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RED LIST OF BULGARIAN ALGAE. II. MICROALGAE.

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Abstract. The Red List presented in this paper is focused on Bulgarian non-marine microalgae which face a risk of extinction. The assignment to each IUCN Red List category is according to the seven specific criteria and their relative values in the new method for evaluation of the threatened status of microalgae (Stoyneva-Gärtner et al., this volume). The list contains 756 taxa (613 species, 82 varieties and 61 forms) from 7 divisions, classified in six IUCN categories and shows that threatened microalgae represent 14% the total algal biodiversity of Bulgaria.

Key words: algae, Bulgaria, Red List, threatened species

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In spite of having no legal definition, Red Lists are world-wide accepted valuable sozological tools for designating the threatened status of organisms, which face an extinction risk and for raising the public awareness for their conservation as well. However, algae, most probably due to their general belonging to the invisible with the *naked eye* microscopic world, have been rarely considered as threatened (*e.g.* Krause 1984; Rassi & Väisänen 1987; Gutowski & Mollenhauer 1996; Knappe et al. 1996; Kusel-Fetzmann 1999; Lange-Bertalot & Steindorf 1996; Lenzenweger 1999; Mollenhauer & Kristensen 1996; Environmental Agency, Japan 2000; Palamar-Mordvintseva & Tsarenko 2004; Németh 2005; Blaženčić et al. 2006; Siemińska 2006) and only 92 taxa, mainly marine macroalgae, have been included in The IUCN Red List of Threatened Species,Version 2015–4.

In Bulgaria, the first Red List of macroalgae, based on standard IUCN criteria and categories, was published as a first part of general Red List of Bulgarian algae (Temniskova et al. 2008). The paper title (*Red List of Bulgarian Algae. I. Macroalgae*) clearly indicates the wish to create a second part oriented towards country's microscopic algae due to the recognition of their biodiversity and conservation importance. The task was extremely difficult because of the obstacles in applying the standard IUCN criteria to the microalgal taxa, using the recent knowledge on their distribution and taxonomy. Therefore the efforts of the author's team were devoted firstly towards the development of a new method for an objective evaluation of the threatened status of the microalgae (Stoyneva-Gärtner et al., this volume). The Red List of microalgae presented in this paper is based on this method and was compiled after critical reading of all the references on their distribution in non-marine habitats of Bulgaria.

The Red List provided below is organized in a table format in the following way: *1)* algal taxa in main taxonomic groups (after Temniskova & Stoyneva 2011a,b), enlisted in alphabetical order according to their recently accepted taxonomic name (mainly after Guiry & Guiry 2016); *2)* assigned IUCN threat category based on *3)* the relative value of each of the seven criteria (A-G) fixed by Stoyneva-Gärtner et al. (this volume), which practically gives the exact formula for each algal taxon and *4)* its total counts (T). As it is proposed in the method description, in further publications or reports such formula could be used separately for each taxon: *e.g. Anabaena pirinica* Petkoff [CR – A3 B3 C4 D4 E4 F4 G4]. In case of special insistence on the level of the importance of the species due to its total counts, the formula could be expressed as *Anabaena pirinica* Petkoff [CR – A3 B3 C4 D4 E4 F4 G4 T25], or could be used in its short versions (*e.g. Anabaena pirinica* Petkoff [CR – T25], or *Anabaena pirinica* Petkoff [CR]).

According to the IUCN recommendations in the Guidelines for Application of IUCN Red List Criteria at Regional Levels (Versions 3.0, 2007 and 4.0., 2012)

we avoided the general categories 'Extinct' and 'Extinct in the Wild'. Taking into account the lack of recent investigations in some of the localities, we decided to avoid also the category 'Regional Extinct' even for species, which have not been confirmed for the territory of Bulgaria during the last five (or more) decades. The other categories (Critically Endangered, Endangered, Vulnerable, Low Risk /Near Threatened, Least Concern/ and Data Deficient) were designated according to the total counts for each species, obtained after applying the seven criteria and their relative values proposed by STOYNEVA-GÄRTNER ET AL. (this volume). Due to the restricted volume of the paper, the synonyms are provided only for a few taxa, described from Bulgaria and references concerning the distribution of the included algae are enlisted only in the end of the paper. A special note has to be made for some *mesoalgae*, which could be visible macroscopically, but could not be identified even on generic level without a light microscope (*e.g. Oedogonium*, *Mougeotia*, *Zygnema*). Their representatives are included in the present list with one exception – *Spirogyra rhodopea* Petkoff, which has been enlisted as a Data Deficient species in TEMNISKOVA ET AL. (2008).

Since the recent algal biodiversity in Bulgaria is quite rich – ca. 5500 taxa (STOYNEVA 2014), a preliminary screening of the species was done by the author's team in an effort to elucidate the most rarely reported algae in Bulgarian phycological literature since the first publications by ISTFANFFI (1890) and PETKOFF (1898A-C) till nowadays. Afterwards the chosen algae were evaluated according to the method of STOYNEVA-GÄRTNER ET AL. (this volume). Therefore it is possible to expect that further checking could outline more threatened microalgae in the country.

The proposed Red List of threatened Bulgarian non-marine microalgae contains 757 taxa (613 species, 83 varieties and 61 forms) from 7 divisions classified in six IUCN categories and the number of the threatened taxa in these categories and main taxonomic groups is shown below (**Tables 1-2**).

The number of threatened species, varieties and forms of microalgae in the present Red List shows that they comprise 14% of the total algal biodiversity of Bulgaria, and together with the 88 threatened macroalgae enlisted in TEMNISKOVA ET AL. (2008), they constitute 15% of all algae reported for the country.

Table 1. Distribution of threatened Bulgarian microalgae in taxonomic divisions and IUCN categories (CR – Critically Endangered, EN – Endangered, VU – Vulnerable, NT – Near Threatened, LC – Least Concern and DD – Data Deficient).

IUCN category	Cyanoprokaryota	Euglenophyta	Pyrrhophyta	Ochrophyta	Haptophyta	Chlorophyta	Streptophyta	Total
CR	4 sp., 2 f.	1 sp.	–	10 sp., 2 var.	–	18 sp., 1 var., 3 f.	5 sp., 18 var., 17 f.	38 sp., 21 var., 22 f.
EN	24 sp., 1 var.	8 sp., 4 var., 4 f.	2 sp.	77 sp., 8 var., 1 f.	1 sp.	47 sp., 2 var., 1 f.	22 sp., 6 var., 2 f.	181 sp., 21 var., 8 f.
VU	20 sp.	10 sp.	–	114 sp., 8 var.	–	64 sp., 2 var.	49 sp., 8 var., 1 f.	257 sp., 18 var., 1 f.
NT	14 sp.	12 sp., 2 var.	2 sp.	31 sp.	–	25 sp., 1 var.	24 sp., 2 var.	108 sp., 5 var.
LC	1 sp.	1 sp.	–	1 sp.	–	–	–	3 sp.
DD	– – 1 f.	3 sp.	–	14 sp., 6 var.	–	5 sp., 5 var., 4 f.	4 sp., 6 var., 25 f.	26 sp., 17 var., 30 f.
Total	63 sp., 1 var., 3 f.	35 sp., 6 var., 4 f.	4 sp.	247 sp., 24 var., 1 f.	1 sp.	159 sp., 11 var., 8 f.	104 sp., 40 var., 45 f.	613 sp., 82 var., 61 f.

Table 2. Red List of Bulgarian microalgae: CS – conservation status (CR – Critically Endangered, EN – Endangered, VU – Vulnerable, NT – Near Threatend, LC – Least Concern, DD – Data Defficient); A–G – criteria in 1–4 categories (described in details in Stoyneva-Gärtner et al., this volume), where: A – number of localities, B – affiliations to protected habitats of Bulgaria, C – affiliation to ecological category, D – affiliation to protected territories, E – endemism, F – general geographic distribution, G – expert weight and T – total counts. In quotes are given the original writting-outs of DD infraspecific taxa, which belong to species which have been taxonomically transferred, or taxa with author names which have been not found by the authors of this paper in the available taxonomic literature.

