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Protozoa of Iowa

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Introduction

Ten years ago, the authors, while working at the University of Iowa Lakeside Laboratory at Lake Okoboji, compiled a list of Protozoa studied that summer. It was felt such a list could be enlarged upon and become a useful reference for workers in the field of Protozoology.

As Protozoa have been identified we have added species from the vicinities of Lakeside Laboratory, Des Moines and Iowa City. Most of these were free living, but we have also included some parasitic forms.

In addition we have made some attempt to include those mentioned in readily accessible literature, but no attempt has been made to make an exhaustive survey.

We intend to supplement this list with additional forms as they are revealed by an intensive search of published material. We believe that this list is sufficiently complete to be of considerable value in its present form.

Protozoa of Iowa

SUB PHYLUM PLASMODROMA
CLASS MASTIGOPHOREA
SUB CLASS PHYTOMASTIGOPHORIA
ORDER 1 CHRYSOMONADIDA

1. Dinobryon calyciforme
2. Dinobryon divergens
3. Dinobryon sertularia
4. Dinobryon sociale
5. Dinobryon stipitatum
6. Hyalobryon sp.
7. Mallomonas sp.

ORDER 2 CRYTOMONADIDA

1. Chilomonas paramecium
2. Cryptomonas erosa
3. Cryptomonas ovata
4. Cyathomonas truncata
5. Nephroselmis olivacea

ORDER 3 DINOFLAGELLIDA

1. Ceratium hirundinella
2. Glenodinium uligenosum
3. Gymnodinium agile
4. Peridinium tabulatum

ORDER 4 PHYTOMONADIDA

1. Carteria sp.
2. Chlamydomonas anglica
3. Chlamydomonas debaryana
4. Chlamydomonas dinobryoni
5. Chlamydomonas ehrenbergii
6. Chlamydomonas globosa
7. Chlamydomonas snowii
8. Chlamydobotrys stellata
9. Eudorina elegans
10. Gonium pectorale
11. Gonium sociale
12. Monas vulgaris
13. Oikomonas termo
14. Pandorina morum
15. Parapolytoma satura
16. Pleodorina californica
17. Pleodorina illinoisensis
18. Platydorina caudatum
19. Polytomella agilis
20. Polytoma uvella
21. Synura adamsii
22. Synura uvella
23. Spondylorum quaternarium
24. Volvox aureus
25. Volvox globator
26. Volvox mononae

ORDER 5 EUGLÆNIDA

1. Anisonema acinus
2. Anisonema emarginatum
3. Anisonema ludibundum
4. Anisonema ovale
5. Anisonema pulsillum
6. Anisonema solenata
7. Anisonema striatum
8. Anisonema truncatum
9. Astasia curvata
10. Astasia dangeardii
11. Astasia inflata
12. Astasia klebsii
13. Astasia ocellata
14. Astasia trichophora
15. Chloropeltis hispidula
16. Chloropeltis ovum
17. Cryptoglena pigma
18. Distigma proteus
19. Entosiphon ovatum
20. Entosiphon sulcatum

21. Euglena acus
22. Euglena acus var. angularis
23. Euglena acus var. rigida
24. Euglena acutissima
25. Euglena acutissima var. longa
26. Euglena anabaena var. minor
27. Euglena antefossa
28. Euglena caudata
29. Euglena chlamydophora
30. Euglena cyclopicola
31. Euglena deses
32. Euglena deses var. tenuis
33. Euglena ehrenbergii
34. Euglena elongata
35. Euglena flava
36. Euglena fronsundulata
37. Euglena fundoversata
38. Euglena gracilis
39. Euglena granulata
40. Euglena ignobilis
41. Euglena intermedia
42. Euglena klebsii
43. Euglena minima
44. Euglena nana
45. Euglena oblongata
46. Euglena oxyurus
47. Euglena pisciformis
48. Euglena pisciformis var. minor
49. Euglena polymorpha
50. Euglena proxima
51. Euglena pseudospiroides
52. Euglena retronata
53. Euglena rostrifera
54. Euglena rubra
55. Euglena sanguinea
56. Euglena sociabilis
57. Euglena spirogyra
58. Euglena spirogyra var. abrupte acuminata
59. Euglena spirogyra var. elegans
60. Euglena spirogyra var. marchica
61. Euglena spirogyra var. suprema
62. Euglena spiroides
63. Euglena splendens
64. Euglena terricola
65. Euglena torta
66. Euglena tripteris
67. Euglena tripteris var. klebsii
68. Euglena trisulcata
69. Euglena truncata

