in each copy of the report, of taxa and appropriate codes by the user, as required.

A scientific name associated with each code was entered in computer files so that data could be retrieved with associated names rather than numbers. The scientific names consist of one or two parts based on the last two coded fields and occupy a maximum of 32 characters. If a taxon is specified by digits 01-99 only in the first field (eg. plant identified only to division), only the division or class name is given. If a plant is identified beyond that level, the names corresponding to the last two fields occupied by digits 01-99 are produced. Thus, a plant identified to species has retrievable genus and species names.

As an aid to code users, all taxa, except species, were listed alphabetically with their associated codes. Thus, a user unfamiliar with order names but knowing the appropriate genus and species names could obtain most of the code for the species from the alphabetical listing of the genus and use that part of the code to obtain the full code and additional information on the taxonomic position from the systematic listing.

Systematic positions and nomenclature were obtained from a variety of sources with modification for practical application of the code. The first taxonomic separation of division or class (first field) came from Scagel et al. (1969). The second separation of subdivision, class, or order (second field) came from Scagel et al. (1969) with the addition of Sphenopsida from Fuller and Carothers (1963) and numerous algal groups from Smith (1950), Prescott (1962), and Bourrelly (1968, 1970, 1972). Further separation of plants, except algae, was based on Fassett (1957) and Britton and Brown (1970a, b, c). Further separation of algae was based on Smith (1950), Prescott (1962), Patrick and Reimer (1966, 1975), and Bourrelly (1968, 1970, 1972).

Occasionally, in the systematically structured listing of taxa, synonymous names were indicated. Only one of the synonyms was used in the list of scientific names based on the last two coded fields and the alphabetical listing of taxa.

## RESULTS AND DISCUSSION

Nine hundred and nineteen taxa were included in the code for plants. These taxa consist of: 21 divisions or classes; 53 subdivisions, classes, or orders; 151 orders, suborders, or families; 241 genera; and 453 species.

Duplication of species names occurred throughout the code (eg. Anabaena flos-aquae, Aphanizomenon flos-aquae). No duplication of a genus name occurred among the plants listed. However, with both parts of the code (Part 1 - Animals, Part 2 - Plants) combined, one duplication of a genus name was encountered. Holopedium refers to H. gibberum, the zooplankter, and H. irregulare, the blue-green alga. No duplication of both genus and species names was encountered.

Plant taxa and their corresponding codes are presented in three arrangements in Appendices 1-3:

- Appendix 1 - Scientific names of plants based on the last two coded fields and corresponding codes ordered by code sequence;
- Appendix 2 - List of taxa other than species and corresponding codes ordered alphabetically by taxa; and,
- Appendix 3 - Systematically structured list of taxa and corresponding codes ordered by code sequence.

It is certain that changes to the code will be required as more organizations and individuals make use of it and as the techniques for classifying organisms are advanced. Suggested changes should be referred to the Head, freshwater investigations, Fisheries Research Branch, Northwest Atlantic Fisheries Centre, P. O. Box 5667, St. John's, Newfoundland, A1C 5X1. Appropriate changes will be entered in each of the master copies of Appendices 1, 2, and 3. These changes may be added to individual copies of the report by users until the publication of a second edition of the report is required.

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APPENDIX 1: SCIENTIFIC NAMES OF PLANTS BASED ON THE LAST TWO CODED  
FIELDS AND CORRESPONDING CODES ORDERED BY CODE SEQUENCE

MYXOMYCOTA	760000000
MYXOMYCOTA MYXOMYCETES	760100000
MYXOMYCOTA ACRASIOMYCETES	760200000
MYXOMYCOTA LABYRINTHULOMYCETES	760300000
EUMYCOTA	770000000
EUMYCOTA PHYCOMYCETES	770100000
EUMYCOTA ASCOMYCETES	770200000
EUMYCOTA BASIDIOMYCETES	770300000
EUMYCOTA DEUTEROMYCETES	770400000
SCHIZOMYCOPHYTA	780000000
SCHIZOMYCOPHYTA SCHIZOMYCETES	780100000
SCHIZOMYCOPHYTA MICROTATOBIOITES	780200000
BRYOPHYTA	790000000
BRYOPHYTA HEPATICAE	790100000
BRYOPHYTA ANTHOCEROTAE	790200000
BRYOPHYTA MUSCI	790300000
MUSCI SPHAGNIDEAE	790301000
LYCOPHYTA	800000000
ARTHROPHYTA	810000000
ARTHROPHYTA SPHENOPSIDA	810100000
SPHENOPSIDA EQUISETALES	810101000
EQUISETALES EQUISETUM	810101010
EQUISETUM FLUVIATILE	810101011
PTEROPHYTA	820000000
PTERIDOSPERMOPHYTA	830000000
CONIFEROPHYTA	840000000
ANTHOPHYTA	850000000
ANTHOPHYTA DICOTYLEDONAE	850100000
DICOTYLEDONAE CERATOPHYLLACEAE	850101000
CERATOPHYLLACEAE CERATOPHYLLUM	850101010
CERATOPHYLLUM DEMERSUM	850101011
DICOTYLEDONAE CABOMBACEAE	850102000
CABOMBACEAE BRASENIA	850102010
BRASENIA SCHREBERI	850102011
DICOTYLEDONAE NYMPHAEACEAE	850103000
NYMPHAEACEAE NYMPHAEA	850103010
NYMPHAEA ODORATA	850103011
NYMPHAEACEAE NUPHAR	850103020
NUPHAR VARIEGATUM	850103021
DICOTYLEDONAE SARRACENIACEAE	850104000
DICOTYLEDONAE DROSERACEAE	850105000
DICOTYLEDONAE CALLITRICHACEAE	850106000
CALLITRICHACEAE CALLITRICHE	850106010
CALLITRICHE HETEROPHYLLA	850106011
DICOTYLEDONAE HALORAGIDACEAE	850107000
HALORAGIDACEAE HIPPURUS	850107010
HALORAGIDACEAE MYRIOPHYLLUM	850107020
DICOTYLEDONAE LENTIBULARIACEAE	850108000
LENTIBULARIACEAE UTRICULARIA	850108010
UTRICULARIA MACRORHIZA	850108011

DICOTYLEDONAE LOBELIACEAE	8501090000
LOBELIACEAE LOBELIA	8501090100
LOBELIA DORTMANNA	8501090101
DICOTYLEDONAE COMPOSITAE	8501100000
COMPOSITAE ASTER	8501100100
ASTER NEMORALIS	8501100101
DICOTYLEDONAE MENYANTHACEAE	8501110000
MENYANTHACEAE MENYANTHES	8501110100
MENYANTHES TRIFOLIATA	8501110101
MENYANTHACEAE NYMPHOIDES	8501110200
ANTHOPHYTA MONOCOTYLEDONAE	8502000000
MONOCOTYLEDONAE TYPHACEAE	8502010000
TYPHACEAE TYPHA	8502010100
TYPHA LATIFOLIA	8502010101
TYPHA ANGUSTIFOLIA	8502010102
MONOCOTYLEDONAE SPARGANIACEAE	8502020000
SPARGANIACEAE SPARGANIUM	8502020100
SPARGANIUM EURYCARPUM	8502020101
SPARGANIUM ANDROCLADUM	8502020102
SPARGANIUM DIVERSIFOLIUM	8502020103
SPARGANIUM ACAULE	8502020104
SPARGANIUM ANGUSTIFOLIUM	8502020105
SPARGANIUM HYPERBOREUM	8502020106
SPARGANIUM MINIMUM	8502020107
MONOCOTYLEDONAE ZANNICHELLIACEAE	8502030000
ZANNICHELLIACEAE POTAMOGETON	8502030100
POTAMOGETON NATANS	8502030101
POTAMOGETON OAKESIANUS	8502030102
POTAMOGETON EPIHYDRUS	8502030103
POTAMOGETON ALPINUS	8502030104
POTAMOGETON PERFOLIATUS	8502030105
ZANNICHELLIACEAE ZANNICHELLIA	8502030200
ZANNICHELLIA PALUSTRIS	8502030201
MONOCOTYLEDONAE NAIADACEAE	8502040000
NAIADACEAE NAIAS	8502040100
NAIAS FLEXILIS	8502040101
MONOCOTYLEDONAE SCHEUCHZERIAEAE	8502050000
SCHEUCHZERIAEAE TRIGLOCHIN	8502050100
TRIGLOCHIN PALUSTRIS	8502050101
TRIGLOCHIN MARITIMA	8502050102
SCHEUCHZERIAEAE SCHEUCHZERIA	8502050200
SCHEUCHZERIA PALUSTRIS	8502050201
MONOCOTYLEDONAE ALISMACEAE	8502060000
ALISMACEAE SAGITTARIA	8502060100
SAGITTARIA LATIFOLIA	8502060101
SAGITTARIA GRAMINEA	8502060102
MONOCOTYLEDONAE GRAMINEAE	8502070000
GRAMINEAE HOMALOCENCHRUS	8502070100
HOMALOCENCHRUS ORYZOIDES	8502070101
GRAMINEAE CALAMAGROSTIS	8502070200
CALAMAGROSTIS CANADENSIS	8502070201
GRAMINEAE CATABROSA	8502070300
CATABROSA AQUATICA	8502070301
GRAMINEAE POA	8502070400

POA TRIFLORA	8502070401
GRAMINEAE PANICULARIA	8502070500
PANICULARIA CANADENSIS	8502070501
PANICULARIA BOREALIS	8502070502
MONOCOTYLEDONAE CYPERACEAE	8502080000
CYPERACEAE ELEOCHARIS	8502080100
ELEOCHARIS PALUSTRIS	8502080101
CYPERACEAE SCIRPUS	8502080200
SCIRPUS SUBTERMINALIS	8502080201
SCIRPUS AMERICANUS	8502080202
SCIRPUS VALIDUS	8502080203
SCIRPUS OCCIDENTALIS	8502080204
SCIRPUS RUFUS	8502080205
SCIRPUS MICROCARPUS	8502080206
SCIRPUS CYPERINUS	8502080207
CYPERACEAE CAREX	8502080300
CAREX STIPATA	8502080301
CAREX ATLANTICA	8502080302
CAREX LEPTALEA	8502080303
CAREX AQUATILIS	8502080304
CAREX GYNANDRA	8502080305
CAREX CRINITA	8502080306
CAREX LACUSTRIS	8502080307
CAREX LASIOCARPA	8502080308
CAREX FLAVA	8502080309
CAREX FOLLICULATA	8502080310
CAREX RETRORSA	8502080311
CAREX HYSTRICINA	8502080312
CAREX COMOSA	8502080313
CAREX FRANKII	8502080314
CAREX INTUMESCENS	8502080315
CAREX ASA-GRAYI	8502080316
CAREX ROSTRATA	8502080317
MONOCOTYLEDONAE ARACEAE	8502090000
MONOCOTYLEDONAE LEMNACEAE	8502100000
LEMNACEAE LEMNA	8502100100
MONOCOTYLEDONAE ERIOCAULACEAE	8502110000
ERIOCAULACEAE ERIOCAULON	8502110100
ERIOCAULON SEPTANGULARE	8502110101
MONOCOTYLEDONAE JUNCACEAE	8502120000
JUNCACEAE JUNCUS	8502120100
JUNCUS EFFUSUS	8502120101
JUNCUS CONGLOMERATUS	8502120102
JUNCUS FILIFORMIS	8502120103
JUNCUS BUFONIUS	8502120104
JUNCUS DUDLEYI	8502120105
JUNCUS MILITARIS	8502120106
JUNCUS ARTICULATUS	8502120107
MONOCOTYLEDONAE MELANTHACEAE	8502130000
MONOCOTYLEDONAE LILIACEAE	8502140000
MONOCOTYLEDONAE CONVALLARIACEAE	8502150000
MONOCOTYLEDONAE IRIDACEAE	8502160000

IRIDACEAE IRIS	8502160100
IRIS VERSICOLOR	8502160101
IRIS HOOKERI	8502160102
CYANOPHYTA	8600000000
CYANOPHYTA CHROOCOCCALES	8601000000
CHROOCOCCALES CHROOCOCCACEAE	8601010000
CHROOCOCCACEAE CHROOCOCCUS	8601010100
CHROOCOCCUS LIMNETICUS	8601010101
CHROOCOCCUS PRESCOTTII	8601010102
CHROOCOCCACEAE MERISMOPEDIA	8601010200
MERISMOPEDIA ELEGANS	8601010201
MERISMOPEDIA MAJOR	8601010202
MERISMOPEDIA GLAUCA	8601010203
MERISMOPEDIA TROLLERI	8601010204
MERISMOPEDIA TENUISSIMA	8601010205
MERISMOPEDIA CONVOLUTA	8601010206
CHROOCOCCACEAE GLOEOCAPSA	8601010300
GLOEOCAPSA MAJOR	8601010301
GLOEOCAPSA PUNCTATA	8601010302
CHROOCOCCACEAE MICROCYSTIS	8601010400
MICROCYSTIS AERUGINOSA	8601010401
MICROCYSTIS FLOS-AQUAE	8601010402
MICROCYSTIS ROBUSTA	8601010403
CHROOCOCCACEAE APHANOCAPSA	8601010500
APHANOCAPSA ELACHISTA	8601010501
APHANOCAPSA PULCHRA	8601010502
CHROOCOCCACEAE EUCAPSIS	8601010600
EUCAPSIS ALPINA	8601010601
CHROOCOCCACEAE COELOSPHAERIUM	8601010700
COELOSPHAERIUM NAEGELIANUM	8601010701
CHROOCOCCACEAE DACTYLOCOCCOPSIS	8601010800
DACTYLOCOCCOPSIS ACICULARIS	8601010801
CHROOCOCCACEAE SYNECHOCOCCUS	8601010900
CHROOCOCCACEAE HOLOPEDIUM	8601011000
HOLOPEDIUM IRREGULARE	8601011001
CHROOCOCCACEAE APHANOTHECE	8601011100
APHANOTHECE CASTAGNEI	8601011101
APHANOTHECE NIDULANS	8601011102
APHANOTHECE ALASCENSE	8601011103
CHROOCOCCACEAE RHABDODERMA	8601011200
RHABDODERMA LINEARE	8601011201
RHABDODERMA SIGMOIDEA	8601011202
RHABDODERMA IRREGULARE	8601011203
CHROOCOCCACEAE GOMPHOSPHAERIA	8601011300
GOMPHOSPHAERIA LACUSTRIS	8601011301
GOMPHOSPHAERIA APONINA	8601011302
CHROOCOCCACEAE SYNECHOCYSTIS	8601011400
SYNECHOCYSTIS AQUATILIS	8601011401
CHROOCOCCACEAE GLOEOTHECE	8601011500
CHROOCOCCACEAE ENTOPHYSALIDACEAE	8601020000
ENTOPHYSALIDACEAE PARACAPSA	8601020100
CYANOPHYTA CHAMAESIPHONALES	8602000000