Taxon/Conservation status and criteria	**CS**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**T**
CYANOPROKARYOTA									
„*Anabaena affinis* forma Petkoff“	**DD**	–	–	–	–	–	–	–	–
***Anabaena lapponica* Borge**	**VU**	3	4	4	2	2	2	3	**20**
***Anabaena oscillarioides* f. *intermedia* Petkoff**	**CR**	4	4	4	4	4	4	4	**28**
***Anabaena pirinica* Petkoff**	**CR**	3	3	4	4	4	4	4	**26**
***Aphanocapsa testacea* Nägeli**	**EN**	3	4	4	4	1	4	4	**24**

Taxon/Conservation status and criteria	CS	A	B	C	D	E	F	G	T
Aphanothece nidulans Richter	EN	3	4	4	4	1	2	3	21
Aulosira valkanovii Draganov	EN	3	2	4	2	4	4	4	23
Calothrix hollerbachii Draganov	EN	4	1	4	1	4	4	4	22
Calothrix thermalis Hansgirg ex Bornet et Flahault	EN	4	3	4	3	1	4	4	23
Chroococcus cohaerens (Brébisson) Nägeli	NT	3	2	4	1	1	2	1	14
Chroococcus helveticus Nägeli	VU	4	1	4	3	1	4	1	18
Chroococcus membraninus (Meneghini) Nägeli	NT	4	3	4	1	1	2	1	16
Chondrocystis dermochroa (Nägeli) Komárek et Anagnostidis	VU	4	3	4	3	1	3	1	19
Chroococcus westii Boye-Petersen	EN	4	4	4	3	1	4	1	21
Coleodesmium sagarmathae Komárek et Watanabe	EN	3	4	4	4	1	4	3	23
Coleodesmium wrangelii ([Agardh] Bornet et Flahault) Borzi ex Geitler	VU	3	4	4	2	1	2	1	17
Coelosphaerium aerugineum Lemmermann	EN	4	4	4	3	1	2	4	22
Cyanobacterium diachloros (Skuja) Komárek, Kopecký et Cepák	EN	4	4	4	3	1	4	1	21
Cylindrospermum alatosporum Fritsch	EN	4	4	4	3	1	3	2	21
Cylindrospermum dobrudjense Draganov	EN	3	1	4	2	4	4	4	22
Cylindrospermum marchicum (Lemmermann) Lemmermann	VU	4	1	4	1	1	3	4	18
Cylindrospermum urumoffii Petkoff	CR	3	3	4	4	4	4	4	26
Cylindrospermum voukii Pevalek	NT	4	1	4	1	1	4	1	16
Eucapsis minor (Skuja) Elenkin	EN	3	4	4	2	1	4	4	22
Eucapsis minuta Fritsch	EN	3	4	4	2	1	4	3	21
Gloeocapsa alpina Nägeli	LC	1	1	2	2	1	1	1	9
Gloeocapsa gelatinosa Kützing	VU	4	3	4	3	1	2	1	18
Gloeocapsa granosa (Berkeley) Kützing	NT	4	1	4	1	1	4	1	16
Gloeocapsa haematodes (Kützing) Kützing	EN	3	4	4	4	1	4	1	21
Gloeocapsopsis crepidinum (Thuret) Geitler ex Komárek	NT	4	1	4	1	1	2	1	14
Gloeothece fuscolutea (Nägeli ex Kützing) Nägeli	NT	3	2	4	2	1	3	1	16
Gomphosphaeria virieuxii Komárek et Hindák	VU	3	2	3	4	1	3	2	18
Hapalosiphon fontinalis Bornet	VU	4	4	4	3	1	2	1	19
Jaaginema geminatum (Meneghini ex Gomont) Anagnostidis et Komárek	NT	3	4	3	2	1	1	1	15
Lemmermanniella pallida (Lemmermann) Geitler	EN	4	4	4	4	1	3	2	22

Taxon/Conservation status and criteria	CS	A	B	C	D	E	F	G	T
Lyngbya lutea Gomont ex Gomont	VU	3	2	4	3	1	2	4	**19**
Lyngbya martensiana var. *mendenhalliana* Kol	EN	4	1	4	4	1	4	4	**22**
Mastigocladus laminosus Cohn ex Kirchner	VU	2	3	4	3	1	2	4	**19**
Mastigocladus testarum Lagerheim ex Bornet et Flahault	NT	4	1	4	1	1	2	1	**14**
Merismopedia elegans A. Braun	VU	3	4	4	2	1	2	3	**19**
Merismopedia affixa Richter	EN	3	4	4	4	1	3	4	**23**
Merismopedia convoluta Brébisson ex Kützing	NT	3	1	4	1	1	2	4	**16**
Merismopedia insignis Škorbatov	EN	3	2	4	4	1	4	3	**21**
Merismopedia mediterranea Nägeli	VU	3	1	4	1	1	3	4	**17**
Microchaete grisea Thuret ex Bornet et Flahault	NT	4	1	4	1	1	2	1	**14**
Microcoleus anguiformis Harvey ex Kirchner	VU	4	1	4	1	1	4	4	**19**
Nostoc caeruleum Lyngbye ex Bornet et Flahault	VU	4	1	4	1	1	3	4	**18**
Nostoc carneum (Lyngbye) Agardh ex Bornet et Flahault	NT	3	2	3	2	1	1	2	**14**
Nostoc disciforme Fritsch	EN	4	4	3	3	1	4	4	**23**
Nostoc zetterstedtii Areschoug	CR	4	4	4	4	1	4	4	**25**
Oscillatoria formosa f. *nalbanthis* Petkoff	CR	4	4	4	4	4	4	4	**28**
Oscillatoria annae Van Goor	VU	3	4	4	2	1	2	2	**18**
Oscillatoria dzeman-sor Woronichin	NT	4	1	4	1	1	4	1	**16**
Phormidium bulgaricum (Komárek) Anagnostidis et Komárek	EN	3	4	4	2	1	4	4	**22**
Phormidium molischii (Vouk) Anagnostidis et Komárek	EN	4	3	4	1	1	4	4	**21**
Phormidium willei (Gardner) Anagnostidis et Komárek	NT	3	1	4	2	1	2	1	**14**
Rivularia rufescens Nägeli ex Bornet et Flahault	EN	4	4	4	3	1	4	4	**24**
Romeria alascensis (Hortobágyi et Hilliard) Komárek	VU	3	2	4	2	1	4	1	**17**
Scytonema bewsii Fritsch et Rich	VU	4	4	4	1	1	4	1	**19**
Scytonema cincinatum (Kützing) Thuret ex Bornet et Flahault	EN	4	3	4	3	1	2	4	**21**
Scytonema mirabile [Dillwyn] Bornet	NT	2	2	4	2	1	3	1	**15**
Stigonema mamillosum (Lyngbye) Agardh et Bornet et Flahault	VU	4	1	4	4	1	2	1	**17**
Scytonematopsis starmachii Kovácik et Komárek	CR	4	4	4	4	1	4	4	**25**

Taxon/Conservation status and criteria	CS	A	B	C	D	E	F	G	T
Stigonema turfaceum Cooke ex Bornet et Flahault	VU	4	3	4	1	1	3	2	**18**
Symploca thermalis Gomont	EN	4	3	4	3	1	4	4	**23**
Tolypothrix calcarata Schmidle	VU	4	4	3	1	1	4	3	**20**
Tolypothrix saviczii Kossinskaja	EN	3	4	4	2	1	4	4	**22**
EUGLENOPHYTA									
Astasia bulgarica Mihajlow	DD	–	–	–	–	–	–	–	–
Astasia sophiensis Mihajlow	DD	–	–	–	–	–	–	–	–
Phacus abrupta Korshikov	VU	4	4	4	1	1	4	1	**19**
Phacus angustus Drezepolski	VU	4	4	4	1	1	4	1	**19**
Phacus anomalus Fritsch et Rich	NT	4	1	4	1	1	3	1	**15**
Phacus curvicauda f. *robusta* Allorge et Lefèvre	EN	4	4	4	4	1	4	1	**22**
Phacus ichthydion Pochmann	EN	4	4	4	4	1	3	1	**21**
Phacus inconspicuus Deflandre	VU	3	4	4	2	1	2	1	**17**
Phacus inflexus (Kisselev) Pochmann	NT	4	1	4	1	1	3	1	**15**
Phacus janiczakii Stawinski	EN	4	4	4	4	1	4	1	**22**
Phacus monilatus var. *suecicus* Lemmermann	NT	3	2	4	2	1	1	1	**14**
Phacus onyx Pochmann	VU	4	4	4	4	1	2	1	**20**
Phacus oscillans Klebs	VU	4	1	4	1	1	3	4	**18**
Phacus pleuronectes f. *gigas* (Da Cunha) Popova	EN	4	4	4	4	1	3	1	**21**
Phacus polytrophos Pochmann	NT	3	1	4	1	1	3	1	**14**
Phacus pomiformis (Conrad) Pochmann	EN	4	4	4	3	1	4	3	**23**
Phacus swirenkoi Skvortzov	NT	4	1	4	1	1	4	1	**16**
Strombomonas asymmetrica (Roll) Popova	NT	3	2	4	2	1	2	1	**15**
Strombomonas balvayi Bourrelly et Couté	NT	3	1	4	1	1	4	1	**15**
Strombomonas jaculata (Palmer) Deflandre	NT	3	1	4	1	1	4	1	**15**
Strombomonas morenensis Balech et Dastugue	VU	3	2	4	2	1	4	1	**17**
Strombomonas praeliaris var. *amphora* Kirjakov	EN	4	1	4	1	4	4	4	**22**
Strombomonas vermontii f. *commune* Popova	EN	4	4	4	1	1	4	4	**22**
Strombomonas vodenicarovii Kirjakov	EN	4	1	4	1	4	4	4	**22**
Trachelomonas acanthophora var. *speciosa* (Deflandre) Balech	EN	4	4	4	4	1	3	1	**21**
Trachelomonas acanthostoma var. *europaea* Drezepolski	NT	4	1	4	1	1	4	1	**16**
Trachelomonas alisoviana Skvortzov	NT	4	1	4	1	1	4	1	**16**
Trachelomonas elegans Conrad	EN	4	4	4	4	1	4	1	**22**