70. Euglena tuba
71. Euglena velata
72. Euglena viridis
73. Euglena vivida
74. Heteronema acus
75. Heteronema mutabilis
76. Heteronema nebulosum
77. Heteronema spirale
78. Heteronema tremulum
79. Khawkinea halli
80. Lepocinclis fusciformis
81. Lepocinclis marsonni
82. Lepocinclis ovum
83. Lepocinclis ovum var. globular
84. Menoidium falcatum
85. Menoidium incurvum
86. Menoidium pellucidum
87. Menoidium tortuosum
88. Notosolenus apocamplus
89. Notosolenus orbicularis
90. Notosolenus sinuatus
91. Peranema trichophorum
92. Petalomonas abscisca
93. Petalomonas abscisca var. convergens
94. Petalomonas alata
95. Petalomonas angusta
96. Petalomonas angusta var. pulsilla
97. Petalomonas assymetrica
98. Petalomonas bicarinata
99. Petalomonas carinata
100. Petalomonas dorsalis
101. Petalomonas inflexa var. obliqua
102. Petalomonas mediocanellata
103. Petalomonas mediocanellata var. distomata
104. Petalomonas mediocanellata var. minor
105. Petalomonas mediocanellata var. pleurosigma
106. Petalomonas quinquemarginata
107. Petalomonas septamarginata
108. Petalomonas sulcata
109. Phacus acumina
110. Phacus acumina var. iowenesis
111. Phacus acuminata
112. Phacus agilia skuja var. okobojiensis
113. Phacus alata
114. Phacus anoceolus
115. Phacus brevicaudata
116. Phacus caudata
117. Phacus longicaudus
118. Phacus monilata

119. Phacus oscillans
120. Phacus pleuronectes
121. Phacus pyrum
122. Phacus quinquemarginatus
123. Phacus rostafinskii
124. Phacus spiralis
125. Phacus stokesii
126. Phacus suecica
127. Phacus torta
128. Phacus trimarginatus
129. Phacus triqueter
130. Phacus warszewiczii
131. Scytomonas pulsilla
132. Trachelomonas abrupta
133. Trachelomonas abrupta var. bonnieri
134. Trachelomonas affinis
135. Trachelomonas affinis var. levis
136. Trachelomonas allia
137. Trachelomonas armata
138. Trachelomonas armata var. steinii
139 .Trachelomonas benardi
140. Trachelomonas elegans
141. Trachelomonas ensifera
142. Trachelomonas enclora
143. Trachelomonas hispida
144. Trachelomonas hispida var. coronata
145. Trachelomonas hispida var. crenulatocollis
146. Trachelomonas hispida var. punctulatum
147. Trachelomonas hispida var. subarmata
148. Trachelomonas hispida var. verrucosa
149. Trachelomonas horrida
150. Trachelomonas horrida var. pauciopina
151. Trachelomonas molesta
152. Trachelomonas oblongata
153. Trachelomonas obovata
154. Trachelomonas piscatoris
155. Trachelomonas planctomica
156. Trachelomonas raciborskii
157. Trachelomonas raciborskii var. incerta
158. Trachelomonas raciborskii var. punctata
159. Trachelomonas reticulata
160. Trachelomonas rugulosa
161. Trachelomonas scheviokoffi
162. Trachelomonas spinosa
163. Trachelomonas superba
164. Trachelomonas volvocina
165. Trachelomonas westii

SUB CLASS ZOOMASTIGOPHORIA

ORDER 1 RHIZOMASTIGIDA

1. Mastigamoeba aspera
2. Mastigamoeba butschlii
3. Mastigamoeba longifilum
4. Mastigamoeba socialis
5. Mastigella radicula
6. Multicillia lacustris
7. Multicillia sp. (90μ)