CHAMAESIPHONALES PLEUROCAPSACEAE	8602010000
PLEUROCAPSACEAE MYXOSARCINA	8602010100
PLEUROCAPSACEAE PLEUROCAPSA	8602010200
PLEUROCAPSA MINOR	8602010201
CHAMAESIPHONALES DERMOCARPACEAE	8602020000
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OSCILLATORIALES OSCILLATORIACEAE	8603010000
OSCILLATORIACEAE OSCILLATORIA	8603010100
OSCILLATORIACEAE PHORMIDIUM	8603010200
OSCILLATORIACEAE TRICHODESMIUM	8603010300
TRICHODESMIUM LACUSTRE	8603010301
OSCILLATORIACEAE LYNGBYA	8603010400
LYNGBYA CONTORTA	8603010401
LYNGBYA MUCICOLA	8603010402
OSCILLATORIACEAE PSEUDANABAENA	8603010500
PSEUDANABAENA CATENATA	8603010501
OSCILLATORIALES NOSTOCACEAE	8603020000
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NOSTOCACEAE NODULARIA	8603020200
NOSTOCACEAE ANABAENA	8603020300
ANABAENA FLOS-AQUAE	8603020301
ANABAENA LIMNETICA	8603020302
NOSTOCACEAE APHANIZOMENON	8603020400
APHANIZOMENON FLOS-AQUAE	8603020401
OSCILLATORIALES SCYTONEMATAACEAE	8603030000
SCYTONEMATAACEAE SCYTONEMA	8603030100
SCYTONEMATAACEAE TOLYPOTHRIX	8603030200
OSCILLATORIALES STIGONEMATAACEAE	8603040000
STIGONEMATAACEAE STIGONEMA	8603040100
STIGONEMA OCELLATUS	8603040101
STIGONEMATAACEAE HAPALOSIPHON	8603040200
HAPALOSIPHON HIBERNICUS	8603040201
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RIVULARIACEAE CALOTHRIX	8603050100
OSCILLATORIALES MASTIGOCLADACEAE	8603060000
MASTIGOCLADACEAE MASTIGOCLADUS	8603060100
MASTIGOCLADUS LAMELLOSUS	8603060101
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CHLOROPHYCEAE VOLVOCALES	8701000000
VOLVOCALES POLYBLEPHARIDACEAE	8701010000
VOLVOCALES CHLAMYDOMONADACEAE	8701020000
CHLAMYDOMONADACEAE CHLAMYDOMONAS	8701020100
CHLAMYDOMONAS GLEOPARA	8701020101
CHLAMYDOMONAS FRIGIDA	8701020102
CHLAMYDOMONAS DINOBRYONI	8701020103
CHLAMYDOMONADACEAE POLYTOMA	8701020200
CHLAMYDOMONADACEAE CHLOROMONAS	8701020300
CHLAMYDOMONADACEAE CARTERIA	8701020400
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VOLVOCALES VOLVOCACEAE	8701040000

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GONIUM SOCIALE	8701040101
VOLVOACEAE VOLVOX	8701040200
VOLVOACEAE PANDORINA	8701040300
PANDORINA MORUM	8701040301
VOLVOACEAE PLEODORINA	8701040400
VOLVOACEAE EUDORINA	8701040500
EUDORINA ELEGANS	8701040501
VOLVOCALES SPONDYLOMORACEAE	8701050000
VOLVOCALES HAEMATOCOCCACEAE	8701060000
VOLVOCALES PYRAMIMONACEAE	8701070000
PYRAMIMONACEAE GYROMITUS	8701070100
CHLOROPHYCEAE TETRASPORALES	8702000000
TETRASPORALES PALMELLACEAE	8702010000
PALMELLACEAE GLOEOCYSTIS	8702010100
GLOEOCYSTIS MAJOR	8702010101
GLOEOCYSTIS AMPLA	8702010102
GLOEOCYSTIS GIGAS	8702010103
GLOEOCYSTIS VESICULOSA	8702010104
GLOEOCYSTIS APONINA	8702010105
GLOEOCYSTIS PLANCTONICA	8702010106
PALMELLACEAE PALMELLA	8702010200
PALMELLA MUCOSA	8702010201
PALMELLACEAE SPHAEROCYSTIS	8702010300
SPHAEROCYSTIS SCHROETERI	8702010301
PALMELLACEAE ASTEROCOCCUS	8702010400
ASTEROCOCCUS LIMNETICUS	8702010401
PALMELLACEAE PLANCTOCOCCUS	8702010500
PLANCTOCOCCUS ALSIUS	8702010501
PLANCTOCOCCUS GELATINOSA	8702010502
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TETRASPORA LAMELLOSA	8702020101
TETRASPORA LACUSTRIS	8702020102
TETRASPORA MINIMUM	8702020103
TETRASPORALES CHLORANGIACEAE	8702030000
TETRASPORALES COCCOMYXACEAE	8702040000
COCCOMYXACEAE ELAKATOTHRIX	8702040100
ELAKATOTHRIX GELATINOSA	8702040101
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ULOTRICHALES ULOTRICHACEAE	8703010000
ULOTRICHACEAE ULOTHRIX	8703010100
ULOTRICHACEAE BINUCLEARIA	8703010200
BINUCLEARIA TECTORUM	8703010201
ULOTRICHALES MICROSPORACEAE	8703020000
MICROSPORACEAE MICROSPORA	8703020100
ULOTRICHALES CYLINDROCAPSACEAE	8703030000
CYLINDROCAPSACEAE CYLINDROCAPSA	8703030100
CYLINDROCAPSA GEMINELLA	8703030101
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CHAETOPHORACEAE THAMNIOCHAETE	8703040100
CHAETOPHORACEAE CHAETOPHORA	8703040200

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ULOTRICHALES COLEOCHAETACEAE	8703060000
COLEOCHAETACEA CHAETOSPHAERIDIUM	8703060100
CHAETOSPHAERIDIUM PRINGSHEIMII	8703060101
ULOTRICHALES TRENTEPOHLIACEAE	8703070000
ULOTRICHALES SPHAEROPLEACEAE	8703080000
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ULVALES ULVACEAE	8704010000
ULVALES SCHIZOMERIDACEAE	8704020000
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SCHIZOGONIALES SCHIZOGONIAEAE	8705010000
CHLOROPHYCEAE OEDOGONIALES	8706000000
OEDOGONIALES OEDOGONIAEAE	8706010000
OEDOGONIAEAE BULBOCHAETE	8706010100
OEDOGONIAEAE OEDOGONIUM	8706010200
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CLADOPHORALES CLADOPHORACEAE	8707010000
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CHLOROCOCCALES CHLOROCOCCACEAE	8708010000
CHLOROCOCCALES ENDOSPHAERACEAE	8708020000
CHLOROCOCCALES MICRACTINIACEAE	8708030000
MICRACTINIACEAE GOLENKINIOPSIS	8708030100
MICRACTINIACEAE GOLENKINIA	8708030200
GOLENKINIA RADIATA	8708030201
CHLOROCOCCALE DICTYOSPHAERIAEAE	8708040000
DICTYOSPHAERIAE DICTYOSPHAERIUM	8708040100
DICTYOSPHAERIUM PULCHELLUM	8708040101
DICTYOSPHAERIUM EHRENBERGIANUM	8708040102
DICTYOSPHAERIAEAE DIMORPHOCOCCUS	8708040200
DIMORPHOCOCCUS LUNATUS	8708040201
DICTYOSPHAERIAEAE BOTRYOCOCCUS	8708040300
DICTYOSPHAERIAEAE BRAUNII	8708040301
CHLOROCOCCALES CHARACIACEAE	8708050000
CHARACIACEAE SCHROEDERIA	8708050100
SCHROEDERIA SETIGERA	8708050101
SCHROEDERIA JUDAYI	8708050102
CHARACIACEAE CHARACIUM	8708050200
CHARACIUM AMBIGUUM	8708050201
CHARACIUM ORNITHOCEPHALUM	8708050202
CHLOROCOCCALES PROTOSIPHONACEAE	8708060000
CHLOROCOCCALES HYDRODICTYACEAE	8708070000
HYDRODICTYACEAE PEDIASTRUM	8708070100
PEDIASTRUM BORYANUM	8708070101
PEDIASTRUM TETRAS	8708070102
PEDIASTRUM OBTUSUM	8708070103
PEDIASTRUM SIMPLEX	8708070104
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COELASTRACEAE COELASTRUM	8708080100
COELASTRUM BRAUNII	8708080101
COELASTRUM SCABRUM	8708080102
COELASTRUM CAMBRICUM	8708080103
COELASTRUM MICROPORUM	8708080104

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OOCYSTACEAE OOCYSTIS	8708090100
OOCYSTIS SUBTILISSIMA	8708090101
OOCYSTIS LACUSTRIS	8708090102
OOCYSTIS ELLIPTICA	8708090103
OOCYSTACEAE KIRCHNERIELLA	8708090200
KIRCHNERIELLA OBESA	8708090201
OOCYSTACEAE ANKISTRODESMUS	8708090300
ANKISTRODESMUS FALCATUS	8708090301
ANKISTRODESMUS FRACTUS	8708090302
ANKISTRODESMUS SPIRALIS	8708090303
OOCYSTACEAE WESTELLA	8708090400
WESTELLA BOTRYOIDES	8708090401
WESTELLA LINEARIS	8708090402
OOCYSTACEAE SELENASTRUM	8708090500
SELENASTRUM MINUTA	8708090501
OOCYSTACEAE QUADRIGULA	8708090600
QUADRIGULA LACUSTRIS	8708090601
QUADRIGULA CLOSTEROIDES	8708090602
OOCYSTACEAE TETRAEDRON	8708090700
TETRAEDRON MINUTA	8708090701
TETRAEDRON CAUDATUM	8708090702
TETRAEDRON REGULARE	8708090703
TETRAEDRON MINIMUM	8708090704
TETRAEDRON PENTAEDRICUM	8708090705
OOCYSTACEAE SCOTIELLA	8708090800
SCOTIELLA NIVALIS	8708090801
OOCYSTACEAE CHODATELLA	8708090900
CHODATELLA QUADRISETA	8708090901
CHLOROCOCCALES SCENEDESMACEAE	8708100000
SCENEDESMACEAE SCENEDESMUS	8708100100
SCENEDESMUS BIJUGA	8708100101
SCENEDESMUS DENTICULATUS	8708100102
SCENEDESMUS QUADRICAUDA	8708100103
SCENEDESMUS ABUNDANS	8708100104
SCENEDESMUS DIMORPHUS	8708100105
SCENEDESMACEAE TETRALLANTOS	8708100200
SCENEDESMACEAE CRUCIGENIA	8708100300
CRUCIGENIA QUADRATA	8708100301
CRUCIGENIA RECTANGULARIS	8708100302
CRUCIGENIA TETRAPEDIA	8708100303
CHLOROCOCCALES RADIOCOCCACEAE	8708110000
RADIOCOCCACEAE PHACOMYXA	8708110100
PHACOMYXA SPHAGNICOLA	8708110101
CHLOROPHYCEAE SIPHONALES	8709000000
SIPHONALES PHYLLOSIPHONACEAE	8709010000
SIPHONALES DICHOTOMOSIPHONACEAE	8709020000
CHLOROPHYCEAE ZYGNEMATALES	8710000000
ZYGNEMATALES ZYGNEMATAACEAE	8710010000
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ZYGNEMATAACEAE SPIROGYRA	8710010200
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GONATOZYGON MONOTAENIUM	8710020101
GONATOZYGON KIHNAHANI	8710020102
MESOTAENIACEAE CYLINDROCYSTIS	8710020201
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DESMIDIACEAE ARTHRODESMUS	8710030100
ARTHRODESMUS TENUISSIMUS	8710030101
ARTHRODESMUS INCUS	8710030102
ARTHRODESMUS TRIANGULARIS	8710030103
ARTHRODESMUS RALFSII	8710030104
ARTHRODESMUS SUBULATUS	8710030105
ARTHRODESMUS VALIDUS	8710030106
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COSMARIUM PUNCTUATUM	8710030201
COSMARIUM CONTRACTUM	8710030202
COSMARIUM MARGARITATUM	8710030203
COSMARIUM BIOCULATUM	8710030204
COSMARIUM ABRUPTUM	8710030205
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DESMIDIUM CYLINDRICUM	8710030301
DESMIDIUM GREVILLII	8710030302
DESMIDIUM BAILEYI	8710030303
DESMIDIACEAE EUASTRUM	8710030400
EUASTRUM DIDELTA	8710030401
EUASTRUM ANSATUM	8710030402
EUASTRUM CRASSUM	8710030403
EUASTRUM PINNATUM	8710030404
EUASTRUM VERRUCOSUM	8710030405
EUASTRUM ABRUPTUM	8710030406
EUASTRUM ELEGANS	8710030407
DESMIDIACEAE PLEUROTAENIUM	8710030500
PLEUROTAENIUM NODOSUM	8710030501
PLEUROTAENIUM NODULOSUM	8710030502
PLEUROTAENIUM CORONATUM	8710030503
PLEUROTAENIUM TRABECULA	8710030504
PLEUROTAENIUM EHRENBERGII	8710030505
PLEUROTAENIUM VERRUCOSUM	8710030506
DESMIDIACEAE BAMBUSINA	8710030600
BAMBUSINA BREBISSEONII	8710030601
BAMBUSINA BARRERI	8710030602
DESMIDIACEAE SPHAEROSOMA	8710030700
SPHAEROSOMA EXCAVATA	8710030701
DESMIDIACEAE SPONDYLIUM	8710030800
SPONDYLIUM PLANUM	8710030801
SPONDYLIUM PULCHRUM	8710030802
DESMIDIACEAE XANTHIDIUM	8710030900
XANTHIDIUM ANTILOPAEUM	8710030901
XANTHIDIUM ARMATUM	8710030902
XANTHIDIUM CRISTATUM	8710030903
XANTHIDIUM PSEUDOBENGALICUM	8710030904
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TRIPLOCERAS GRACILE	8710031001
TRIPLOCERAS VERTICULATUM	8710031002
DESMIDIACEAE MICRASTERIAS	8710031100
MICRASTERIAS LATICEPTS	8710031101
MICRASTERIAS MAHABULESHWARENSIS	8710031102
MICRASTERIAS APICULATA	8710031103
MICRASTERIAS MURICATA	8710031104
MICRASTERIAS DENTICULATA	8710031105
MICRASTERIAS FOLIACEAE	8710031106
MICRASTERIAS JOHNSONII	8710031107
MICRASTERIAS RADIATA	8710031109
MICRASTERIAS RADIOSA	8710031110
MICRASTERIAS ROTATA	8710031111
MICRASTERIAS CONFERTA	8710031112
MICRASTERIAS JENNERII	8710031113
MICRASTERIAS PAPILLIFERA	8710031114
MICRASTERIAS MUCOSA	8710031115
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STAUSTRUM ANATINUM	8710031202
STAUSTRUM ANKYROIDES	8710031203
STAUSTRUM ARTISTIFERUM	8710031204
STAUSTRUM BREVISPINUM	8710031205
STAUSTRUM COMPTUM	8710031206
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STAUSTRUM GRALLATORIUM	8710031208
STAUSTRUM JOHNSONI	8710031209
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STAUSTRUM MANFELDTII	8710031211
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STAUSTRUM OPHIURA	8710031214
STAUSTRUM PACHYRHYNCHUM	8710031215
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STAUSTRUM MEGACANTHUM	8710031218
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STAUSTRUM LIMNETICUM	8710031221
STAUSTRUM AVICULA	8710031222
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STAUSTRUM AVERSUM	8710031225
STAUSTRUM BOREALE	8710031226
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STAUSTRUM DICKIEI	8710031228
STAUSTRUM ELONGATUM	8710031229
STAUSTRUM O'MEARII	8710031230
STAUSTRUM PELAGICUM	8710031231
STAUSTRUM TETRACERUM	8710031232
STAUSTRUM GRACILE	8710031233
DESMIDIACEAE HYALOTHECA	8710031300