Taxon/Conservation status and criteria	CS	A	B	C	D	E	F	G	T
Trachelomonas formosa (Skvortzov) Deflandre	EN	4	4	4	4	1	4	1	**22**
Trachelomonas laticollis Kotlar	EN	4	4	4	4	1	4	1	**22**
Trachelomonas obtusa Palmer	NT	3	1	4	1	1	3	1	**14**
Trachelomonas ovoides Conrad	VU	4	1	4	1	1	4	4	**19**
Trachelomonas mirabilis var. *helvetica* Huber-Pestalozzi	EN	4	4	4	4	1	4	1	**22**
Trachelomonas pascherii Valkanov	DD	–	–	–	–	–	–	–	–
Trachelomonas perforata Averintsev	NT	4	1	4	1	1	4	1	**16**
Trachelomonas pseudobulla Svirenko	LC	4	1	1	1	1	2	1	**11**
Trachelomonas rhodopensis Valkanov	CR	4	4	4	4	4	4	4	**28**
Trachelomonas rugulosa Stein	NT	3	2	4	2	1	2	1	**15**
Trachelomonas scabra var. *ovata* Playfair	EN	4	4	4	4	1	3	1	**21**
Trachelomonas stokesiana Palmer	VU	3	4	4	2	1	2	1	**17**
Trachelomonas szabadosiana Huber-Pestalozzi	NT	4	1	4	1	1	4	1	**16**
Trachelomonas vas Deflandre	EN	4	4	4	4	1	3	1	**21**
Trachelomonas verrucosa f. *sparseornata* Deflandre	EN	4	4	4	4	1	4	1	**22**
Trachelomonas woycickii Kosczwara	VU	3	4	4	2	1	2	1	**17**
Trachelomonas zorensis Deflandre	VU	4	4	4	1	1	4	1	**19**
PYRRHOPHYTA									
Cystodinium cornifax (Schilling) Klebs	NT	3	2	4	2	1	2	1	**15**
Katodinium planum (Fott) Loeblich III	EN	4	4	4	4	1	3	1	**21**
Tetradinium intermedium Geitler	EN	4	4	4	3	1	4	3	**23**
Hemidinium nasutum Stein	NT	3	2	4	2	1	2	1	**15**
OCHROPHYTA									
BACILLARIOPHYCEAE									
Achnanthidium caledonicum (Lange-Bertalot) Lange-Bertalot	EN	4	3	4	4	1	2	3	**21**
Achnanthidium daonense (Lange-Bertalot) Lange-Bertalot, Monnier et Ector	NT	2	2	4	3	1	1	2	**15**
Achnanthidium helveticum (Hustedt) Monnier, Lange-Bertalot et Ector	NT	2	2	4	3	1	1	1	**14**
Achnanthidium kranzii (Lange-Bertalot) Round et Bukhtiyarova	EN	4	3	4	4	1	2	3	**21**
Achnanthidium kryophila (Petersen) Bukhtiyarova	EN	3	3	4	4	1	2	4	**21**
Achnanthidium lineare W. Smith	NT	2	2	4	2	1	1	1	**13**
Achnanthidium subatomoides (Hustedt) Monnier, Lange-Bertalot et Ector	NT	2	2	4	2	1	1	1	**13**

Taxon/Conservation status and criteria	CS	A	B	C	D	E	F	G	T
Achnanthidium subatomus (Hustedt) Lange-Bertalot	NT	2	2	4	2	1	1	2	**14**
Achnanthidium temniskovae Ivanov et Ector	CR	3	4	4	3	4	4	4	**26**
Achnanthidium ventralis (Krasske) Haworth et Kelly	EN	4	3	4	4	1	2	3	**21**
Adlafia bryophila (Petersen) Moser, Lange-Bertalot et Metzeltin	VU	3	3	4	4	1	2	2	**19**
Adlafia suchlandtii (Hustedt) Lange-Bertalot	EN	4	3	4	4	1	2	3	**21**
Amphora eximia Carter	VU	3	3	4	3	1	2	3	**19**
Aneumastus stroesei (Østrup) Mann et Stickle	VU	4	3	4	3	1	2	2	**19**
Aulacoseira alpigena (Grunow) Krammer	VU	2	3	4	4	1	2	2	**18**
Aulacoseira distans (Ehrenberg) Simonsen	EN	4	3	4	4	1	2	3	**21**
Aulacoseira pfaffiana (Reinsch) Krammer	VU	3	3	4	4	1	2	3	**20**
Aulacoseira valida (Grunow) Krammer	EN	4	3	4	4	1	2	4	**22**
Boreozonacola hustedtii Lange-Bertalot, Kulikovskiy et Witkowski	EN	3	3	4	4	1	2	4	**21**
Brachysira neoexilis Lange-Bertalot	VU	3	3	4	4	1	2	2	**19**
Brachysira styriaca (Grunow) Ross	VU	4	3	4	3	1	2	3	**20**
Caloneis dubia Krammer	VU	4	3	4	3	1	2	3	**20**
Caloneis lauta Carter et Bailey-Watts	EN	4	3	4	4	1	2	3	**21**
Caloneis schumanniana (Grunow) Cleve	EN	4	3	4	4	1	2	3	**21**
Caloneis tenuis (Gregory) Krammer	VU	3	3	4	3	1	1	2	**17**
Campylodiscus hibernicus Ehrenberg	DD	–	–	–	–	–	–	–	–
Cavinula cocconeiformis (Gregory) Mann et Stickle	VU	3	3	4	4	1	2	3	**20**
Cavinula lapidosa (Krasske) Lange-Bertalot	VU	3	3	4	4	1	2	3	**20**
Cavinula pseudoscutiformis (Hustedt) Mann et Stickle	VU	3	3	4	3	1	2	3	**19**
Cavinula variostriata (Krasske) Mann et Stickle	VU	3	3	4	3	1	2	2	**18**
Cavinula weinzierlii (Schimanski) Czarnecki	CR	4	4	4	4	1	4	4	**25**
Chamaepinnularia schauppiana Lange-Bertalot et Metzeltin	EN	4	4	4	4	1	2	3	**22**
Chamaepinnularia soehrensis var. *hassica* (Krasske) Lange-Bertalot	EN	4	4	4	4	1	2	3	**22**
Cocconeis disculus (Schumann) Cleve	VU	3	3	4	3	1	2	3	**19**
Cocconeis neodiminuta Krammer	VU	3	3	4	3	1	2	1	**17**
Ctenophora pulchella var. *lacerata* (Hustedt) Bukhtiyarova	DD	–	–	–	–	–	–	–	–
Ctenophora pulchella var. *lanceolata* (O'Meara) Bukhtiyarova	DD	–	–	–	–	–	–	–	–