ORDER 2 PROTOMASTIGIDA (PROTOMANADINA)

1. Anthophysa vegetans
2. Bodo caudatus
3. Codosiga botrytus
4. Embadomonas phyllophagae
5. Monas communis
6. Monas elongata
7. Monas guttula
8. Monas vivipara
9. Monosiga steinii
10. Oikomonas equi
11. Trypanosoma chrysemydis
12. Trypanosoma cryptobranchi
13. Trypanosoma hixsoni
14. Trypanosoma iowensis
15. Trypanosoma laverani var. toxastomae

ORDER 3 POLYMASTIGIDA

1. Callimastix equi
2. Eutrichomastix phyllophagae
3. Eutrichomastix passali
4. Giardia botouri
5. Giardia floridae
6. Giardia melaspizae
7. Giardia ondalrae
8. Giardia stunellae
9. Hexamita marmotae
10. Hexamita inflatus
11. Hexamita intestinalis
12. Monocercomonas melolonthae
13. Polymastix melolonthae
14. Polymastix phyllaphagae
15. Tetramitus pyriformis
16. Tetramitus rostratus
17. Tetramitus sulcatus
18. Tetramitus sp.
19. Trepomonas agilis
20. Trichomonas augusta
21. Trichomonas chordeilis
22. Trichomonas equi

23. Trichomonas galenae
24. Trichomonas iowensis
25. Trichomonas pisobiae
26. Trichomonas ruminatium

CLASS II SARCODINA

SUB CLASS RHIZOPODA

ORDER 1 AMOEBIDA

1. Amoeba gargonia
2. Amoeba limicola
3. Amoeba proteus
4. Amoeba radiosa
5. Amoeba striata
6. Amoeba verrucosa
7. Amoeba vespertilio
8. Dinamoeba mirabilis
9. Endamoeba bovis
10. Endamoeba gedoelsti
11. Pelomyxa villosa
12. Vahlkampfia limax
13. Vahlkampfia lobospinosa

ORDER 2 TESTACIDA

1. Arcella vulgaris
2. Arcella discoides
3. Assulina semilinulum
4. Centropyxis aculeata
5. Cochliopodium vestitum
6. Cochliopodium bilimbosum
7. Diffulgia acuminata
8. Difflugia circeolata
9. Difflugia constricta
10. Difflugia corona
11. Difflugia cratera
12. Difflugia globulosa
13. Difflugia lobostoma
14. Difflugia oblongata
15. Difflugia pyriformis
16. Difflugia spiralis
17. Difflugia urceolata
18. Euglypha alveolata
19. Pamphagus mutabilis
20. Pyxidicula operculata
21. Trinema enchelys
22. Cyphoderia ampulla

SUB CLASS ACTINOPODIA

ORDER 1 HELIOZOA

1. Acanthocystis sp.
2. Actinophrys sol
3. Actinophrys picta

4. Actinosphaerium eichorni
5. Clathrulina elegans
6. Heterophrys sp.
7. Raphidiophrys viridis
8. Vampyrella lateritia

CLASS SPOROZOEA

ORDER 1 MYXOSPORIDA

1. Chloromyxum trijugum
2. Henneguya exilis
3. Henneguya magna
4. Myxidium macrocapsularis
5. Myxidium melum
6. Myxosoma ovalis
7. Myxosoma okobojiensis
8. Myxosoma multiplicatum
9. Myxidiium sp.
10. Myxobolus bursaria
11. Myxobolus discrepans
12. Myxobolus iowensis
13. Myxobolus okobojiensis
14. Myxobolus osburnii
15. Myxobolus sparoidia
16. Myxobolus symmetricus
17. Myxobolus transovalis

ORDER 2 COCCIDIA

1. Eimeria americana
2. Eimeria chrysemydis
3. Eimeria delagei
4. Eimeria environ
5. Eimeria exigua
6. Eimeria irresidua
7. Eimeria leporis
8. Eimeria magna
9. Eimeria major
10. Eimeria media
11. Eimeria minima
12. Eimeria mitrarium
13. Eimeria monacis
14. Eimeria neoleparis
15. Eimeria os
16. Eimeria palistana
17. Eimeria perforoides
18. Eimeria perforans
19. Eimeria perforans var. groenlandica
20. Eimeria pintonensis
21. Eimeria robertsoni
22. Eimeria sculpta
23. Eimeria septentrionalis