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HYALOTHECA QUADRIDENS	8710031302
HYALOTHECA MUCOSA	8710031303
DESMIDIACEAE CLOSTERIUM	8710031400
CLOSTERIUM SETACEUM	8710031401
CLOSTERIUM KUTZINGII	8710031402
CLOSTERIUM PARIENTANA	8710031403
DESMIDIACEAE GROENBLADIA	8710031500
GROENBLADIA NEGLECTA	8710031501
DESMIDIACEAE STAURODESMUS	8710031600
DESMIDIACEAE GYMNOZYGA	8710031700
GYMNOZYGA MONILIFORMIS	8710031701
DESMIDIACEAE PENIUM	8710031800
PENIUM OBTUSA	8710031801
DESMIDIACEAE AMSCOTTIA	8710031900
AMSCOTTIA MIRA	8710031901
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CHAROPHYCEAE CHARACEAE	8711010000
CHARACEAE CHARA	8711010100
CHARACEAE NITELLA	8711010200
CHARACEAE TOLYPELLA	8711010300
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EUGLENOPHYCEAE EUGLENALES	8801000000
EUGLENALES EUGLENACEAE	8801010000
EUGLENACEAE TRACHELOMONAS	8801010100
EUGLENACEAE EUGLENA	8801010200
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EUGLENACEAE STROMBOMONAS	8801010400
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EUGLENALES PERANEMACEAE	8801030000
EUGLENOPHYCEAE COLACIALES	8802000000
COLACIALES COLIACIACEAE	8802010000
COLIACIACEAE COLACIUM	8802010100
COLACIUM CALVUM	8802010101
COLACIUM VESICULOSUM	8802010102
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XANTHOPHYCEAE RHIZOCHLORIDALES	8901000000
RHIZOCHLORIDALE STIPITOCOCCACEAE	8901010000
STIPITOCOCCACEAE RHIZOCHLORIS	8901010100
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HETEROCAPSALES CHLOROSACCACEAE	8902010000
HETEROCAPSALES MALLEODENDRACEAE	8902020000
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HETEROCOCCALES GLOEBOTRYDIACEAE	8903020000
HETEROCOCCALES MISCHOCOCCACEAE	8903030000
HETEROCOCCALES CHARACIOPSIDACEAE	8903040000
CHARACIOPSIDACEAE CHARACIOPSIS	8903040100
CHARACIOPSIDACEAE PERONIELLA	8903040200
PERONIELLA HYALOTHECAE	8903040201
HETEROCOCCALES CHLOROPEDIACEAE	8903050000
HETEROCOCCALES CENTRITRACTACEAE	8903060000

CENTRITRACTACEA PSEUDOTETRAEDRON	8903060100
PSEUDOTETRAEDRON NEGLECTUM	8903060101
HETEROCOCCALES CHLOROTHECIAEAE	8903070000
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HETEROTRICHAELES TRIBONEMATAEAE	8904010000
TRIBONEMATAEAE TRIBONEMA	8904010100
HETEROTRICHAELES MONOCILIAEAE	8904020000
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HETEROSIPHONALES BOTRYDIAEAE	8905010000
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CHROMULINAEAE KEPHYRION	9001010100
KEPHYRION CINCTUM	9001010101
KEPHYRION LITTORALE	9001010102
KEPHYRION BORALE	9001010103
KEPHYRION VALKANOVII	9001010104
KEPHYRION FULVUM	9001010105
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CHROMULINA MINUTA	9001010201
CHROMULINA GLACIALIS	9001010202
CHROMULINAEAE BICOECA	9001010300
BICOECA MITRA	9001010301
BICOECA CYLINDRICA	9001010302
CHROMULINAEAE CHRYSOCOCCUS	9001010400
CHRYSOCOCCUS RADIANS	9001010401
CHROMULINAEAE CHRYSOPYXIS	9001010500
CHROMULINAEAE CODOMONAS	9001010600
CODOMONAS ANNULATA	9001010601
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MALLOMONADAEAE CHRYSOSPHAERELLA	9001020100
CHRYSOSPHAERELLA LONGISPINA	9001020101
MALLOMONADAEAE MALLOMONAS	9001020200
MALLOMONAS LIEBNERI	9001020201
MALLOMONAS ELONGATA	9001020202
MALLOMONAS PUMILLIO	9001020203
MALLOMONAS AKROKOMONAS	9001020204
MALLOMONAS LYNCHENSIS	9001020205
MALLOMONAS TONSURATA	9001020206
MALLOMONAS PSEUDOCORONATA	9001020207
MALLOMONAS CAUDATA	9001020208
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CHRYSOMONADALES SYNURAEAE	9001040000
SYNURAEAE SYNURA	9001040100
SYNURA ADAMSII	9001040101
SYNURA CAROLINIANA	9001040102
SYNURA URELLA	9001040103
SYNURA LAPPONICA	9001040104
SYNURAEAE CHRYSODIDYMUS	9001040200
SYNURAEAE CONRADIELLA	9001040300
CHRYSOMONA COCCOLITHOPHORIDAEAE	9001050000

CHRYSOMONADALES OCHROMONADACEAE	9001060000
OCHROMONADACEAE OCHROMONAS	9001060100
OCHROMONAS GLOBOSA	9001060101
OCHROMONADACEAE CYCLONEXIS	9001060200
OCHROMONADACEAE CHRYSOXYS	9001060300
CHRYSOXYS MAJOR	9001060301
OCHROMONADACEAE UROGLENA	9001060400
UROGLENA VOLVOX	9001060401
OCHROMONADACEAE UROGLENOPSIS	9001060500
UROGLENOPSIS AMERICANA	9001060501
OCHROMONADACEAE HYALOBRYON	9001060600
OCHROMONADACEAE EPIPYXIS	9001060700
EPIPYXIS DIPLOSTOMA	9001060701
EPIPYXIS RAMOSA	9001060702
EPIPYXIS UTRICULUS	9001060703
OCHROMONADACEAE DINOBYRON	9001060800
DINOBYRON BAVARICUM	9001060801
DINOBYRON DIVERGENS	9001060802
DINOBYRON SERTULARIA	9001060803
DINOBYRON SOCIALE	9001060804
DINOBYRON CYLINDRICUM	9001060805
DINOBYRON BORGEI	9001060806
OCHROMONADACEAE PSEUDOKEPHYRION	9001060900
PSEUDOKEPHYRION PLANCTONICUM	9001060901
PSEUDOKEPHYRION MINUTISSIMUM	9001060902
PSEUDOKEPHYRION LATUM	9001060903
PSEUDOKEPHYRION SKUJAE	9001060904
OCHROMONADACEAE CHRYSOLYKOS	9001061000
CHRYSOLYKOS SKUJAI	9001061001
CHRYSOLYKOS PLANCTONICUS	9001061002
OCHROMONADACEAE CHRYSOIKOS	9001061100
CHRYSOIKOS BICORNIS	9001061101
OCHROMONADACEAE DENDROMONAS	9001061200
DENDROMONAS CRYPTOSTYLIS	9001061201
OCHROMONADACEAE STYLOCHRYSALLIS	9001061300
STYLOCHRYSALLIS PARASITICA	9001061301
CHRYSOMONADALES PRYMNESIACEAE	9001070000
PRYMNESIACEAE CHRYSOCHROMULINA	9001070100
CHRYSOCHROMULINA PARVA	9001070101
CHRYSOPHYCEAE RHIZOCHRYSIDALES	9002000000
RHIZOCHRYSIDAL RHIZOCHRYSIDACEAE	9002010000
RHIZOCHRYSIDACEAE CHRYSAMOEBA	9002010100
CHRYSAMOEBA RADIANS	9002010101
RHIZOCHRYSIDACEAE RHIZOCHRYSIS	9002010200
RHIZOCHRYSIS LIMNETICA	9002010201
RHIZOCHRYSIDACEAE BITRICHIA	9002010300
BITRICHIA CHODATI	9002010301
RHIZOCHRYSIDACEAE HELIOCHRYSIS	9002010400
HELIOCHRYSIS RADIANS	9002010401
RHIZOCHRYSIDACEAE LAGYNION	9002010500
LAGYNION FULVUM	9002010501
LAGYNION SCHERFFELI	9002010502

LAGYNIUM OBLONGATUM	9002010503
CHRYSTOPHYCEAE CHRYSOCAPSALES	9003000000
CHRYSOCAPSALES CHRYSOCAPSACEAE	9003010000
CHRYSOCAPSACEAE CHRYSOCAPSA	9003010100
CHRYSOCAPSA PLANCTONICA	9003010101
CHRYSOCAPSALES NAEGELIACEAE	9003020000
NAEGELIACEAE NAEGELIELLA	9003020100
NAEGELIELLA FLAGELLIFERA	9003020101
CHRYSOCAPSALES HYDRURACEAE	9003030000
CHRYSTOPHYCEAE CHRYSOTRICHIALES	9004000000
CHRYSOTRICHIALES PHAEOTHAMNIAEAE	9004010000
CHRYSTOPHYCEAE CHRYSOSPHAERALES	9005000000
CHRYSOSPHAERAL CHRYSOSPHAERACEAE	9005010000
CHRYSTOPHYCEAE MONOSIGALES	9006000000
MONOSIGALES SALPINGOECACEAE	9006010000
SALPINGOECACEAE SALPINGOECA	9006010100
SALPINGOECA FREQUENTISSIMA	9006010101
MONOSIGALES MONOSIGACEAE	9006020000
MONOSIGACEAE DESMARELLA	9006020100
DESMARELLA MONILIFORMIS	9006020101
DESMARELLA IRREGULARIS	9006020102
BACILLARIOPHYCEAE	9100000000
BACILLARIOPHYCEAE CENTRALES	9101000000
CENTRALES COSCINODISCACEAE	9101010000
COSCINODISCACEAE CYCLOTELLA	9101010100
CYCLOTELLA NANA	9101010101
CYCLOTELLA COMTA	9101010102
CYCLOTELLA MICHIGANIANA	9101010103
CYCLOTELLA BODANICA	9101010104
CYCLOTELLA KUTZINGIANA	9101010105
CYCLOTELLA MENEGHINIANA	9101010106
COSCINODISCACEAE STEPHANODISCUS	9101010200
STEPHANODISCUS ASTREA	9101010201
COSCINODISCACEAE MELOSIRA	9101010300
MELOSIRA GRANULATA	9101010301
MELOSIRA DISTANS	9101010302
MELOSIRA ITALICA	9101010303
COSCINODISCACEAE COSCINODISCUS	9101010400
COSCINODISCUS LACUSTRIS	9101010401
CENTRALES EUPODISCACEAE	9101020000
CENTRALES RHIZOLENIAEAE	9101030000
RHIZOLENIAEAE RHIZOLENIA	9101030100
RHIZOLENIA ERIENSIS	9101030101
CENTRALES CHAETOCERACEAE	9101040000
CENTRALES BIDDULPHIAEAE	9101050000
BIDDULPHIAEAE BIDDULPHIA	9101050100
CENTRALES ANAULACEAE	9101060000
BACILLARIOPHYCEAE PENNALES	9102000000
PENNALES TABELLARIAEAE	9102010000
TABELLARIAEAE TABELLARIA	9102010100
TABELLARIA FENESTRATA	9102010101
TABELLARIA FLOCCULOSA	9102010102