Taxon/Conservation status and criteria	CS	A	B	C	D	E	F	G	T
Cymbella aspera (Ehrenberg) Cleve	NT	2	2	4	2	1	1	1	**13**
Cymbella hustedtii Krasske	VU	3	3	4	3	1	2	2	**18**
Cymbella orientalis var. *delicatula* Stancheva et Ivanov	CR	4	4	4	3	4	4	4	**27**
Cymbopleura amphicephala (Nägeli) Krammer	NT	2	2	4	2	1	1	1	**13**
Cymbopleura anglica (Lagerstedt) Krammer	VU	3	3	4	3	1	2	2	**18**
Cymbopleura subaequalis (Grunow) Krammer	VU	3	3	4	4	1	2	3	**20**
Cymbopleura subaequalis var. *alpestris* Krammer	EN	4	3	4	4	1	2	3	**21**
Cymbopleura subcuspidata (Krammer) Krammer	VU	3	3	4	3	1	2	2	**18**
Decussata hexagona (Torka) Lange-Bertalot	CR	4	4	4	4	1	4	4	**25**
Diploneis fontium Reichardt et Lange-Bertalot	VU	4	3	4	3	1	2	2	**19**
Diploneis parma Cleve	VU	3	3	4	3	1	2	2	**18**
Encyonema brevicapitatum Krammer	EN	4	4	4	4	1	2	2	**21**
Encyonema gaeumannii (Meister) Krammer	NT	3	2	4	2	1	2	2	**16**
Encyonema hebridicum (Gregory) Grunow	EN	4	3	4	4	1	2	3	**21**
Encyonema mesianum (Cholnoky) Mann	NT	3	2	4	2	1	2	2	**16**
Encyonema neogracile Krammer	VU	2	3	4	3	1	2	2	**17**
Encyonema perpusillum (Cleve) Mann	VU	3	3	4	4	1	2	2	**19**
Encyonema reichardtii (Krammer) Mann	NT	3	3	4	3	1	1	1	**16**
Encyonema rostratum Krammer	EN	4	3	4	4	1	2	3	**21**
Encyonopsis falaisensis (Grunow) Krammer	NT	2	3	4	3	1	1	1	**15**
Encyonopsis krammeri Reichardt	EN	4	3	4	4	1	2	3	**21**
Encyonopsis naviculoides (Hustedt) Krammer	VU	4	3	4	3	1	2	2	**19**
Epithemia adnata var. *saxonica* (Kützing) Patrick	DD	–	–	–	–	–	–	–	–
Epithemia adnata var. *porcellus* (Kützing) Patrick	DD	–	–	–	–	–	–	–	–
Eucocconeis flexella (Kützing) Meister	VU	3	3	4	3	1	2	3	**19**
Eucocconeis quadratarea (Østrup) Lange-Bertalot	VU	3	3	4	4	1	2	3	**20**
Eunotia arculus (Grunow) Lange-Bertalot et Nörpel	VU	3	3	4	4	1	2	3	**20**
Eunotia arcus Ehrenberg	EN	4	3	4	4	1	2	4	**22**

Taxon/Conservation status and criteria	CS	A	B	C	D	E	F	G	T
Eunotia boreoalpina Lange-Bertalot et Nörpel-Schempp	VU	3	3	4	4	1	2	2	19
Eunotia diadema Ehrenberg	EN	3	3	4	3	1	4	4	22
Eunotia diodon Ehrenberg	EN	3	4	4	3	1	2	4	21
Eunotia faba (Ehrenberg) Grunow	EN	3	4	4	3	1	2	4	21
Eunotia flexuosa Kützing	VU	3	3	4	4	1	2	3	20
Eunotia flexuosa var. *rilensis* Kawecka	CR	4	4	4	4	4	4	4	28
Eunotia groenlandica (Grunow) Nörpel-Schempp et Lange-Bertalot	VU	3	3	3	3	1	2	2	17
Eunotia implicata Nörpel, Lange-Bertalot et Alles	VU	3	3	4	3	1	2	2	18
Eunotia inflata (Grunow) Norpel-Schempp et Lange-Bertalot	VU	3	3	4	4	1	2	2	19
Eunotia monodon Ehrenberg	VU	3	3	4	3	1	2	3	19
Eunotia mucophila (Lange-Bertalot, Nörpel et Alles) Lange-Bertalot	EN	3	3	4	4	1	2	4	21
Eunotia paludosa Grunow	VU	3	3	4	3	1	2	2	18
Eunotia pectinalis (Kützing) Rabenhorst	VU	3	3	4	3	1	2	2	18
Eunotia pseudopectinalis Hustedt	EN	3	3	4	4	1	4	4	23
Eunotia rhomboidea Hustedt	VU	3	3	4	4	1	2	3	20
Eunotia sudetica Müller	EN	4	4	4	3	1	2	3	21
Eunotia tenella (Grunow) Hustedt	VU	3	4	4	3	1	2	2	19
Eunotia triodon Ehrenberg	EN	3	3	4	4	1	2	4	21
Eunotia valida Hustedt	VU	3	4	4	3	1	2	2	19
Fragilaria alpestris Krasske	VU	3	4	4	3	1	2	2	19
Fragilaria amphicephaloides Lange-Bertalot	VU	3	3	4	3	1	2	2	18
Fragilaria tenera (Smith) Lange-Bertalot	VU	3	3	4	4	1	2	2	19
Frustulia crassinervia (Brébisson) Lange-Bertalot et Krammer	VU	3	3	4	3	1	2	3	19
Frustulia rhomboides (Ehrenberg) De Toni	VU	3	3	4	3	1	1	2	17
Frustulia saxonica Rabenhorst	VU	3	3	4	3	1	1	3	18
Genkalia boreoalpina Wojtal, Wetzel, Ector, Ognjanova-Rumenova et Buczkó	EN	4	3	4	4	1	2	3	21
Genkalia digitulus (Hustedt) Lange-Bertalot et Kulikovskiy	VU	3	3	4	3	1	2	3	19
Gomphonema acidoclinatum Lange-Bertalot et Reichardt	NT	2	2	4	3	1	1	1	14
Gomphonema amoenum Lange-Bertalot	VU	3	3	4	3	1	2	3	19
Gomphonema angustum Agardh	NT	3	3	4	2	1	1	1	15
Gomphonema carolinense Hagelstein	EN	4	3	4	3	1	4	3	22
Gomphonema exilissimum (Grunow) Lange-Bertalot et Reichardt	NT	2	2	4	2	1	1	1	13

Taxon/Conservation status and criteria	CS	A	B	C	D	E	F	G	T
Gomphonema gracile Ehrenberg	VU	2	3	4	3	1	2	2	17
Gomphonema hebridense Gregory	VU	3	3	4	4	1	2	2	19
Gomphonema intricatum Kützing	VU	3	3	4	3	1	2	2	18
Gomphonema lateripunctatum Reichardt et Lange-Bertalot	VU	3	3	4	3	1	2	2	18
Gomphonema neonasutum Lange-Bertalot et Reichardt	VU	4	3	4	3	1	2	3	20
Gomphonema parvulius (Lange-Bertalot et Reichardt) Lange-Bertalot et Reichardt	EN	4	3	4	4	1	2	3	21
Gomphonema productum (Grunow) Lange-Bertalot et Reichardt	VU	2	3	4	3	1	2	3	18
Gomphonema rhombicum Fricke	LC	1	2	4	2	1	1	1	12
Gomphonema sarcophagus Gregory	VU	3	3	4	3	1	2	2	18
Gomphonema subtile Ehrenberg	EN	4	3	4	4	1	2	3	21
Gomphonema utae Lange-Bertalot et Reichardt	VU	4	3	4	3	1	2	2	19
Hygropetra balfouriana (Grunow) Krammer et Lange-Bertalot	VU	4	3	4	3	1	2	3	20
Karayevia laterostrata (Hustedt) Round et Bukhtiyarova	VU	3	4	4	3	1	2	3	20
Karayevia suchlandtii (Hustedt) Buktiyarova	EN	4	3	4	4	1	2	3	21
Kobayasiella jaagii (Meister) Lange-Bertalot	EN	4	3	4	4	1	2	3	21
Kobayasiella parasubtilissima (Kobayasi et Nagumo) Lange-Bertalot	VU	3	3	4	3	1	2	2	18
Mastogloia smithii var. *lacustris* Grunow	EN	4	3	4	4	1	2	3	21
Melosira dickiei (Thwaites) Kützing	DD	–	–	–	–	–	–	–	–
Navicula angusta Grunow	NT	2	2	4	3	1	1	3	16
Navicula bremensis Hustedt	EN	4	3	4	4	1	2	3	21
Navicula concentrica Carter et Bailey-Watts	EN	3	4	4	3	1	2	4	21
Navicula detenta Hustedt	EN	3	3	4	3	1	3	4	21
Navicula medioconvexa Hustedt	VU	3	2	4	2	1	2	3	17
Navicula oligotraphenta Lange-Bertalot et Hofmann	VU	3	2	4	2	1	2	3	17
Navicula porifera var. *opportuna* (Hustedt) Lange-Bertalot	VU	3	3	4	3	1	2	4	20
Navicula schmassmanii Hustedt	EN	3	3	4	4	1	2	4	21
Navicula striolata (Grunow) Lange-Bertalot	VU	4	3	4	3	1	2	3	20
Navicula tridentula Krasske	EN	3	3	4	4	1	2	4	21
Navicula utermoehlii Hustedt	DD	–	–	–	–	–	–	–	–
Navicula vulpina Kützing	EN	4	3	4	4	1	2	3	21