24. Eimeria silvilagi
25. Eimeria stiedae
26. Haemogregarina lahillei
27. Haemogregarina masoni
28. Haemogregarina pituophis
29. Haemogregarina stepanowi

ORDER 3 HEMOSPORIDIA

1. Hemoproteus beckeri
2. Hemoproteus citelli
3. Hemoproteus columbae

SUBPHYLUM CILLIOPHORA

CLASS CILIATEA

ORDER 1 HOLOTRICHIDA

1. Actinobolus radians
2. Aegyria sp.
3. Alloiozona trizona
4. Blepharaconus cervicalis
5. Blepharaconus benbrooki
6. Blepharocorys angusta
7. Blepharocorys cardionucleata
8. Belpharocorys curvigula
9. Blepharocorys jubata
10. Blepharocorys uncinata
11. Blepharocorys valvata
12. Blepharosphaera ellipsoidalis
13. Blepharosphaera intestinalis
14. Blepharoprosthium pireum
15. Bundleia postciliata
16. Charon equi
17. Chilodon caudatus
18. Chilodon fluviatilia
19. Chilodonella cucullulus
20. Chilodonella dentata
21. Cinetochilum margaritaceum
22. Coleps bicuspis
23. Coleps hirtus
24. Coleps octospinus
25. Coleps striatus
26. Colpidium striatum
27. Colpidium campylum
28. Colpoda flavicans
29. Colpoda helia
30. Colpoda inflata
31. Colpoda saprophila
32. Colpoda steinii
33. Ctedoctema acanthocrysta
34. Cyclidium chrysalis
35. Cyclidium citrullus

36. Cyclidium glaucoma
37. Cyrotolophosis mucicola
38. Dallasia frontata
39. Dasytricha ruminantium
40. Didesmis ovalis
41. Didesmis quadrata
42. Didesmis spiralis
43. Didinium nasutum
44. Dileptus gigas
45. Dileptus micronatus
46. Dileptus monilatus
47. Enchelys truncata
48. Enchelyodon farctus
49. Frontonia acuminata
50. Frontonia atra
51. Frontonia leucas
52. Glaucoma scintillans
53. Glaucoma macrostoma
54. Holophyra keselerii
55. Isotricha prostoma
56. Lembadion bullinum
57. Lacrymaria cohirii
58. Lacrymaria truncata
59. Lacrymaria olor
60. Lacrymaria elegans
61. Lionotus fasicola
62. Lionotus pleurosigma
63. Loxocephalus granulosus
64. Loxophyllum melaegris
65. Loxodes rostrum
66. Mesodinium sp.
67. Microthorax sulcatus
68. Nassula flava
69. Nassula aranata
70. Nassula rubens
71. Ophryoglena grandulosis
72. Paraisotricha beckeri
73. Paraisotricha colpoidea
74. Paraisotricha minuata
75. Paramecium aurelia
76. Paramecium bursaria
77. Paramecium caudatum
78. Paramecium multimicronucleatum
79. Paramecium trichium
80. Polymorpha trizona
81. Prorodon edentatis
82. Prorodon discolor
83. Prorodon morgani
84. Prorodon opalescens

85. Prorodon ovum
86. Prorodon teres
87. Spathidum spathula
88. Trachelocerca trepida
89. Trachelius ovum
90. Trachelophyllum tachyblastum
91. Urocentrum turbo
92. Uronema marinum
93. Urotricha platystoma