TABELLARIACEAE TETRACYCLUS	9102010200
TETRACYCLUS LACUSTRIS	9102010201
PENNALES MERIDIONACEAE	9102020000
MERIDIONACEAE MERIDION	9102020100
MERIDION CIRCULARE	9102020101
PENNALES DIATOMACEAE	9102030000
DIATOMACEAE OPEPHORA	9102030100
OPEPHORA PACIFICA	9102030101
DIATOMACEAE DIATOMA	9102030200
DIATOMA VULGARE	9102030201
DIATOMA ELONGATUM	9102030202
PENNALES FRAGILARIACEAE	9102040000
FRAGILARIACEAE ASTERIONELLA	9102040100
ASTERIONELLA FORMOSA	9102040101
FRAGILARIACEAE FRAGILARIA	9102040200
FRAGILARIA CAPUCINA	9102040201
FRAGILARIA CROTONENSIS	9102040202
FRAGILARIA VIRESSENS	9102040203
FRAGILARIA CONSTRUENS	9102040204
FRAGILARIA PINNATA	9102040205
FRAGILARIACEAE SYNEDRA	9102040300
SYNEDRA ACUS	9102040301
SYNEDRA RUMPENS	9102040302
SYNEDRA DELITISSIMA	9102040303
SYNEDRA FILIFORMIS	9102040304
SYNEDRA ULNA	9102040305
SYNEDRA CAPITELLATA	9102040306
SYNEDRA CAPITATA	9102040307
SYNEDRA NANA	9102040308
FRAGILARIACEAE CENTRONELLA	9102040400
CENTRONELLA REICHELTI	9102040401
PENNALES EUNOTIACEAE	9102050000
EUNOTIACEAE CERATONEIS	9102050100
EUNOTIACEAE EUNOTIA	9102050200
EUNOTIA DENTICULATA	9102050201
EUNOTIA BINALE	9102050202
EUNOTIA FLEXUOSA	9102050203
EUNOTIA LUNARIS	9102050204
EUNOTIA PERPUSSILLA	9102050205
EUNOTIA PECTINALIS	9102050206
EUNOTIA PRAEMONAS	9102050207
EUNOTIA SUDETICA	9102050208
EUNOTIA CAESPITOSA	9102050209
EUNOTIA NAEGELII	9102050210
EUNOTIACEAE ACTINELLA	9102050300
ACTINELLA PUNCTATA	9102050301
EUNOTIACEAE AMPHICAMPA	9102050400
AMPHICAMPA HEMICYCLUS	9102050401
PENNALES ACHNANTHACEAE	9102060000
ACHNANTHACEAE ACHNANTHES	9102060100
ACHNANTHES DEPRESSA	9102060101
ACHNANTHES LAEVIS	9102060102

ACHNANTHES LANCEOLATA	9102060103
ACHNANTHES LINEARIS	9102060104
ACHNANTHES MICROCEPHALA	9102060105
ACHNANTHES NETICUS	9102060106
ACHNANTHACEAE COCCONEIS	9102060200
COCCONEIS PLANCENTULA	9102060201
ACHNANTHACEAE PERONIOPSIS	9102060300
PERONIOPSIS HERIBAUDII	9102060301
PENNALES NAVICULACEAE	9102070000
NAVICULACEAE NEIDIUM	9102070100
NEIDIUM AFFINE	9102070101
NAVICULACEAE GYROSIGMA	9102070200
NAVICULACEAE PINNULARIA	9102070300
PINNULARIA ARCA	9102070301
PINNULARIA MAJOR	9102070302
PINNULARIA LATA	9102070303
PINNULARIA DIVERGENS	9102070304
PINNULARIA STOMATOPHORA	9102070305
PINNULARIA ARCTICA	9102070306
NAVICULACEAE ANOMOEONEIS	9102070400
ANOMOEONEIS BRACHYSIRA	9102070401
ANOMOEONEIS SERIANS	9102070402
NAVICULACEAE AMPHIPLEURA	9102070500
AMPHIPLEURA PELLUCIDA	9102070501
NAVICULACEAE FRUSTULIA	9102070600
FRUSTULIA RHOMBOIDES	9102070601
FRUSTULIA VULGARIS	9102070603
NAVICULACEAE NAVICULA	9102070700
NAVICULA RADIOSA	9102070701
NAVICULA CRYPTOCEPHALA	9102070702
NAVICULA CUSPIDATA	9102070703
NAVICULACEAE STAURONEIS	9102070800
STAURONEIS PHOENICENTERON	9102070801
STAURONEIS ANCEPTS	9102070802
NAVICULACEAE PLEUROSIGMA	9102070900
NAVICULACEAE CALONEIS	9102071000
CALONEIS LADOGENSIS	9102071001
NAVICULACEAE MASTOGLOIA	9102071100
MASTOGLOIA SMITHII	9102071101
NAVICULACEAE DIPLONEIS	9102071200
PENNALES GOMPHONEMATACEAE	9102080000
GOMPHONEMATACEAE GOMPHONEMA	9102080100
GOMPHONEMA ANGUSTATUM	9102080101
GOMPHONEMA GRACILE	9102080102
GOMPHONEMA LANCEOLATUM	9102080103
GOMPHONEMA MONTANUM	9102080104
GOMPHONEMATACEAE GOMPHONEIS	9102080200
PENNALES CYMBELLACEAE	9102090000
CYMBELLACEAE CYMBELLA	9102090100
CYMBELLA CAESPITOSA	9102090101
CYMBELLA CISTULA	9102090102
CYMBELLA EHRENBERGII	9102090103

CYMBELLA TUMIDULA	9102090104
CYMBELLA LANCEOLATA	9102090105
CYMBELLACEAE AMPHORA	9102090200
AMPHORA OVALIS	9102090201
CYMBELLACEAE EPITHEMIA	9102090300
CYMBELLACEAE RHOPALODIA	9102090400
RHOPALODIA GIBBA	9102090401
PENNALES NITZSCHIAEAE	9102100000
NITZSCHIAEAE NITZSCHIA	9102100100
NITZSCHIA ACICULARIS	9102100101
NITZSCHIA CAPITELLATA	9102100102
NITZSCHIA SIGMA	9102100103
NITZSCHIA SIGMOIDEA	9102100104
NITZSCHIA SINUATA	9102100105
NITZSCHIA VERMICULARIS	9102100106
NITZSCHIA SCALARIS	9102100107
NITZSCHIA CLOSTERIUM	9102100108
NITZSCHIAEAE HANTZSCHIA	9102100200
HANTZSCHIA AMPHIOXYS	9102100201
NITZSCHIAEAE DENTICULA	9102100300
PENNALES SURIRELLACEAE	9102110000
SURIRELLACEAE SURIRELLA	9102110100
SURIRELLA ROBUSTA	9102110101
SURIRELLACEAE CYMATOPLEURA	9102110200
CYMATOPLEURA SOLEA	9102110201
SURIRELLACEAE STENOPTEROBIA	9102110300
STENOPTEROBIA INTERMEDIA	9102110301
PHAEOPHYTA	9200000000
DINOPHYCEAE	9300000000
DINOPHYCEAE GYMNODINIALES	9301000000
GYMNODINIALES GYMNODINIACEAE	9301010000
GYMNODINIACEAE GYMNODINIUM	9301010100
GYMNODINIUM UBERRIMUM	9301010101
GYMNODINIUM VARIANS	9301010102
GYMNODINIUM ORDINATUM	9301010103
DINOPHYCEAE PERIDINIALES	9302000000
PERIDINIALES GLENODINIACEAE	9302010000
GLENODINIACEAE GLENODINIUM	9302010100
GLENODINIUM QUADRIDENS	9302010101
PERIDINIALES GONYAULACACEAE	9302020000
PERIDINIALES PERIDINIACEAE	9302030000
PERIDINIACEAE PERIDINIUM	9302030100
PERIDINIUM CINCTUM	9302030101
PERIDINIUM LIMBATUM	9302030102
PERIDINIUM PUSILLUM	9302030103
PERIDINIACEAE PERIDINIOPSIS	9302030200
PERIDINIALES CERATIACEAE	9302040000
CERATIACEAE CERATIUM	9302040100
CERATIUM CAROLINIANA	9302040101
CERATIUM HIRUDINELLA	9302040102
DINOPHYCEAE DINOCAPSALES	9303000000
DINOCAPSALES GLOEODINIACEAE	9303010000

GLOEODINIACEAE UROCOCCUS	9303010100
UROCOCCUS INSIGNIS	9303010101
DINOPHYCEAE DINOCOCCALES	9304000000
DINOCOCCALES PHYTODINIACEAE	9304010000
PHYTODINIACEAE STYLODINIUM	9304010100
STYLODINIUM GLOBOSUM	9304010101
DINOCOCCALES BLASTODINIACEAE	9304020000
CHLOROMONADOPHYCEAE	9400000000
CHLOROMONADOPHY CHLOROMONADALES	9401000000
CHLOROMONADALES CHLOROMONADACEAE	9401010000
CRYPTOPHYCEAE	9500000000
CRYPTOPHYCEAE CRYPTOMONADALES	9501000000
CRYPTOMONAD CRYPTOCHRYSIDACEAE	9501010000
CRYPTOCHRYSIDACEAE RHODOMONAS	9501010100
RHODOMONAS MINUTA	9501010101
CRYPTOMONADALES CRYPTOMONADACEAE	9501020000
CRYPTOMONADACEAE CRYPTOMONAS	9501020100
CRYPTOMONAS EROSA	9501020101
CRYPTOMONAS MARSSONII	9501020102
CRYPTOMONAS OVATA	9501020103
CRYPTOMONAD NEPHROSELMIDIACEAE	9501030000
CRYPTOMONAD KATHABLEPHARIDACEAE	9501040000
KATHABLEPHARIDAC KATHABLEPHARIS	9501040100
KATHABLEPHARIS OVALIS	9501040101
CRYPTOPHYCEAE CRYPTOCOCCALES	9502000000
CRYPTOCOCCALES CRYPTOCOCCACEAE	9502010000
RHODOPHYCEAE	9600000000
RHODOPHYCEAE BANGIALES	9601000000
BANGIALES GONIOTRICHACEAE	9601010000
BANGIALES BANGIACEAE	9601020000
RHODOPHYCEAE NEMALIONALES	9602000000
NEMALIONALES CHANTRANSIACEAE	9602010000
NEMALIONALES BATRACHOSPERMACEAE	9602020000
NEMALIONALES THOREACEAE	9602030000
NEMALIONALES LEMANEACEAE	9602040000
EXTRATERRESTRIALS	9900000000





APPENDIX 2: LIST OF TAXA OTHER THAN SPECIES AND CORRESPONDING  
CODES ORDERED ALPHABETICALLY BY TAXA

ACHNANTHACEAE	9102060000
ACHNANTHES	9102060100
ACRASIOMYCETES	7602000000
ACTINELLA	9102050300
ALISMACEAE	8502060000
AMPHICAMPA	9102050400
AMPHIPLEURA	9102070500
AMPHORA	9102090200
AMSCOTTIA	8710031900
ANABAENA	8603020300
ANAULACEAE	9101060000
ANKISTRODESMUS	8708090300
ANOMOEONEIS	9102070400
ANTHOCEROTAE	7902000000
ANTHOPHYTA	8500000000
APHANIZOMENON	8603020400
APHANOCAPSA	8601010500
APHANOTHECE	8601011100
ARACEAE	8502090000
ARTHRODESMUS	8710030100
ARTHROPHYTA	8100000000
ASCOMYCETES	7702000000
ASTASIACEAE	8801020000
ASTER	8501100100
ASTERIONELLA	9102040100
ASTEROCOCCUS	8702010400
BACILLARIOPHYCEAE	9100000000
BAMBUSINA	8710030600
BANGIACEAE	9601020000
BANGIALES	9601000000
BASIDIOMYCETES	7703000000
BATRACHOSPERMACEAE	9602020000
BICOECA	9001010300
BIDDULPHIA	9101050100
BIDDULPHIACEAE	9101050000
BINUCLEARIA	8703010200
BITRICHIA	9002010300
BLASTODINIACEAE	9304020000
BOTRYDIACEAE	8905010000
BOTRYOCOCCUS	8708040300
BRASENIA	8501020100
BRYOPHYTA	7900000000
BULBOCHAETE	8706010100
CABOMBACEAE	8501020000
CALAMAGROSTIS	8502070200
CALLITRICHACEAE	8501060000
CALLITRICHE	8501060100
CALONEIS	9102071000
CALOTHRIX	8603050100
CAREX	8502080300