Taxon/Conservation status and criteria	CS	A	B	C	D	E	F	G	T
Neidiopsis levanderi (Hustedt) Lange-Bertalot et Metzeltin	EN	3	3	4	4	1	2	4	21
Neidium affine (Ehrenberg) Pfizer	VU	3	3	4	3	1	1	2	17
Neidium alpinum Hustedt	EN	4	3	4	4	1	2	3	21
Neidium ampliatum (Ehrenberg) Krammer	NT	3	3	4	3	1	1	1	16
Neidium bisulcatum (Lagerstedt) Cleve	VU	3	3	4	3	1	2	3	19
Neidium bisulcatum var. *subampliatum* Krammer	EN	4	3	4	3	1	2	4	21
Neidium hercynicum Mayer	EN	4	3	4	3	1	2	4	21
Neidium iridis (Ehrenberg) Cleve	VU	3	4	4	3	1	2	3	20
Nitzschia alpina Hustedt	VU	3	3	4	3	1	2	2	18
Nupela impexiformis Lange-Bertalot	EN	4	3	4	4	1	2	3	21
Nupela lapidosa (Krasske) Lange-Bertalot	VU	3	3	4	3	1	2	2	18
Nupela silvahercynia (Lange-Bertalot) Lange-Bertalot	EN	3	4	4	4	1	4	4	24
Orthoseira roeseana (Rabenhorst) O'Meara	VU	3	3	4	3	1	2	2	18
Pinnularia acutobrebissonii Kulikovskiy, Lange-Bertalot et Metzeltin	DD	–	–	–	–	–	–	–	–
Pinnularia angusta var. *rostrata* Krammer	EN	4	3	4	4	1	2	3	21
Pinnularia appendiculata (Agardh) Schaarschmidt	VU	3	3	4	3	1	2	2	18
Pinnularia bicapitata (Lagerstedt) Cleve	DD	–	–	–	–	–	–	–	–
Pinnularia biceps Gregory	VU	2	4	4	3	1	2	2	18
Pinnularia borealis var. *scalaris* (Ehrenberg) Rabenhorst	VU	3	3	4	3	1	2	3	19
Pinnularia brandelii Cleve	VU	4	3	4	3	1	2	3	20
Pinnularia braunii (Grunow) Cleve	VU	3	4	4	3	1	2	3	20
Pinnularia brevicostata Cleve	EN	3	3	4	4	1	2	4	21
Pinnularia crucifera Cleve	DD	–	–	–	–	–	–	–	–
Pinnularia divergens Smith	EN	4	3	4	4	1	2	3	21
Pinnularia divergentissima (Grunow) Cleve	EN	4	3	4	4	1	2	4	22
Pinnularia diversa Østrup	EN	4	3	4	4	1	2	4	22
Pinnularia eifeliana (Krammer) Krammer	VU	4	3	4	3	1	2	3	20
Pinnularia gentilis (Donkin) Cleve	DD	–	–	–	–	–	–	–	–
Pinnularia gigas Ehrenberg	DD	–	–	–	–	–	–	–	–
Pinnularia hemiptera (Kützing) Rabenhorst	VU	3	3	4	3	1	2	2	18
Pinnularia intermedia (Lagerstedt) Cleve	VU	3	4	4	3	1	2	2	19
Pinnularia isselana Krammer	VU	3	3	4	3	1	2	2	18
Pinnularia lata (Brébisson) Smith	VU	4	3	3	4	1	2	3	20
Pinnularia lundii Hustedt	VU	4	3	4	3	1	2	2	19
Pinnularia marchica Ilka Schönfelder	VU	4	3	4	3	1	2	2	19
Pinnularia mayeri Krammer	VU	3	3	4	3	1	2	2	18

Taxon/Conservation status and criteria	CS	A	B	C	D	E	F	G	T
Pinnularia microstauron var. *nonfasciata* Krammer	VU	3	3	4	3	1	2	2	**18**
Pinnularia neomajor var. *inflata* Krammer	VU	4	3	4	4	1	2	2	**20**
Pinnularia nobilis (Ehrenberg) Ehrenberg	DD	–	–	–	–	–	–	–	–
Pinnularia obscura Krasske	EN	4	3	4	4	1	2	3	**21**
Pinnularia platycephala (Ehrenberg) Cleve	EN	4	3	4	4	1	2	4	**22**
Pinnularia rabenhorstii (Grunow) Krammer	EN	4	3	4	4	1	2	3	**21**
Pinnularia rhombarea Krammer	EN	4	3	4	4	1	2	3	**21**
Pinnularia schoenfelderi Krammer	VU	3	3	3	3	1	2	3	**18**
Pinnularia schroederi (Hustedt) Cholnoky	VU	4	3	4	4	1	2	2	**20**
Pinnularia scotica Krammer	VU	4	3	4	3	1	2	3	**20**
Pinnularia stomatophora (Grunow) Cleve	VU	3	3	3	3	1	2	2	**17**
Pinnularia stomatophora var. *irregularis* Krammer	VU	4	3	4	4	1	2	2	**20**
Pinnularia subcommutata Krammer	VU	4	3	4	3	1	2	2	**19**
Pinnularia subrupestris var. *cuneata* Krammer	VU	4	3	4	3	1	2	3	**20**
Pinnularia sudetica (Hilse) Hilse	DD	–	–	–	–	–	–	–	–
Pinnularia tirolensis var. *julma* Krammer	VU	4	3	4	3	1	2	3	**20**
Placoneis abiskoensis (Hustedt) Lange-Bertalot et Metzeltin	VU	4	3	4	3	1	2	3	**20**
Placoneis ignorata (Schimanski) Lange-Bertalot	VU	3	3	4	3	1	2	2	**18**
Placoneis pseudanglica Cox	NT	3	2	4	2	1	2	1	**15**
Platessa rupestris (Krasske) Lange-Bertalot	EN	4	4	4	3	1	3	4	**23**
Psammothidium bioretii (Germain) Bukhtiyarova et Round	NT	1	3	4	2	1	1	2	**14**
Psammothidium curtissimum (Carter) Aboal	VU	3	3	4	4	1	2	3	**20**
Psammothidium didymum (Hustedt) Bukhtiyarova et Round	VU	3	3	4	4	1	2	3	**20**
Psammothidium marginulatum (Grunow) Bukhtiyarova et Round	VU	3	3	4	4	1	2	3	**20**
Psammothidium oblongellum (Østrup) Van de Vijver	VU	3	3	4	3	1	2	3	**19**
Psammothidium pseudoswazi (Carter) Bukhtiyarova et Round	VU	3	3	4	3	1	2	3	**19**
Psammothidium rechtense (Leclercq) Lange-Bertalot	VU	3	3	4	3	1	2	4	**20**
Psammothidium sacculum (Carter) Bukhtiyarova	VU	3	3	4	4	1	2	3	**20**
Pseudostaurosira pseudoconstruens (Marciniak) Williams et Round	NT	3	3	4	3	1	1	1	**16**
Rossithidium nodosum (Cleve) Aboal	EN	3	4	4	3	1	2	4	**21**