ORDER 2 SPIROTRICHIDA

SUB ORDER HETEROTRICHINA

1. Blepharisma bursaria
2. Blepharisma clarrissinum
3. Blepharisma lateritia
4. Blepharisma salinarum
5. Bursaria truncatella
6. Caenomorpha levanderi
7. Climacostomum virens
8. Condylostoma sp.
9. Gyrocoris oxyura
10. Metopoides acuminata
11. Metopus bacillatus
12. Metopus campanula
13. Metopus hyalinus
14. Metopus pullus
15. Metopus setifer
16. Metopus setosus
17. Metopus sigmoides
18. Metopus spiralis
19. Metopus undulans
20. Nyctotherus cordiformis
21. Spirostomum ambiguum
22. Spirostomum intermedium
23. Spirostomum teres
24. Stentor coeruleus
25. Stentor igneus
26. Stentor polymorphus
27. Stentor pyriformis
28. Stentor roeseli
29. Peritromus ovalis

SUB ORDER OGLIGOTRICHINA

1. Cycloposthium affinae
2. Cycloposthium bipalmatum
3. Cycloposthium corrugatum
4. Cycloposthium dentifernum
5. Cycloposthium edentatum
6. Cycloposthium scutigerum
7. Cochliatoxum periachtum

8. Diplodinium bursa
9. Diplodinium clevelandi
10. Diplodinium dentatum
11. Diplodinium denticulatum
12. Diplodinium ecuadatum
13. Diplodinium hegneri
14. Diplodinium helveri
15. Diplodinium magii
16. Diplodinium medium
17. Ditoxum funinucleum
18. Entodidium bicarinatum
19. Entodinium bursa
20. Entodinium caudatum
21. Entodinium furca
22. Entodinium minimum
23. Halteria grandinella
24. Halteria grandinella var. chlorelligera
25. Halteria grandinella var. cirrifera
26. Ophryoscolex caudatus
27. Ophryoscolex inermis
28. Spirodinium equi
29. Tetratoxum excavatum
30. Tetratoxum parvum
31. Tetratoxum unifasiculatum
32. Triadinium caudatum
33. Triadinium galea
34. Triadinium minimum
35. Tripalmaria dogieli

SUB ORDER CTENOSTOMINA

1. Epalxis mirabilis

SUB ORDER HYPOTRICHINA

1. Aspidisca costata
2. Aspidisca lynceus
3. Aspidisca putrina
4. Balladina elongata
5. Euplotes carinata
6. Euplotes charon
7. Euplotes patella
8. Gastrostyla steinii
9. Histrio steinii
10. Onychodromus grandis
11. Oxytricha minor
12. Oxytricha pellionella
13. Oxytricha platystoma
14. Pleurotricha lanceolata
15. Stichotricha aculeata
16. Stichotricha opisthonoides
17. Stichotricha secunda

18. Stylonychia mytilus
19. Stylonychia notophora
20. Stylonychia pustulata
21. Stylonychia putrina
22. Strongylidium californicum
23. Uroleptus agilis
24. Uroleptus rattulus
25. Urosoma caudata
26. Urosoma cienkowskii
27. Urostyla grandis

SUB ORDER PERITRICHINA

1. Carchesium polypinum
2. Cothurnia curva
3. Cothurnia imberbis
4. Epistylus articularis
5. Epistylus chrysemydis
6. Epistylus flavians
7. Epistylus niagarae
8. Epistylus plicatilis
9. Epistylus urceolata
10. Gerda glans
11. Opercularia ramosa
12. Scyphidia inclinans
13. Vaginicola sp.
14. Vorticella alba
15. Vorticella campanula
16. Vorticella citrina
17. Vorticella convallaria
18. Vorticella elongata
19. Vorticella fluviatilis
20. Vorticella longifilum
21. Vorticella nebulifera
22. Vorticella nutans
23. Vorticella perlata
24. Vorticella quadrangularis
25. Vorticella striata
26. Vorticella telescopa
27. Zoothamnium sp.

CLASS SUCTOREA

1. Allantosoma brevicoxniger
2. Allantosoma dicoxniger
3. Allantosoma intestinalis
4. Anarma brevis
5. Anarma multiruga
6. Acineta sp.
7. Acineta limnetis
8. Hallezia buckei
9. Multifasiculatum elegans

10. Podophyra fixa
11. Podophyra okobojiensis
12. Podophyra quadripartita
13. Sphaerophyra magna
14. Squalorophyra macrostyla
15. Tokophyra quadripartita
16. Trichophysea sinuosa

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