CARTERIA	8701020400
CATABROSA	8502070300
CENTRALES	9101000000
CENTRITRACTACEAE	8903060000
CENTRONELLA	9102040400
CERATIACEAE	9302040000
CERATIUM	9302040100
CERATONEIS	9102050100
CERATOPHYLLACEAE	8501010000
CERATOPHYLLUM	8501010100
CHAETOCERACEAE	9101040000
CHAETOPHORA	8703040200
CHAETOPHORACEAE	8703040000
CHAETOSPHAERIDIUM	8703060100
CHAMAESIPHON	8602030100
CHAMAESIPHONACEAE	8602030000
CHAMAESIPHONALES	8602000000
CHANTRANSIACEAE	9602010000
CHARA	8711010100
CHARACEAE	8711010000
CHARACIACEAE	8708050000
CHARACIOPSIDACEAE	8903040000
CHARACIOPSIS	8903040100
CHARACIUM	8708050200
CHAROPHYCEAE	8711000000
CHLAMYDOMONADACEAE	8701020000
CHLAMYDOMONAS	8701020100
CHLORANGIACEAE	8702030000
CHLOROCOCCACEAE	8708010000
CHLOROCOCCALES	8708000000
CHLOROMONADACEAE	9401010000
CHLOROMONADALES	9401000000
CHLOROMONADOPHYCEAE	9400000000
CHLOROMONAS	8701020300
CHLOROPEDIACEAE	8903050000
CHLOROPHYCEAE	8700000000
CHLOROSACCACEAE	8902010000
CHLOROTHECIACEAE	8903070000
CHODATELLA	8708090900
CHROMULINA	9001010200
CHROMULINACEAE	9001010000
CHROOCOCCACEAE	8601010000
CHROOCOCCALES	8601000000
CHROOCOCCUS	8601010100
CHRYSAMOEBIA	9002010100
CHRYSOCAPSA	9003010100
CHRYSOCAPSACEAE	9003010000
CHRYSOCAPSALES	9003000000
CHRYSOCHROMULINA	9001070100
CHRYSOCOCCUS	9001010400
CHRYSODIDYMUS	9001040200
CHRYSOIKOS	9001061100
CHRYSOLYKOS	9001061000
CHRYSOMONADALES	9001000000

CHRYSOPHYCEAE	9000000000
CHRYSOPYXIS	9001010500
CHRYSOSPHAERACEAE	9005010000
CHRYSOSPHAERALES	9005000000
CHRYSOSPHAERELLA	9001020100
CHRYSOTRICHIALES	9004000000
CHRYSOXYS	9001060300
CLADOPHORACEAE	8707010000
CLADOPHORALES	8707000000
CLOSTERIUM	8710031400
COCCOLITHOPHORIDACEAE	9001050000
COCCOMYXACEAE	8702040000
COCCONEIS	9102060200
CODOMONAS	9001010600
COELASTRACEAE	8708080000
COELASTRUM	8708080100
COELOSPHAERIUM	8601010700
COLACIALES	8802000000
COLACIUM	8802010100
COLEOCHAETACEAE	8703060000
COLIACIACEAE	8802010000
COMPOSITAE	8501100000
CONIFEROPHYTA	8400000000
CONRADIELLA	9001040300
CONVALLARIACEAE	8502150000
COSCINODISCACEAE	9101010000
COSCINODISCUS	9101010400
COSMARIUM	8710030200
CRUCIGENIA	8708100300
CRYPTOCHRYSIDACEAE	9501010000
CRYPTOCOCCACEAE	9502010000
CRYPTOCOCCALES	9502000000
CRYPTOMONADACEAE	9501020000
CRYPTOMONADALES	9501000000
CRYPTOMONAS	9501020100
CRYPTOPHYCEAE	9500000000
CYANOPHYTA	8600000000
CYCLONEXIS	9001060200
CYCLOTELLA	9101010100
CYLINDROCAPSA	8703030100
CYLINDROCAPSACEAE	8703030000
CYMATOPLEURA	9102110200
CYMBELLA	9102090100
CYMBELLACEAE	9102090000
CYPERACEAE	8502080000
DACTYLOCOCCOPSIS	8601010800
DENDROMONAS	9001061200
DENTICULA	9102100300
DERMOCARPACEAE	8602020000
DESMARELLA	9006020100
DESMIDIACEAE	8710030000
DESMIDIUM	8710030300

DEUTEROMYCETES	7704000000
DIATOMA	9102030200
DIATOMACEAE	9102030000
DICHOTOMOSIPHONACEAE	8709020000
DICOTYLEDONAE	8501000000
DICTYOSPHAERIACEAE	8708040000
DICTYOSPHAERIUM	8708040100
DIMORPHOCOCCUS	8708040200
DINOBRYON	9001060800
DINOCAPSALES	9303000000
DINOCOCCALES	9304000000
DINOPHYCEAE	9300000000
DIPLONEIS	9102071200
DROSERACEAE	8501050000
ELAKATOTHRIX	8702040100
ELEOCHARIS	8502080100
ENDOSPHAERACEAE	8708020000
ENTOPHYSALIDACEAE	8601020000
EPIPYXIS	9001060700
EPITHEMIA	9102090300
EQUISETALES	8101010000
EQUISETUM	8101010100
ERIOCAULACEAE	8502110000
ERIOCAULON	8502110100
EUASTRUM	8710030400
EUCAPSIS	8601010600
EUDORINA	8701040500
EUGLENA	8801010200
EUGLENACEAE	8801010000
EUGLENALES	8801000000
EUGLENOPHYCEAE	8800000000
EUMYCOTA	7700000000
EUNOTIA	9102050200
EUNOTIACEAE	9102050000
EUPODISCACEAE	9101020000
EXTRATERRESTRIALS	9900000000
FRAGILARIA	9102040200
FRAGILARIACEAE	9102040000
FRUSTULIA	9102070600
GLENODINIACEAE	9302010000
GLENODINIUM	9302010100
GLOEOTRYDIACEAE	8903020000
GLOEOCAPSA	8601010300
GLOEOCYSTIS	8702010100
GLOEODINIACEAE	9303010000
GLOEOTHECE	8601011500
GOLENKINIA	8708030200
GOLENKINIOPSIS	8708030100
GOMPHONEIS	9102080200
GOMPHONEMA	9102080100
GOMPHONEMATAACEAE	9102080000
GOMPHOSPHAERIA	8601011300

GONATOZYGON	8710020100
GONIOTRICHACEAE	9601010000
GONIUM	8701040100
GONYAULACACEAE	9302020000
GRAMINEAE	8502070000
GROENBLADIA	8710031500
GYMNODINIACEAE	9301010000
GYMNODINIALES	9301000000
GYMNODINIUM	9301010100
GYMNOZYGA	8710031700
GYROMITUS	8701070100
GYROSIGMA	9102070200
HAEMATOCOCCACEAE	8701060000
HALORAGIDACEAE	8501070000
HANTZSCHIA	9102100200
HAPALOSIPHON	8603040200
HELIOCHRYSIS	9002010400
HEPATICAE	7901000000
HETEROCAPSALES	8902000000
HETEROCOCCALES	8903000000
HETEROSIPHONALES	8905000000
HETEROTRICHALES	8904000000
HIPPURUS	8501070100
HOLOPEDIUM	8601011000
HOMALOCENCHRUS	8502070100
HYALOBRYON	9001060600
HYALOTHECA	8710031300
HYDRODICTYACEAE	8708070000
HYDRURACEAE	9003030000
IRIDACEAE	8502160000
IRIS	8502160100
JUNCACEAE	8502120000
JUNCUS	8502120100
KATHABLEPHARIDACEAE	9501040000
KATHABLEPHARIS	9501040100
KEPHYRION	9001010100
KIRCHNERIELLA	8708090200
LABYRINTHULOMYCETES	7603000000
LAGYNION	9002010500
LEMANEACEAE	9602040000
LEMNA	8502100100
LEMNACEAE	8502100000
LENTIBULARIACEAE	8501080000
LILIACEAE	8502140000
LOBELIA	8501090100
LOBELIACEAE	8501090000
LYCOPHYTA	8000000000
LYNGBYA	8603010400
MALLEODENDRACEAE	8902020000
MALLOMONADACEAE	9001020000
MALLOMONAS	9001020200
MASTIGOCLADACEAE	8603060000

MASTIGOCLADUS	8603060100
MASTOGLIOIA	9102071100
MELANTHACEAE	8502130000
MELOSIRA	9101010300
MENYANTHACEAE	8501110000
MENYANTHES	8501110100
MERIDION	9102020100
MERIDIONACEAE	9102020000
MERISMOPEDIA	8601010200
MESOTAENIACEAE	8710020000
MICRACTINIACEAE	8708030000
MICRASTERIAS	8710031100
MICROCYSTIS	8601010400
MICROSPORA	8703020100
MICROSPORACEAE	8703020000
MICROTATOBIOITES	7802000000
MISCHOCOCCACEAE	8903030000
MONOCILIAEAE	8904020000
MONOCOTYLEDONAE	8502000000
MONOSIGACEAE	9006020000
MONOSIGALES	9006000000
MOUGEOTIA	8710010100
MUSCI	7903000000
MYRIOPHYLLUM	8501070200
MYXOMYCETES	7601000000
MYXOMYCOTA	7600000000
MYXOSARCINA	8602010100
NAEGELIELLA	9003020100
NAEGELIACEAE	9003020000
NAIADACEAE	8502040000
NAIAS	8502040100
NAVICULA	9102070700
NAVICULACEAE	9102070000
NEIDIUM	9102070100
NEMALIONALES	9602000000
NEPHROSELMIDIACEAE	9501030000
NITELLA	8711010200
NITZSCHIA	9102100100
NITZSCHIAEAE	9102100000
NODULARIA	8603020200
NOSTOC	8603020100
NOSTOCACEAE	8603020000
NUPHAR	8501030200
NYMPHAEA	8501030100
NYMPHAEACEAE	8501030000
NYMPHOIDES	8501110200
OCHROMONADACEAE	9001060000
OCHROMONAS	9001060100
OEDOGONIAEAE	8706010000
OEDOGONIALES	8706000000
OEDOGONIUM	8706010200
OOCYSTACEAE	8708090000

OOCYSTIS	8708090100
OPEPHORA	9102030100
OSCILLATORIA	8603010100
OSCILLATORIACEAE	8603010000
OSCILLATORIALES	8603000000
PALMELLA	8702010200
PALMELLACEAE	8702010000
PANDORINA	8701040300
PANICULARIA	8502070500
PARACAPSA	8601020100
PEDIASTRUM	8708070100
PENIUM	8710031800
PENNALES	9102000000
PERANEMACEAE	8801030000
PERIDINIACEAE	9302030000
PERIDINIALES	9302000000
PERIDINIOPSIS	9302030200
PERIDINIUM	9302030100
PERONIELLA	8903040200
PERONIOPSIS	9102060300
PHACOMYXA	8708110100
PHACOTACEAE	8701030000
PHACUS	8801010300
PHAEOPHYTA	9200000000
PHAEOTHAMNIACEAE	9004010000
PHORMIDIUM	8603010200
PHYCOMYCETES	7701000000
PHYLLOSIPHONACEAE	8709010000
PHYTODINIACEAE	9304010000
PINNULARIA	9102070300
PLANCTOCOCCUS	8702010500
PLEODORINA	8701040400
PLEUROCAPSA	8602010200
PLEUROCAPSACEAE	8602010000
PLEUROCHLORIDACEAE	8903010000
PLEUROSIGMA	9102070900
PLEUROTAENIUM	8710030500
POA	8502070400
POLYBLEPHARIDACEAE	8701010000
POLYTOMA	8701020200
POTAMOGETON	8502030100
PROTOCOCCACEAE	8703050000
PROTOSIPHONACEAE	8708060000
PRYMNESIACEAE	9001070000
PSEUDANABAENA	8603010500
PSEUDOKEPHYRION	9001060900
PSEUDOTETRAEDRON	8903060100
PTERIDOSPERMOPHYTA	8300000000
PTEROPHYTA	8200000000
PYRAMIMONACEAE	8701070000
QUADRIGULA	8708090600
RADIOCOCCACEAE	8708110000

RHABDODERMA	8601011200
RHIZOCHLORIDALES	8901000000
RHIZOCHLORIS	8901010100
RHIZOCHRYSIDACEAE	9002010000
RHIZOCHRYSIDALES	9002000000
RHIZOCHRYSIS	9002010200
RHIZOSOLENIA	9101030100
RHIZOSOLENIACEAE	9101030000
RHODOMONAS	9501010100
RHODOPHYCEAE	9600000000
RHOPALODIA	9102090400
RIVULARIACEAE	8603050000
SAGITTARIA	8502060100
SALPINGOECA	9006010100
SALPINGOECACEAE	9006010000
SARRACENIACEAE	8501040000
SCENEDESMACEAE	8708100000
SCENEDESMUS	8708100100
SCHEUCHZERIA	8502050200
SCHEUCHZERIACEAE	8502050000
SCHIZOGONIACEAE	8705010000
SCHIZOGONIALES	8705000000
SCHIZOMERIDACEAE	8704020000
SCHIZOMYCETES	7801000000
SCHIZOMYCOPHYTA	7800000000
SCHROEDERIA	8708050100
SCIRPUS	8502080200
SCOTIELLA	8708090800
SCYTONEMA	8603030100
SCYTONEMATAACEAE	8603030000
SELENASTRUM	8708090500
SIPHONALES	8709000000
SPARGANIACEAE	8502020000
SPARGANIUM	8502020100
SPHAEROCYSTIS	8702010300
SPHAEROPLEACEAE	8703080000
SPHAEROSMA	8710030700
SPHAGNIDEAE	7903010000
SPHENOPSIDA	8101000000
SPIROGYRA	8710010200
SPONDYLOMORACEAE	8701050000
SPONDYLIUM	8710030800
STAUROSTRUM	8710031200
STAURODESMUS	8710031600
STAURONEIS	9102070800
STENOPTEROBIA	9102110300
STEPHANODISCUS	9101010200
STIGONEMA	8603040100
STIGONEMATAACEAE	8603040000
STIPITOCOCCACEAE	8901010000
STROMBOMONAS	8801010400
STYLOCHRYSALLIS	9001061300