Taxon/Conservation status and criteria	CS	A	B	C	D	E	F	G	T
Rossithidium petersennii **(Hustedt) Round et Bukhtiyarova**	**VU**	3	3	4	3	1	2	2	**18**
Rossithidium pusillum **(Grunow) Round et Bukhtiyarova**	**VU**	3	3	4	4	1	2	2	**19**
Sellaphora americana **(Ehrenberg) Mann**	**DD**	–	–	–	–	–	–	–	–
Sellaphora disjuncta **(Hustedt) Mann**	**EN**	4	3	4	3	1	2	4	**21**
Sellaphora laevissima **(Kützing) Mann**	**VU**	3	3	4	3	1	2	3	**19**
Sellaphora perhibita **(Hustedt) Lange-Bertalot et Cantonati**	**EN**	4	3	4	4	1	2	3	**21**
Stauroneis acidoclinata **Lange-Bertalot et Werum**	**VU**	3	3	4	4	1	2	2	**19**
Stauroneis anceps **Ehrenberg**	**EN**	4	3	4	4	1	2	3	**21**
Stauroneis gracilis **Ehrenberg**	**VU**	3	4	4	3	1	2	2	**19**
Stauroneis kriegerii **Patrick**	**VU**	3	4	4	3	1	2	2	**19**
Stauroneis phoenicenteron **(Nitzsch) Ehrenberg**	**VU**	3	3	4	3	1	2	2	**18**
Stauroneis phoenicenteron **var.** ***lanceolata*** **(Kützing) Brun**	**DD**	–	–	–	–	–	–	–	–
Stauroneis siberica **(Grunow) Lange-Bertalot et Krammer**	**VU**	4	3	4	3	1	2	3	**20**
Stauroneis tackei **(Hustedt) Krammer et Lange-Bertalot**	**EN**	4	3	4	4	1	2	3	**21**
Stenopterobia delicatissima **(Lewis) Brébisson**	**VU**	3	3	4	3	1	2	3	**19**
Stenopterobia intermedia **(Lewis) Van Heurck**	**DD**	–	–	–	–	–	–	–	–
Surirella bifrons **Ehrenberg**	**EN**	4	3	4	4	1	2	3	**21**
Surirella biseriata **var.** ***constricta*** **(Ehrenberg) Grunow**	**DD**	–	–	–	–	–	–	–	–
Surirella spiralis **Kützing**	**VU**	3	3	4	4	1	2	3	**20**
Surirella tenera **Gregory**	**VU**	3	4	4	3	1	2	2	**19**
Tetracyclus rupestris **(Kützing) Grunow**	**DD**	-	-	-	-	-	-	-	-
Note: The list of diatoms contains only freshwater taxa, due to scarce data on other ecological groups in the country.									
CHRYSOPHYCEAE									
Bicosoeca depoucquesiana **Bourrelly**	**NT**	4	1	4	1	1	4	1	**16**
Bicosoeca urceolata **Fott**	**NT**	4	1	4	1	1	2	1	**14**
Chromulina globosa **Pascher**	**NT**	4	1	4	1	1	4	1	**16**
Chromulina hokeana **Pascher**	**NT**	4	1	4	1	1	4	1	**16**
Chromulina pascheri **Hofeneder**	**EN**	4	4	4	3	1	4	1	**21**
Chrysocapsa planktonica **Pascher**	**NT**	4	1	4	1	1	4	1	**16**
Chrysostephanosphaera globulifera **Scherffel**	**VU**	4	4	4	3	1	3	1	**20**

Taxon/Conservation status and criteria	CS	A	B	C	D	E	F	G	T
***Dinobryon annulatum* Hilliard et Asmund**	**EN**	4	4	4	3	1	4	1	**21**
***Dinobryon bavaricum* Imhof**	**NT**	4	1	4	1	1	2	1	**14**
***Dinobryon behningii* Swirenko**	**EN**	4	4	4	3	1	4	1	**21**
***Dinobryon borgei* Lemmermann**	**VU**	3	4	4	2	1	2	1	**17**
***Dinobryon elegans* f. *glabra* Korshikov**	**EN**	4	4	4	3	1	4	4	**24**
***Dinobryon eurystoma* (Stokes) Lemmermann**	**VU**	4	4	4	3	1	2	1	**19**
***Dinobryon korshikovii* Matvienko**	**EN**	3	4	4	2	1	4	4	**22**
***Dinobryon sertularia* var. *protuberans* (Lemmermann) Krieger**	**EN**	4	4	4	3	1	4	1	**21**
***Dinobryon stokesii* var. *neustonicum* Petersen et Hanzen**	**EN**	4	4	4	3	1	4	1	**21**
***Epipyxis marchica* (Lemmermann) Hilliard et Asmund**	**EN**	3	4	4	2	1	4	3	**21**
***Epipyxis proteus* (Wislouch) Hilliard et Asmund**	**VU**	3	4	4	2	1	4	1	**19**
***Epipyxis stokesii* (Lemmermann) Smith**	**EN**	4	4	4	4	1	4	1	**22**
***Kephyrion cupuliforme* Conrad**	**EN**	4	4	4	3	1	4	4	**24**
***Kybotion globosum* (Matvienko) Bourrelly**	**EN**	3	4	4	2	1	4	4	**22**
***Monosiga vitošensis* Valkanov**	**CR**	4	4	4	3	4	4	4	**27**
***Paraphysomonas takahashi* Cronberg et Kristiansen**	**CR**	4	4	4	4	4	4	1	**25**
***Phaeodermatium rivulare* Hansgirg**	**EN**	4	4	4	3	1	3	2	**21**
***Polykyrtos vitreus* Pascher**	**VU**	4	1	4	1	1	4	4	**19**
***Syncrypta pallida* (Korschikov) Bourrelly**	**EN**	4	4	4	3	1	4	4	**24**
SYNUROPHYCEAE									
***Mallomonas actinoloma* var. *maramuresensis* Péterfi et Momeu**	**VU**	3	4	4	4	1	3	1	**20**
***Mallomonas valkanoviana* (Valkanov) Conrad** (Syn. *Mallomonas pyriformis* Valkanov)	**CR**	4	4	4	1	4	4	4	**25**
***Spiniferomonas abei* Takahashi**	**EN**	4	4	4	4	4	3	1	**24**
XANTHOPHYCEAE									
***Arachnochloris maior* Pascher**	**EN**	4	4	4	3	1	4	3	**23**
***Botryochloris cumulata* Pascher**	**EN**	4	4	4	4	1	4	1	**22**
***Botrydiopsis arhiza* Borzì**	**NT**	3	4	2	1	1	2	1	**14**
***Botrydium corniforme* Wodenitscharov**	**CR**	4	4	4	4	4	4	4	**28**
***Botrydium milleri* Wodenitscharov**	**EN**	3	4	4	4	1	4	4	**24**
***Botrydium pachydermum* Miller**	**VU**	3	1	4	2	1	4	4	**19**
***Botrydium tuberosum* Iyengar**	**VU**	4	1	4	1	1	4	4	**19**
***Bumilleriopsis closterioides* Pascher**	**EN**	4	4	4	3	1	4	2	**22**

Taxon/Conservation status and criteria	CS	A	B	C	D	E	F	G	T
Bumilleriopsis peterseniana Vischer et Pascher	NT	3	4	3	3	1	1	1	16
Centritractus africanus Fritsch et Rich	NT	3	2	4	2	1	3	1	16
Centritractus belenophorus var. *skujae* Kiriakov	EN	4	1	4	1	4	4	4	22
Centritractus brunneus Fott	NT	3	1	4	1	1	4	1	15
Centritractus heteracanthus Vodeničarov	EN	4	1	4	1	4	4	4	22
Chlorobotrys regularis (W. West) Bohlin	VU	3	4	4	2	1	2	1	17
Goniochloris triradiata Pascher	VU	4	4	4	2	1	4	1	20
Mischococcus sphaerocephalus Vischer	VU	3	2	4	2	1	4	1	17
Ophiocytium arbuscula (A. Braun) Rabenhorst	VU	4	4	4	2	1	1	3	19
Ophiocytium lagerheimii Lemmermann	VU	3	4	4	2	1	4	1	19
Raphidiella fascicularis Pascher	VU	4	1	4	1	1	4	4	19
Trachychloron regulare Pascher	CR	4	4	4	4	1	4	4	25
Trachydiscus minutus (Bourrelly) Fott	NT	3	1	4	1	1	4	1	15
Trachydiscus sexangulatus Ettl	NT	3	1	4	1	1	4	1	15
Tribonema tenerrimum Heering	DD	–	–	–	–	–	–	–	–
PHAEOTHAMNIOPHYCEAE									
Phaeoschizochlamys mucosa Lemmermann	CR	4	4	4	4	4	4	4	28
Phaeothamnion confervicola Lagerheim	CR	4	4	4	3	4	3	4	26
EUSTIGMATOPHYCEAE									
Ellipsoidion solitare (Geitler) Pascher	EN	4	4	4	4	1	4	2	23
Visheria gibbosa Pascher	EN	4	4	3	3	1	4	2	21
Vischeria undulata Pascher	EN	4	4	3	4	1	4	2	22
Vischeria stellata (Chodat ex Poulton) Pascher	EN	4	3	3	3	4	3	3	23
HAPTOPHYTA									
Hymenomonas coccolithophora Massart et Conrad	EN	3	2	4	2	1	4	4	23
CHLOROPHYTA									
Ankistrodesmus setigerus var. *undosus* Hortobágyi	DD	–	–	–	–	–	–	–	–
Borodinella polytetras Miller	NT	4	3	4	1	1	2	1	16
Bulbochaete basispora Wittrock et Lundell ex Hirn	VU	3	4	4	4	1	2	1	19
Bulbochaete tenuis Hirn	VU	4	4	4	1	1	2	1	17
Binuclearia tectorum (Kützing) Beger	NT	3	4	2	2	1	2	1	15
Botryococcus neglectus (W. et G.S. West) Komárek et Marvan	EN	4	4	4	3	1	3	2	21
Carteria rotunda Ettl H. et O.	VU	4	4	4	2	1	4	1	20
Catena viridis Chodat	EN	4	4	3	3	1	4	4	23

Taxon/Conservation status and criteria	CS	A	B	C	D	E	F	G	T
Chlainomonas rubra (Stein et R.C.Brooke) Hoham	EN	4	1	4	4	1	3	4	**21**
Chlorococcum pinquideum Arce et Bold	VU	4	4	1	4	1	4	1	**19**
Choricystis hindakii Tell	VU	4	1	4	3	1	4	1	**18**
Closteridium petkovii Vodenicharov	CR	4	4	4	3	4	4	4	**27**
Coelastrella aeroterrestrica Tschaikner, Gärtner et Kofler	CR	4	2	4	4	4	4	4	**26**
Coelastrella terrestris (Reisigl) Hegewald et Hanagata	CR	4	4	4	4	4	2	4	**26**
Coelastropsis costata (Korshikov) Fott et Kalina	EN	4	4	4	3	1	4	1	**21**
Coelastrum proboscideum f. *minor* Petkoff	DD	–	–	–	–	–	–	–	–
Coelastrum scabrum Reinsch	VU	4	4	4	3	1	2	1	**19**
Crucigeniopsis divergens (Smith) Hindák	VU	3	4	4	2	1	4	1	**19**
Dangeardinella saltathrix Pascher	EN	4	4	4	4	1	4	3	**24**
Desmodesmus grahneisii (Heynig) Hegewald	EN	4	4	4	4	1	4	2	**23**
Desmodesmus pannonicus (Hortobágyi) Hegewald	VU	3	2	4	2	1	4	1	**17**
Desmodesmus pseudodenticulatus (Hegewald) Hegewald	CR	4	4	4	4	1	4	4	**25**
Desmodesmus serratus (Corda) S. S. An, Friedl et Hegewald	NT	2	2	4	2	1	1	4	**16**
Dichotomococcus bacillaris Komárek	VU	3	2	4	2	1	4	1	**17**
Dichotomococcus capitatus Korshikov	VU	4	1	4	1	1	4	3	**18**
Dichotomococcus curvatus Korshikov	NT	3	2	4	2	1	2	1	**15**
Dicloster acuatus Jao, Wei et Hu	CR	4	4	4	4	1	4	4	**25**
Dictyosphaerium granulatum Hindák	EN	4	4	4	3	1	4	4	**24**
Didymocystis inermis (Fott) Fott	VU	3	4	4	2	1	4	2	**20**
Didymogenes anomala (Smith) Hindák	VU	3	2	4	2	1	4	1	**17**
Dimorphococcus lunatus A. Braun	VU	2	2	4	2	1	2	4	**17**
Dispora crucigenioides Printz	VU	3	4	4	2	1	2	3	**19**
Dispora speciosa Korshikov	EN	3	4	4	2	1	4	3	**21**
Dunaliella lateralis Pascher et Jahoda	EN	4	4	4	4	1	4	1	**22**
Elakatothrix gelatinosa Wille	NT	3	2	4	2	1	2	1	**15**
Elakatothrix parvula (Archer) Hindák	EN	4	4	4	4	1	4	1	**22**
Ellipsoidion solitare (Geitler) Pascher	EN	4	4	4	4	1	4	2	**23**
Enallax costatus (Schmidle) Pascher	NT	2	4	3	2	1	2	1	**15**
Enallax coelastroides (Bohlin) Skuja	VU	2	4	4	2	1	4	1	**18**
Geminella interrupta Turpin	NT	4	1	4	1	1	2	1	**14**
Geminella minor (Nägeli) Heering	VU	4	4	4	3	1	2	1	**19**
Glaucocystis nostochinearum var. *incrassata* Lemmermann	CR	4	4	4	4	1	4	4	**25**

Taxon/Conservation status and criteria	CS	A	B	C	D	E	F	G	T
Gloeocystis major f. *sphaerica* Petkoff	CR	4	4	4	4	4	4	4	**28**
Gloeocystis vesiculosa var. *alpina* Schmidle	EN	3	4	4	4	1	4	1	**21**
Glochiococcus aciculiferus (Lagerheim) Silva	NT	2	2	4	2	1	2	1	**14**
Gloeotaenium loitlesbergerianum Hansgirg	CR	4	4	4	4	1	4	4	**25**
Gongrosira calcifera Krieger	EN	4	4	4	4	1	3	1	**21**
Gongrosira debaryana Rabenhorst	VU	3	4	4	3	1	2	1	**18**
Gongrosira incrustans (Reinsch) Schmidle	NT	3	2	4	2	1	2	1	**15**
Gongrosira schmidlei Richter	VU	4	4	4	1	1	4	1	**19**
Gongrosira scourfieldii G. S. West	VU	3	4	4	1	1	4	1	**18**
Granulocystopsis calyptrata Hindák	EN	4	4	4	3	1	4	1	**21**
Heleochloris pallida Korshikov	EN	4	4	4	4	1	4	3	**24**
Hindakia tetrachotoma (Printz) C. Bock, Pröschold et Krienitz	VU	3	4	4	2	4	2	1	**20**
Hydrianum gracile Korshikov	EN	3	4	4	4	1	4	4	**24**
Hydrianum viride (Scherffrel) Ettl	VU	3	4	4	4	1	2	2	**20**
Interfilum paradoxum Chodat et Topali	EN	4	4	3	4	1	2	3	**21**
Juraniella javorkae (Hortobagyi) Hortobagyi	NT	3	1	4	1	1	4	1	**15**
Kentrosphaera bristoliae Smith	VU	4	1	4	1	1	4	2	**17**
Keratococcus saxatilis (Komarková-Legnerová) Hindák	VU	3	4	4	2	1	2	2	**18**
Koliella spiculiformis (Vischer) Hindák	CR	4	4	4	4	1	4	4	**25**
Lagerheimia circumfilata (Seligo) Hegewald et Schmidt	EN	4	4	4	3	1	4	1	**21**
Lanceola spatulifera (Korshikov) Hindák	VU	3	2	4	2	1	4	1	**17**
Lauterborniella elegantissima Schmidle	VU	2	2	4	2	1	4	2	**17**
Lobocystis michevii Stoyneva	CR	4	4	4	4	1	4	4	**25**
Lobomonas francei Dangeard	VU	4	1	4	1	1	4	4	**19**
Lobomonas gracilis Christen	EN	4	4	4	1	1	4	4	**22**
Lobomonas irregularis Wawrik	EN	4	4	4	3	1	4	4	**24**
Lobomonas monstruosa Korshikov	NT	4	1	4	1	1	4	1	**16**
Lobomonas stellata Chodat	NT	4	1	4	1	1	4	1	**16**
Macrochloris multinucleata (Reisigl) Ettl et Gärtner	CR	3	2	4	4	4	4	4	**25**
Micracantha minutissima Korshikov	NT	4	1	4	1	1	4	1	**16**
Micractinium crassisetum Hortobágyi	VU	3	2	4	2	1	4	4	**20**
Micractinium valkanovii Vodenicharov	DD	–	–	–	–	–	–	–	–
Microspora formosana Okada	CR	4	4	4	4	1	4	4	**25**
Microspora irregularis (West et G. S. West) Wichmann	EN	3	4	4	4	1	4	1	**21**
Microspora loefgrenii (Nordstedt) Lagerheim	EN	4	4	4	4	4	3	1	**24**