STYLODINIUM	9304010100
SURIRELLA	9102110100
SURIRELLACEAE	9102110000
SYNCRYPTACEAE	9001030000
SYNECHOCOCCUS	8601010900
SYNECHOCYSTIS	8601011400
SYNEDRA	9102040300
SYNURA	9001040100
SYNURACEAE	9001040000
TABELLARIA	9102010100
TABELLARIACEAE	9102010000
TETRACYCLUS	9102010200
TETRAEDRON	8708090700
TETRALLANTOS	8708100200
TETRASPORA	8702020100
TETRASPORACEAE	8702020000
TETRASPORALES	8702000000
THAMNIOCHAETE	8703040100
THOREACEAE	9602030000
TOLYPELLA	8711010300
TOLYPOTHRIX	8603030200
TRACHELOMONAS	8801010100
TRENTEPOHLIACEAE	8703070000
TRIBONEMA	8904010100
TRIBONEMATACEAE	8904010000
TRICHODESMIUM	8603010300
TRIGLOCHIN	8502050100
TRIPLOCERAS	8710031000
TYPHA	8502010100
TYPHACEAE	8502010000
ULOTHRIX	8703010100
ULOTRICHACEAE	8703010000
ULOTRICHALES	8703000000
ULVACEAE	8704010000
ULVALES	8704000000
UROCOCCUS	9303010100
UROGLENA	9001060400
UROGLENOPSIS	9001060500
UTRICULARIA	8501080100
VAUCHERIACEAE	8905020000
VOLVOACEAE	8701040000
VOLVOCALES	8701000000
VOLVOX	8701040200
WESTELLA	8708090400
XANTHIDIUM	8710030900
XANTHOPHYCEAE	8900000000
ZANNICHELLIA	8502030200
ZANNICHELLIACEAE	8502030000
ZYGNEMA	8710010300
ZYGNEMATACEAE	8710010000
ZYGNEMATALES	8710000000







APPENDIX 3: SYSTEMATICALLY STRUCTURED LIST OF TAXA AND CORRESPONDING CODES ORDERED BY CODE SEQUENCE (ONLY NUMBERS 1-99 ARE SHOWN IN THE FIELDS)

Slime Molds

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code Fields				
					00	00	00	00	00
Myxomycota					76				
	Myxomycetes				76	1			
	Acrasiomycetes				76	2			
	Labyrinthulomycetes				76	3			

## Fungi

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code
					Fields
					00 00 00 00 00
Eumycota					77
	Phycomycetes				77 1
	Ascomycetes				77 2
	Basidiomycetes				77 3
	Deuteromycetes				77 4

## Bacteria and Viruses

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code
					Fields 00 00 00 00 00
Schizomycophyta					78
	Schizomycetes				78 1
	Microtatobiotetes				78 2



## Club Mosses and Horsetails

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
Lycophyta					80				
Arthropphyta					81				
	Sphenopsida				81 1				
		Equisetales			81 1 1				
			Equisetum		81 1 1 1				
				fluviatile	81 1 1 1 1				



## Conifers

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code Fields				
					00	00	00	00	00
Coniferophyta					84				

## Flowering Plants

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code Fields					
					00	00	00	00	00	
Anthophyta					85					
	Dicotyledonae				85	1				
		Ceratophyllaceae			85	1	1			
			Ceratophyllum		85	1	1	1		
				demersum	85	1	1	1	1	1
		Cabombaceae			85	1	2			
			Brasenia		85	1	2	1		
				schreberi	85	1	2	1	1	
		Nymphaeaceae			85	1	3			
			Nymphaea		85	1	3	1		
				odorata*	85	1	3	1	1	
			Nuphar		85	1	3	2		
				variegatum**	85	1	3	2	1	

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\*white water lily

\*\*yellow water lily

## Flowering Plants

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Sarraceniaceae			85	1	4		
		Droseraceae			85	1	5		
		Callitrichaceae			85	1	6		
			Callitriche		85	1	6	1	
			heterophylla		85	1	6	1	1
		Haloragidaceae			85	1	7		
			Hippurus		85	1	7	1	
			Myriophyllum		85	1	7	2	

## Flowering Plants

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Lentibulariaceae			85	1	8		
			Utricularia		85	1	8	1	
				macrorhiza= vulgaris	85	1	8	1	1
		Lobeliaceae			85	1	9		
			Lobelia		85	1	9	1	
				dortmanna	85	1	9	1	1
		Compositae			85	1	10		
			Aster		85	1	10	1	
				nemoralis	85	1	10	1	1
		Menyanthaceae			85	1	11		
			Menyanthes		85	1	11	1	
				trifoliata	85	1	11	1	1
			Nymphoides		85	1	11	2	

## Flowering Plants

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
	Moncotyledonae				85	2			
		Typhaceae			85	2	1		
			Typha		85	2	1	1	
				latifolia	85	2	1	1	1
				angustifolia	85	2	1	1	2

## Flowering Plants

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Sparganiaceae			85	2	2		
			Sparganium		85	2	2	1	
				eurycarpum	85	2	2	1	1
				androcladum	85	2	2	1	2
				diversifolium	85	2	2	1	3
				acaule	85	2	2	1	4
				angustifolium	85	2	2	1	5
				hyperboreum	85	2	2	1	6
				minimum	85	2	2	1	7

## Flowering Plants

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Zannichelliaceae			85	2	3		
			Potamogeton		85	2	3	1	
				natans	85	2	3	1	1
				oakesianus	85	2	3	1	2
				epihydus	85	2	3	1	3
				alpinus	85	2	3	1	4
				perfoliatus	85	2	3	1	5
			Zannichellia		85	2	3	2	
				palustris	85	2	3	2	1
		Naiadaceae			85	2	4		
			Naias		85	2	4	1	
				flexilis	85	2	4	1	1

## Flowering Plants

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Scheuchzeriaceae			85	2	5		
			Triglochin		85	2	5	1	
				palustris	85	2	5	1	1
				maritima	85	2	5	1	2
			Scheuchzeria		85	2	5	2	
				palustris	85	2	5	2	1
		Alismaceae			85	2	6		
			Sagittaria		85	2	6	1	
				latifolia	85	2	6	1	1
				graminea	85	2	6	1	2

## Flowering Plants

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Gramineae			85	2	7		
			Homalocenchrus		85	2	7	1	
				oryzoides	85	2	7	1	1
			Calamagrostis		85	2	7	2	
				canadensis	85	2	7	2	1
			Catabrosa		85	2	7	3	
				aquatica	85	2	7	3	1
			Poa		85	2	7	4	
				triflora	85	2	7	4	1
			Panicularia= Glyceria		85	2	7	5	
				canadensis	85	2	7	5	1
				borealis	85	2	7	5	2

## Flowering Plants

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Cyperaceae			85	2	8		
			Eleocharis		85	2	8	1	
				palustris	85	2	8	1	1
			Scirpus		85	2	8	2	
				subterminalis	85	2	8	2	1
				americanus	85	2	8	2	2
				validus	85	2	8	2	3
				occidentalis	85	2	8	2	4
				rufus	85	2	8	2	5
				microcarpus	85	2	8	2	6
				cyperinus	85	2	8	2	7
			Carex		85	2	8	3	
				stipata	85	2	8	3	1
				atlantica	85	2	8	3	2
				leptalea	85	2	8	3	3
				aquatilis	85	2	8	3	4
				gynandra	85	2	8	3	5
				crinita	85	2	8	3	6
				lacustris	85	2	8	3	7
				lasiocarpa	85	2	8	3	8
				flava	85	2	8	3	9
				folliculata	85	2	8	3	10
				retrorsa	85	2	8	3	11
				hystericina	85	2	8	3	12
				comosa	85	2	8	3	13
				frankii	85	2	8	3	14
				intumescens	85	2	8	3	15
				asa-grayi	85	2	8	3	16
				rostrata	85	2	8	3	17
		Araceae			85	2	9		

## Flowering Plants

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Lemnaceae			85	2	10		
			Lemna		85	2	10	1	
		Eriocaulaceae			85	2	11		
			Eriocaulon		85	2	11	1	
				septangulare	85	2	11	1	1

## Flowering Plants

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Juncaceae			85	2	12		
			Juncus		85	2	12	1	
				effusus	85	2	12	1	1
				conglomeratus	85	2	12	1	2
				filiformis	85	2	12	1	3
				bufonius	85	2	12	1	4
				dudleyi	85	2	12	1	5
				militaris	85	2	12	1	6
				articulatus	85	2	12	1	7
		Melanthaceae			85	2	13		

## Flowering Plants

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Liliaceae			85	2	14		
		Convallariaceae			85	2	15		
		Iridaceae			85	2	16		
			Iris		85	2	16	1	
				versicolor	85	2	16	1	1
				hookeri=	85	2	16	1	2
				setosa					

## Blue-Green Algae

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
Cyanophyta					86				
	Chroococcales				86	1			
		Chroococcaceae			86	1	1		
			Chroococcus		86	1	1	1	
				limneticus	86	1	1	1	1
				prescottii	86	1	1	1	2
				Merismopedia	86	1	1	2	
				elegans	86	1	1	2	1
				major	86	1	1	2	2
				glauca	86	1	1	2	3
				trolleri	86	1	1	2	4
				tenuissima	86	1	1	2	5
				convoluta	86	1	1	2	6
				Gloeocapsa	86	1	1	3	
				major	86	1	1	3	1
				punctata	86	1	1	3	2

## Blue-Green Algae

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
			Microcystis= Polycystis		86	1	1	4	
				aeruginosa	86	1	1	4	1
				flos-aquae	86	1	1	4	2
				robusta	86	1	1	4	3
			Aphanocapsa		86	1	1	5	
				elachista	86	1	1	5	1
				pulchra	86	1	1	5	2
			Eucapsis		86	1	1	6	
				alpina	86	1	1	6	1
			Coelosphaerium		86	1	1	7	
				naegelianum	86	1	1	7	1
			Dactylococcopsis		86	1	1	8	
				acicularis	86	1	1	8	1

## Blue-Green Algae

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
			Synechococcus		86	1	1	9	
			Holopedium		86	1	1	10	
				irregulare	86	1	1	10	1
			Aphanothece		86	1	1	11	
				castagnei	86	1	1	11	1
				nidulans	86	1	1	11	2
				alascense	86	1	1	11	3
			Rhabdoderma		86	1	1	12	
				lineare	86	1	1	12	1
				sigmoidea	86	1	1	12	2
				irregulare	86	1	1	12	3
			Gomphosphaeria		86	1	1	13	
				lacustris	86	1	1	13	1
				aponina	86	1	1	13	2
			Synechocystis		86	1	1	14	
				aquatilis	86	1	1	14	1
			Gloeothece		86	1	1	15	

## Blue-Green Algae

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Entophysalidaceae			86	1	2		
			Paracapsa		86	1	2	1	
	Chamaesiphonales				86	2			
		Pleurocapsaceae			86	2	1		
			Myxosarcina		86	2	1	1	
			Pleurocapsa		86	2	1	2	
			minor		86	2	1	2	1
		Dermocarpaceae			86	2	2		
		Chamaesiphonaceae			86	2	3		
			Chamaesiphon		86	2	3	1	
	Oscillatoriales				86	3			
		Oscillatoriaceae			86	3	1		
			Oscillatoria		86	3	1	1	

## Blue-Green Algae

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code Fields				
					00	00	00	00	00
			Phormidium		86	3	1	2	
			Trichodesmium		86	3	1	3	
				lacustre	86	3	1	3	1
			Lyngbya		86	3	1	4	
				contorta	86	3	1	4	1
				mucicola	86	3	1	4	2
			Pseudanabaena		86	3	1	5	
				catenata	86	3	1	5	1
		Nostocaceae			86	3	2		
			Nostoc		86	3	2	1	
			Nodularia		86	3	2	2	

## Blue-Green Algae

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
			Anabaena		86	3	2	3	
				flos-aquae	86	3	2	3	1
				limnetica	86	3	2	3	2
			Aphanizomenon		86	3	2	4	
				flos-aquae	86	3	2	4	1
		Scytonemataceae			86	3	3		
			Scytonema		86	3	3	1	
			Tolypothrix		86	3	3	2	
		Stigonemataceae			86	3	4		
			Stigonema		86	3	4	1	
				ocellatus	86	3	4	1	1
			Hapalosiphon		86	3	4	2	
				hibernicus	86	3	4	2	1

## Blue-Green Algae

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Rivulariaceae			86	3	5		
			Calothrix		86	3	5	1	
		Mastigocladaceae			86	3	6		
			Mastigocladus		86	3	6	1	
			lamellosus		86	3	6	1	1

## Green Algae (including desmids and stoneworts)

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
Chlorophyceae					87				
	Volvocales				87	1			
		Polyblepharidaceae			87	1	1		
		Chlamydomonadaceae			87	1	2		
			Chlamydomonas		87	1	2	1	
			gleopara		87	1	2	1	1
			frigida		87	1	2	1	2
			dinobryoni		87	1	2	1	3
				Polytoma	87	1	2	2	
				Chloromonas	87	1	2	3	
				Carteria	87	1	2	4	
		Phacotaceae			87	1	3		

## Green Algae (including desmids and stoneworts)

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Volvocaceae			87	1	4		
			Gonium		87	1	4	1	
				sociale	87	1	4	1	1
				Volvox	87	1	4	2	
				Pandorina	87	1	4	3	
				morum	87	1	4	3	1
				Pleodorina	87	1	4	4	
				Eudorina	87	1	4	5	
				elegans	87	1	4	5	1

## Green Algae (including desmids and stoneworts)

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code			
					Fields			
					00	00	00	00
		Spondylomoraceae			87	1	5	
		Haematococcaceae			87	1	6	
		Pyramimonaceae			87	1	7	
			Gyromitus		87	1	7	1
					87	2		
	Tetrasporales	Palmellaceae			87	2	1	
			Gloeocystis		87	2	1	1
			major		87	2	1	1
			ampla		87	2	1	2
			gigas		87	2	1	3
			vesiculosa		87	2	1	4
			aponina		87	2	1	5
			planctonica		87	2	1	6
					87	2	1	2
			Palmella		87	2	1	2
			mucosa		87	2	1	1

## Green Algae (including desmids and stoneworts)

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
			Sphaerocystis		87	2	1	3	
				schroeteri	87	2	1	3	1
			Asterococcus		87	2	1	4	
				limneticus	87	2	1	4	1
			Planctococcus		87	2	1	5	
				alsius	87	2	1	5	1
				gelatinosa	87	2	1	5	2
		Tetrasporaceae			87	2	2		
			Tetraspora		87	2	2	1	
				lamellosa	87	2	2	1	1
				lacustris	87	2	2	1	2
				minumum	87	2	2	1	3
		Chlorangiaceae			87	2	3		

## Green Algae (including desmids and stoneworts)

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Coccomyxaceae			87	2	4		
			Elakatothrix		87	2	4	1	
				gelatinosa	87	2	4	1	1
	Ulotrichales	Ulotrichaceae			87	3			
			Ulothrix		87	3	1		
					87	3	1	1	
			Binuclearia		87	3	1	2	
				tectorum	87	3	1	2	1
		Microsporaceae			87	3	2		
			Microspora		87	3	2	1	
		Cylindrocapsaceae			87	3	3		
			Cylindrocapsa		87	3	3	1	
				geminella	87	3	3	1	1

## Green Algae (including desmids and stoneworts)

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Chaetophoraceae			87	3	4		
			Thamniochaete		87	3	4	1	
			Chaetophora		87	3	4	2	
		Protococcaceae			87	3	5		
		Coleochaetaceae			87	3	6		
			Chaetosphaeridium		87	3	6	1	
			pringsheimii		87	3	6	1	1
		Trentepohliaceae			87	3	7		

## Green Algae (including desmids and stoneworts)

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Sphaeropleaceae			87	3	8		
	Ulvales				87	4			
		Ulvaceae			87	4	1		
		Schizomeridaceae			87	4	2		
	Schizogoniales				87	5			
		Schizogoniaceae			87	5	1		

## Green Algae (including desmids and stoneworts)

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
	Oedogoniales				87	6			
		Oedogoniaceae			87	6	1		
			Bulbochaete		87	6	1	1	
				Oedogonium	87	6	1	2	
	Cladophorales				87	7			
		Cladophoraceae			87	7	1		
	Chlorococcales				87	8			
		Chlorococcaceae			87	8	1		
		Endosphaeraceae			87	8	2		

## Green Algae (including desmids and stoneworts)

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Micractiniaceae			87	8	3		
			Golenkiniopsis		87	8	3	1	
			Golenkinia		87	8	3	2	
			radiata		87	8	3	2	1
		Dictyosphaeriaceae			87	8	4		
			Dictyosphaerium		87	8	4	1	
			pulchellum		87	8	4	1	1
			ehrenbergianum		87	8	4	1	2
			Dimorphococcus		87	8	4	2	
			lunatus		87	8	4	2	1
			Botryococcus		87	8	4	3	
			braunii		87	8	4	3	1

## Green Algae (including desmids and stoneworts)

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Characiaceae			87	8	5		
			Schroederia		87	8	5	1	
				setigera	87	8	5	1	1
				judayi	87	8	5	1	2
			Characium		87	8	5	2	
				ambiguum	87	8	5	2	1
				ornithocephalum	87	8	5	2	2
		Protosiphonaceae			87	8	6		
		Hydrodictyaceae			87	8	7		
			Pediastrum		87	8	7	1	
				boryanum	87	8	7	1	1
				tetras	87	8	7	1	2
				obtusum	87	8	7	1	3
				simplex	87	8	7	1	4

## Green Algae (including desmids and stoneworts)

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Coelastraceae			87	8	8		
			Coelastrum		87	8	8	1	
				braunii	87	8	8	1	1
				scabrum	87	8	8	1	2
				cambricum	87	8	8	1	3
				microporum	87	8	8	1	4
		Oocystaceae			87	8	9		
			Oocystis		87	8	9	1	
				subtilissima	87	8	9	1	1
				lacustris	87	8	9	1	2
				elliptica	87	8	9	1	3
			Kirchneriella		87	8	9	2	
				obesa	87	8	9	2	1
			Ankistrodesmus		87	8	9	3	
				falcatus	87	8	9	3	1
				fractus	87	8	9	3	2
				spiralis	87	8	9	3	3

## Green Algae (including desmids and stoneworts)

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
			Westella		87	8	9	4	
				botryoides	87	8	9	4	1
				linearis	87	8	9	4	2
			Selenastrum		87	8	9	5	
				minuta	87	8	9	5	1
			Quadrigula		87	8	9	6	
				lacustris	87	8	9	6	1
				closteroides	87	8	9	6	2
			Tetraedron		87	8	9	7	
				minuta	87	8	9	7	1
				caudatum	87	8	9	7	2
				regulare	87	8	9	7	3
				minimum	87	8	9	7	4
				pentaedricum	87	8	9	7	5
			Scotiella		87	8	9	8	
				nivalis	87	8	9	8	1

## Green Algae (including desmids and stoneworts)

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
			Lagerheimia=						
			Chodatella		87	8	9	9	
				quadriseta	87	8	9	9	1
		Scenedesmaceae			87	8	10		
			Scenedesmus		87	8	10	1	
				bijuga	87	8	10	1	1
				denticulatus	87	8	10	1	2
				quadricauda	87	8	10	1	3
				abundans	87	8	10	1	4
				dimorphus	87	8	10	1	5
			Tetraliantos		87	8	10	2	

## Green Algae (including desmids and stoneworts)

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
			Crucigenia		87	8	10	3	
				quadrata	87	8	10	3	1
				rectangularis	87	8	10	3	2
				tetrapedia	87	8	10	3	3
		Radiococcaceae			87	8	11		
			Phacomyxa		87	8	11	1	
				sphagnicola	87	8	11	1	1
	Siphonales				87	9			
		Phyllosiphonaceae			87	9	1		
		Dichotomosiphonaceae			87	9	2		
	Zygnematales				87	10			
		Zygnemataceae			87	10	1		
			Mougeotia		87	10	1	1	
				Spirogyra	87	10	1	2	

## Green Algae (including desmids and stoneworts)

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
			Zygnema		87	10	1	3	
		Mesotaeniaceae			87	10	2		
			Gonatozygon		87	10	2	1	
				monotaenium	87	10	2	1	1
				kihnhani	87	10	2	1	2
			Cylindrocystis		87	10	2	2	1

## Desmids (green algae)

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Desmidiaceae			87	10	3		
			Arthrodesmus		87	10	3	1	
				tenuissimus	87	10	3	1	1
				incus	87	10	3	1	2
				triangularis	87	10	3	1	3
				ralfsii	87	10	3	1	4
				subulatus	87	10	3	1	5
				validus	87	10	3	1	6
			Cosmarium		87	10	3	2	
				punctuatum	87	10	3	2	1
				contractum	87	10	3	2	2
				margaritatum	87	10	3	2	3
				bioculatum	87	10	3	2	4
				abruptum	87	10	3	2	5
			Desmidium		87	10	3	3	
				cylindricum	87	10	3	3	1
				grevillii	87	10	3	3	2
				baileyi	87	10	3	3	3

## Desmids (green algae)

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
			Euastrum		87	10	3	4	
				didelta	87	10	3	4	1
				ansatum	87	10	3	4	2
				crassum	87	10	3	4	3
				pinnatum	87	10	3	4	4
				verrucosum	87	10	3	4	5
				abruptum	87	10	3	4	6
				elegans	87	10	3	4	7
			Pleurotaenium		87	10	3	5	
				nodosum	87	10	3	5	1
				nodulosum	87	10	3	5	2
				coronatum	87	10	3	5	3
				trabecula	87	10	3	5	4
				ehrenbergii	87	10	3	5	5
				verrucosum	87	10	3	5	6
			Bambusina		87	10	3	6	
				brebissonii	87	10	3	6	1
				barreri	87	10	3	6	2
			Sphaerososma		87	10	3	7	
				excavata	87	10	3	7	1

## Desmids (green algae)

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
			Spondylosium		87	10	3	8	
				planum	87	10	3	8	1
				pulchrum	87	10	3	8	2
			Xanthidium		87	10	3	9	
				antilopaeum	87	10	3	9	1
				armatum	87	10	3	9	2
				cristatum	87	10	3	9	3
				pseudoben- galicum	87	10	3	9	4
			Triploceras		87	10	3	10	
				gracile	87	10	3	10	1
				verticulatum	87	10	3	10	2
			Micrasterias		87	10	3	11	
				laticeps	87	10	3	11	1
				mahabulesh- warensis	87	10	3	11	2
				apiculata	87	10	3	11	3
				muricata	87	10	3	11	4
				denticulata	87	10	3	11	5
				foliaceae	87	10	3	11	6
				johnsonii	87	10	3	11	7
				radiata	87	10	3	11	9
				radiosa	87	10	3	11	10

## Desmids (green algae)

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
				rotata	87	10	3	11	11
				conferta	87	10	3	11	12
				jennerii	87	10	3	11	13
				papillifera	87	10	3	11	14
				mucosa	87	10	3	11	15
			Staurastrum		87	10	3	12	
				curvatum	87	10	3	12	1
				anatinum	87	10	3	12	2
				ankyroides	87	10	3	12	3
				artistiferum	87	10	3	12	4
				brevispinum	87	10	3	12	5
				comptum	87	10	3	12	6
				furcigerum	87	10	3	12	7
				grallatorium	87	10	3	12	8
				johnsoni	87	10	3	12	9
				lacustre	87	10	3	12	10
				manfeldtii	87	10	3	12	11
				mucronatum	87	10	3	12	12
				natator	87	10	3	12	13
				ophiura	87	10	3	12	14
				pachyrhynchum	87	10	3	12	15
				paradoxum	87	10	3	12	16
				pentacerum	87	10	3	12	17
				megacanthum	87	10	3	12	18
				gladiosum	87	10	3	12	19
				leptocladum	87	10	3	12	20
				limneticum	87	10	3	12	21
				avicula	87	10	3	12	22
				grande	87	10	3	12	23
				arctiscon	87	10	3	12	24
				aversum	87	10	3	12	25
				boreale	87	10	3	12	26
				cingulum	87	10	3	12	27
				dickiei	87	10	3	12	28

## Desmids (green algae)

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
				elongatum	87	10	3	12	29
				o'mearii	87	10	3	12	30
				pelagicum	87	10	3	12	31
				tetracerum	87	10	3	12	32
				gracile	87	10	3	12	33
			Hyalotheca		87	10	3	13	
				dissiliens	87	10	3	13	1
				quadridens	87	10	3	13	2
				mucosa	87	10	3	13	3
			Closterium		87	10	3	14	
				setaceum	87	10	3	14	1
				kutzingii	87	10	3	14	2
				parientana	87	10	3	14	3
			Groenbladia		87	10	3	15	
				neglecta	87	10	3	15	1

## Desmids (green algae)

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
			Staurodesmus		87	10	3	16	
			Gymnozyga		87	10	3	17	
				moniliformis	87	10	3	17	1
			Penium		87	10	3	18	
				obtusa	87	10	3	18	1
			Amscottia		87	10	3	19	
				mira	87	10	3	19	1

## Stoneworts (green algae)

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
	Charophyceae				87	11			
		Characeae			87	11	1		
			Chara		87	11	1	1	
				Nitella	87	11	1	2	
				Tolypella	87	11	1	3	

## Euglenids

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
Euglenophyceae					88				
	Euglenales				88	1			
		Euglenaceae			88	1	1		
			Trachelomonas		88	1	1	1	
				Euglena	88	1	1	2	
				Phacus	88	1	1	3	
				Strombomonas	88	1	1	4	
		Astasiaceae			88	1	2		

## Euglenids

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Peranemaceae			88	1	3		
	Colaciales				88	2			
		Coliacciaceae			88	2	1		
			Colacium		88	2	1	1	
			calvum		88	2	1	1	1
			vesiculosum		88	2	1	1	2

## Yellow-Green Algae

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
Xanthophyceae					89				
	Rhizochloridales				89	1			
		Stipitococcaceae			89	1	1		
			Rhizochloris		89	1	1	1	
	Heterocapsales				89	2			
		Chlorosaccaceae			89	2	1		
		Malleodendraceae			89	2	2		
	Heterococcales				89	3			
		Pleurochloridaceae			89	3	1		
		Gloeobotrydiaceae			89	3	2		

## Yellow-Green Algae

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code Fields				
					00	00	00	00	00
		Mischococcaceae			89	3	3		
		Characiopsidaceae			89	3	4		
			Characiopsis		89	3	4	1	
			Peroniella		89	3	4	2	
			hyalothecae		89	3	4	2	1
		Chloropodiaceae			89	3	5		
		Centritractaceae			89	3	6		
			Pseudotetraedron		89	3	6	1	
			neglectum		89	3	6	1	1
		Chlorotheciaceae			89	3	7		

## Yellow-Green Algae

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
	Heterotrichales				89	4			
		Tribonemataceae			89	4	1		
			Tribonema		89	4	1	1	
		Monociliaceae			89	4	2		
	Heterosiphonales				89	5			
		Botrydiaceae			89	5	1		
		Vaucheriaceae			89	5	2		

## Golden Algae

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
Chrysophyceae					90				
	Chrysoomonadales				90	1			
		Chromulinaceae			90	1	1		
			Kephyrion		90	1	1	1	
				cinctum	90	1	1	1	1
				littorale	90	1	1	1	2
				borale	90	1	1	1	3
				valkanovii	90	1	1	1	4
				fulvum	90	1	1	1	5
			Chromulina		90	1	1	2	
				minuta	90	1	1	2	1
				glacialis	90	1	1	2	2
			Bicoeca		90	1	1	3	
				mitra	90	1	1	3	1
				cylindrica	90	1	1	3	2
			Chrysococcus		90	1	1	4	
				radians	90	1	1	4	1

## Golden Algae

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
			Chrysopyxis		90	1	1	5	
			Codomonas		90	1	1	6	
				annulata	90	1	1	6	1
		Mallomonadaceae			90	1	2		
			Chrysophaerella		90	1	2	1	
				longispina	90	1	2	1	1
			Mallomonas		90	1	2	2	
				liebneri	90	1	2	2	1
				elongata	90	1	2	2	2
				pumillio	90	1	2	2	3
				akrokomonas	90	1	2	2	4
				lynchensis	90	1	2	2	5
				tonsurata	90	1	2	2	6
				pseudocoronata	90	1	2	2	7
				caudata	90	1	2	2	8

## Golden Algae

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00.	00	00	00	00
		Syncryptaceae			90	1	3		
		Synuraceae			90	1	4		
			Synura		90	1	4	1	
				adamsii	90	1	4	1	1
				caroliniana	90	1	4	1	2
				urella	90	1	4	1	3
				lapponica	90	1	4	1	4
			Chrysodidymus		90	1	4	2	
			Conradiella		90	1	4	3	

## Golden Algae

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
Coccolithophoridaeae					90	1	5		
Ochromonadaceae					90	1	6		
Ochromonas					90	1	6	1	
<i>globosa</i>					90	1	6	1	1
Cyclonexis					90	1	6	2	
Chrysoxys					90	1	6	3	
<i>major</i>					90	1	6	3	1
Uroglena					90	1	6	4	
<i>volvox</i>					90	1	6	4	1

## Golden Algae

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					90	00	00	00	00
			Uroglenopsis		90	1	6	5	
				americana	90	1	6	5	1
			Hyalobryon		90	1	6	6	
			Epipyxis		90	1	6	7	
				diplostoma	90	1	6	7	1
				ramosa	90	1	6	7	2
				utriculus	90	1	6	7	3
			Dinobryon		90	1	6	8	
				bavaricum	90	1	6	8	1
				divergens	90	1	6	8	2
				sertularia	90	1	6	8	3
				sociale	90	1	6	8	4
				cylindricum	90	1	6	8	5
				borgei	90	1	6	8	6

## Golden Algae

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
			Pseudokephyrion		90	1	6	9	
				planctonicum	90	1	6	9	1
				minutissimum	90	1	6	9	2
				latum	90	1	6	9	3
				skujae	90	1	6	9	4
			Chrysoykos		90	1	6	10	
				skujai	90	1	6	10	1
				planctonicus	90	1	6	10	2
			Chrysoikos		90	1	6	11	
				bicornis	90	1	6	11	1
			Dendromonas		90	1	6	12	
				cryptostylis	90	1	6	12	1
			Stylochrysalis		90	1	6	13	
				parasitica	90	1	6	13	1

## Golden Algae

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Prymnesiaceae			90	1	7		
			Chrysochromulina		90	1	7	1	
				parva	90	1	7	1	1
	Rhizochrysidales				90	2			
		Rhizochrysidaceae			90	2	1		
			Chrysamoeba		90	2	1	1	
				radians	90	2	1	1	1
			Rhizochrysis		90	2	1	2	
				limnetica	90	2	1	2	1
			Bitrichia		90	2	1	3	
				chodati	90	2	1	3	1

## Golden Algae

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
			Heliochrysis		90	2	1	4	
				radians	90	2	1	4	1
			Lagynion		90	2	1	5	
				fulvum	90	2	1	5	1
				scherffeli	90	2	1	5	2
				oblongatum	90	2	1	5	3
	Chrysocapsales				90	3			
		Chrysocapsaceae			90	3	1		
			Chrysocapsa		90	3	1	1	
				planctonica	90	3	1	1	1
		Naegeliellaceae			90	3	2		
			Naegeliella		90	3	2	1	
				flagellifera	90	3	2	1	1

## Golden Algae

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Hydruraceae			90	3	3		
	Chrysotrichales				90	4			
		Phaeothamniaceae			90	4	1		
	Chrysosphaerales				90	5			
		Chrysosphaeraceae			90	5	1		
	Monosigales=Choanoflagellate				90	6			
		Salpingoecaceae			90	6	1		
			Salpingoeca		90	6	1	1	
			frequentissima		90	6	1	1	1

## Golden Algae

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Monosigaceae			90	6	2		
			Desmarella		90	6	2	1	
				moniliformis	90	6	2	1	1
				irregularis	90	6	2	1	2

## Diatoms

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
Bacillariophyceae					91				
	Centrales				91	1			
		Coscinodiscaceae			91	1	1		
			Cyclotella		91	1	1	1	
			nana		91	1	1	1	1
			comta		91	1	1	1	2
			michiganiana		91	1	1	1	3
			bodanica		91	1	1	1	4
			kutzingiana		91	1	1	1	5
			meneghiniana		91	1	1	1	6
			Stephanodiscus		91	1	1	2	
			astrea		91	1	1	2	1
			Melosira		91	1	1	3	
			granulata		91	1	1	3	1
			distans		91	1	1	3	2
			italica		91	1	1	3	3
			Coscinodiscus		91	1	1	4	
			lacustris		91	1	1	4	1
		Eupodiscaceae			91	1	2		

## Diatoms

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Rhizosoleniaceae			91	1	3		
			Rhizosolenia		91	1	3	1	
				eriensis	91	1	3	1	1
		Chaetoceraceae			91	1	4		
		Biddulphiaceae			91	1	5		
			Biddulphia		91	1	5	1	
		Anaulaceae			91	1	6		

## Diatoms

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
	Pennales				91	2			
		Tabellariaceae			91	2	1		
			Tabellaria		91	2	1	1	
				fenestrata	91	2	1	1	1
				flocculosa	91	2	1	1	2
				Tetracyclus	91	2	1	2	
				lacustris	91	2	1	2	1
		Meridionaceae			91	2	2		
			Meridion		91	2	2	1	
				circularis	91	2	2	1	1
		Diatomaceae			91	2	3		
			Opephora		91	2	3	1	
				pacifica	91	2	3	1	1
				Diatoma	91	2	3	2	
				vulgare	91	2	3	2	1
				elongatum	91	2	3	2	2

## Diatoms

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Fragilariaceae			91	2	4		
			Asterionella		91	2	4	1	
				formosa	91	2	4	1	1
			Fragilaria		91	2	4	2	
				capucina	91	2	4	2	1
				crotonensis	91	2	4	2	2
				virescens	91	2	4	2	3
				construens	91	2	4	2	4
				pinnata	91	2	4	2	5
			Synedra		91	2	4	3	
				acus	91	2	4	3	1
				rumpens	91	2	4	3	2
				delitissima	91	2	4	3	3
				filiformis	91	2	4	3	4
				ulna	91	2	4	3	5
				capitellata	91	2	4	3	6
				capitata	91	2	4	3	7
				nana	91	2	4	3	8
			Centronella		91	2	4	4	
				reichelti	91	2	4	4	1

## Diatoms

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code Fields				
					00	00	00	00	00
		Eunotiaceae			91	2	5		
			Ceratoneis		91	2	5	1	
			Eunotia		91	2	5	2	
				denticulata	91	2	5	2	1
				binale	91	2	5	2	2
				flexuosa	91	2	5	2	3
				lunaris	91	2	5	2	4
				perpussilla	91	2	5	2	5
				pectinalis	91	2	5	2	6
				praemonas	91	2	5	2	7
				sudetica	91	2	5	2	8
				caespitosa	91	2	5	2	9
				naegelii	91	2	5	2	10
			Actinella		91	2	5	3	
				punctata	91	2	5	3	1

## Diatoms

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
			Amphicampa		91	2	5	4	
				hemicyclus	91	2	5	4	1
		Achnanthaceae			91	2	6		
			Achnanthes		91	2	6	1	
				depressa	91	2	6	1	1
				laevis	91	2	6	1	2
				lanceolata	91	2	6	1	3
				linearis	91	2	6	1	4
				microcephala	91	2	6	1	5
				neticus	91	2	6	1	6
			Cocconeis		91	2	6	2	
				placentula	91	2	6	2	1
			Peroniopsis		91	2	6	3	
				heribaudii	91	2	6	3	1
		Naviculaceae			91	2	7		
			Neidium		91	2	7	1	
				affine	91	2	7	1	1

## Diatoms

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
			Gyrosigma		91	2	7	2	
			Pinnularia		91	2	7	3	
				arca	91	2	7	3	1
				major	91	2	7	3	2
				lata	91	2	7	3	3
				divergens	91	2	7	3	4
				stomatophora	91	2	7	3	5
				arctica	91	2	7	3	6
			Anomoeoneis		91	2	7	4	
				brachysira	91	2	7	4	1
				serians	91	2	7	4	2

## Diatoms

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
			Amphipleura		91	2	7	5	
				pellucida	91	2	7	5	1
			Frustulia		91	2	7	6	
				rhomboides	91	2	7	6	1
				vulgaris	91	2	7	6	3
			Navicula		91	2	7	7	
				radiosa	91	2	7	7	1
				cryptocephala	91	2	7	7	2
				cuspidata	91	2	7	7	3
			Stauroneis		91	2	7	8	
				phoenicenteron	91	2	7	8	1
				ancepts	91	2	7	8	2

## Diatoms

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code Fields				
					00	00	00	00	00
			Pleurosigma		91	2	7	9	
			Caloneis		91	2	7	10	
				ladogensis	91	2	7	10	1
			Mastogloia		91	2	7	11	
				smithii	91	2	7	11	1
			Diploneis		97	2	7	12	
		Gomphonemataceae			91	2	8		
			Gomphonema		91	2	8	1	
				angustatum	91	2	8	1	1
				gracile	91	2	8	1	2
				lanceolatum	91	2	8	1	3
				montanum	91	2	8	1	4
			Gomphoneis		91	2	8	2	

## Diatoms

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Cymbellaceae			91	2	9		
			Cymbella		91	2	9	1	
				caespitosa	91	2	9	1	1
				cistula	91	2	9	1	2
				ehrenbergii	91	2	9	1	3
				tumidula	91	2	9	1	4
				lanceolata	91	2	9	1	5
			Amphora		91	2	9	2	
				ovalis	91	2	9	2	1
			Epithemia		91	2	9	3	
			Rhopalodia		91	2	9	4	
				gibba	91	2	9	4	1

## Diatoms

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Nitzschiaceae			91	2	10		
			Nitzschia		91	2	10	1	
				acicularis	91	2	10	1	1
				capitellata	91	2	10	1	2
				sigma	91	2	10	1	3
				sigmoidea	91	2	10	1	4
				sinuata	91	2	10	1	5
				vermicularis	91	2	10	1	6
				scalaris	91	2	10	1	7
				closterium	91	2	10	1	8
			Hantzschia		91	2	10	2	
				amphioxys	91	2	10	2	1
			Denticula		91	2	10	3	
		Surirellaceae			91	2	11		
			Surirella		91	2	11	1	
				robusta	91	2	11	1	1

## Diatoms

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
			Cymatopleura		91	2	11	2	
				solea	91	2	11	2	1
			Stenopterobia		91	2	11	3	
				intermedia	91	2	11	3	1

## Brown Algae

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code
					Fields
					00 00 00 00 00
Phaeophyta					92

## Dinoflagellates

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
Dinophyceae					93				
	Gymnodiniales				93	1			
		Gymnodiniaceae			93	1	1		
			Gymnodinium		93	1	1	1	
			uberrimum		93	1	1	1	1
			varians		93	1	1	1	2
			ordinatum		93	1	1	1	3
	Peridiniales				93	2			
		Glenodiniaceae			93	2	1		
			Glenodinium		93	2	1	1	
			quadridens		93	2	1	1	1
		Gonyaulacaceae			93	2	2		
		Peridiniaceae			93	2	3		
			Peridinium		93	2	3	1	
			cinctum		93	2	3	1	1
			limbatum		93	2	3	1	2
			pusillum		93	2	3	1	3
			Peridiniopsis		93	2	3	2	

## Dinoflagellates

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Ceratiaceae			93	2	4		
			Ceratium		93	2	4	1	
				caroliniana	93	2	4	1	1
				hirudinella	93	2	4	1	2
	Dinocapsales				93	3			
		Gloeodiniaceae			93	3	1		
			Urococcus		93	3	1	1	
				insignis	93	3	1	1	1
	Dinococcales				93	4			
		Phytodiniaceae			93	4	1		
			Stylodinium		93	4	1	1	
				globosum	93	4	1	1	1
		Blastodiniaceae			93	4	2		

## Chloromonads

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
Chloromonadophyceae					94				
	Chloromonadales				94	1			
		Chloromonadaceae			94	1	1		

## Cryptomonads

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
Cryptophyceae					95				
	Cryptomonadales				95	1			
		Cryptochrysidaceae			95	1	1		
			Rhodomonas		95	1	1	1	
				minuta	95	1	1	1	1
		Cryptomonadaceae			95	1	2		
			Cryptomonas		95	1	2	1	
				erosa	95	1	2	1	1
				marssonii	95	1	2	1	2
				ovata	95	1	2	1	3
		Nephroselmidiaceae			95	1	3		

## Cryptomonads

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Kathablepharidaceae			95	1	4		
			Kathablepharis		95	1	4	1	
				ovalis	95	1	4	1	1
	Cryptococcales				95	2			
		Cryptococcaceae			95	2	1		

## Red Algae

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
Rhodophyceae					96				
	Bangiales				96	1			
		Goniotrichaceae			96	1	1		
		Bangiaceae			96	1	2		
	Nemalionales				96	2			
		Chantransiaceae			96	2	1		

## Red Algae

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code				
					Fields				
					00	00	00	00	00
		Batrachospermaceae			96	2	2		
		Thoreaceae			96	2	3		
		Lemaneaceae			96	2	4		

## Extraterrestrials

Division or Class	Subdivision, Class or Order	Order, Suborder or Family	Genus	Species	Code
					Fields
					00 00 00 00 00
Extraterrestrials					99