Taxon/Conservation status and criteria	CS	A	B	C	D	E	F	G	T
Microspora loefgrenii (Nordstedt) Lagerheim	EN	4	4	4	4	4	3	1	24
Microthamnion kutzingianum f. *madarense* Petkoff	EN	4	1	4	3	4	4	4	24
Neglectella eremosphaerophila Vodeničarov et Benderliev	CR	4	4	4	4	4	4	1	25
Neodesmus danubialis Hindák	NT	4	1	4	1	1	4	1	16
Nephrochloris incerta Geitler et Gimesi	EN	4	4	4	3	1	4	4	24
Nephroselmis discoidea Skuja	VU	3	2	4	2	1	4	1	17
Oedogonium acrosporum De Bary ex Hirn	VU	1	4	4	3	1	2	3	18
Oedogonium acrosporum var. *bathmidosporum* Hirn	VU	4	4	4	3	1	2	1	19
Oedogonium balcanicum Petkoff	DD	–	–	–	–	–	–	–	–
Oedogonium braunii Kützing ex Hirn	NT	4	1	4	1	1	2	1	14
Oedogonium borisianum Wittrock ex Hirn	VU	4	4	4	3	1	2	1	19
Oedogonium cardiacum var. *polymorphum* Petkoff	DD	–	–	–	–	–	–	–	–
Oedogonium crispum Wittrock ex Hirn	VU	4	1	4	1	1	2	4	17
Oedogonium cyathigerum Wittrock ex Hirn	VU	4	4	4	1	1	2	3	19
Oedogonium cyathigerum var. *rumelica* Istvanffi	DD	–	–	–	–	–	–	–	–
Oedogonium globosum Nordstedt ex Hirn	EN	4	4	4	3	1	2	3	21
Oedogonium intermedium Wittrock	VU	3	4	4	2	1	2	1	17
Oedogonium inversum f. *major* Petkoff	DD	–	–	–	–	–	–	–	–
Oedogonium itzigsohnii De Bary ex Hirn	EN	4	4	4	3	1	2	4	22
Oedogonium jordanovii Vodenicharov	DD	–	–	–	–	–	–	–	–
Oedogonium longatum Kützing	VU	3	2	4	2	1	2	4	18
Oedogonium magnusii forma Petkoff	DD	–	–	–	–	–	–	–	–
Oedogonium minus Wittrock ex Hirn	EN	4	4	4	3	1	2	4	22
Oedogonium oblongum Wittrock ex Hirn (Syn. *Oedogonium parvulum* Vodenicharov)	NT	3	2	4	2	1	2	1	15
Oedogonium orientale Jao	EN	4	4	4	3	1	4	1	21
Oedogonium plagiostomum Wittrock ex Hirn	NT	4	1	4	1	1	2	3	15
Oedogonium pringsheimii Cramer ex Hirn	VU	4	1	4	1	4	2	4	20
Oedogonium punctatostriatum De Bary ex Hirn	VU	4	4	4	4	1	2	1	20
Oedogonium pusillum Kirchner ex Hirn	VU	4	4	4	3	1	2	1	19
Oedogonium rufescens Wittrock ex Hirn	EN	4	4	4	4	1	2	4	23
Oedogonium rufescens f. *intermedia* Petkoff	DD	–	–	–	–	–	–	–	–
Oedogonium sociale Wittrock ex Hirn	NT	3	2	4	2	1	2	1	15
Oedogonium suecicum Wittrock ex Hirn	VU	4	4	4	3	1	2	1	19
Oedogonium vaucheri A. Braun ex Hirn	NT	3	2	4	2	1	2	1	15

Taxon/Conservation status and criteria	CS	A	B	C	D	E	F	G	T
Oedogonium vernale (Hassall) Wittrock	DD	–	–	–	–	–	–	–	–
Oocystis gigas f. *intermedia* Petkoff	CR	4	4	4	4	4	4	4	**28**
Oocystis irregularis (Petkoff) Printz	CR	4	4	4	4	1	4	4	**28**
Oonephris palustris Komárek	VU	3	4	4	2	1	4	2	**20**
Palmellopsis texensis (Groover et Bold) Ettl et Gärtner	CR	4	4	4	4	1	4	4	**25**
Palmodictyon varium (Nägeli) Lemmermann	VU	3	4	4	2	1	2	4	**20**
Palmodictyon viride Kützing	VU	3	4	4	2	1	2	2	**18**
Paradoxia paradoxioides (Cirik) Hegewald et Reymond	VU	4	1	4	3	1	4	1	**18**
Parallela transversalis (Brébisson) Novis, M. Lorenz, Broady et E. A. Flint	VU	4	4	4	3	1	3	1	**20**
Pediastrum vagum Kützing	DD	–	–	–	–	–	–	–	–
Peterfiella alata (Peterfi) Gerloff	EN	4	4	4	1	1	4	4	**22**
Phacotus minusculus Bourrelly	EN	4	4	4	3	1	4	1	**21**
Pithophora roettleri (Roth) Wittrock	EN	4	3	4	3	1	2	4	**21**
Pleodorina illinoisensis Kofoid	NT	3	1	4	1	1	2	1	**13**
Pocillomonas flos-aquae Steinecke	VU	3	4	4	2	1	4	1	**19**
Porochloris filamentorum Pascher	EN	4	4	4	3	1	4	4	**24**
Porochloris leptochlamys Pascher	CR	4	4	4	4	1	4	4	**25**
Porochloris tetragona Pascher	EN	4	4	4	3	1	4	4	**24**
Pseudodictyochloris multinucleata (Broady) Ettl et Gartner	EN	4	1	4	4	1	4	4	**22**
Pseudokirchneriella extensa (Korshikov) Hindák	EN	3	4	4	2	1	4	3	**21**
Pseudokirchneriella gracillima (Bohlin) Hindák	EN	4	4	4	4	1	2	3	**22**
Pseudokirchneriella roselata (Hindák) Hindák	EN	3	4	4	2	1	4	4	**22**
Pseudotetrastrum punctatum (Schmidle) Hindák	VU	3	4	4	2	1	4	1	**19**
Pteromonas aequiciliata (Gicklhorn) Bourrelly	VU	4	1	4	1	1	2	4	**17**
Pteromonas cordiformis Lemmermann	EN	3	4	4	3	2	1	4	**21**
Pteromonas torta Korshikov	VU	3	2	4	2	1	4	1	**17**
Pseudodictyochloris multinucleata (Broady) Ettl et Gärtner	CR	4	3	4	4	4	4	4	**27**
Quadricoccus laevis Fott	NT	4	1	4	1	1	3	1	**15**
Quadricoccus verrucosus Fott	NT	4	1	4	1	1	3	1	**15**
Raciborskiella uroglenoides Svirenko	VU	4	1	4	1	1	4	4	**19**
Radiococcus planctonicus Lund	VU	4	4	4	2	1	2	2	**19**

Taxon/Conservation status and criteria	CS	A	B	C	D	E	F	G	T
***Radiofilum conjunctivum* Schmidle**	**EN**	4	4	4	4	1	2	4	**23**
***Radiophillum mesomorphum* Skuja**	**EN**	4	4	4	3	1	2	4	**22**
***Raphidonema tatrae* var. *yellowstonense* Kol**	**EN**	4	1	4	4	1	4	4	**22**
***Scenedesmus danubialis* Hortobágyi**	**EN**	3	4	4	2	1	4	4	**22**
***Scenedesmus parvus* (Smith) Bourrelly**	**VU**	3	4	4	2	1	2	1	**17**
***Scherffelia dubia* (Scherffel) Pascher**	**EN**	4	4	4	3	1	4	2	**22**
***Schizochlamydella delicatula* (West) Korshikov**	**VU**	3	4	4	2	1	3	1	**18**
***Scotinosphaera gibberosa* (Vodenicarov et Benderliev) Wujek et Thompson** (Syn. *Kentrosphaera gibberosa* Vodenicarov et Benderliev)	**VU**	3	1	3	1	4	4	4	**20**
***Scourfeldia complanata* G. S. West**	**EN**	4	4	4	3	1	4	3	**23**
***Selenochloris angusta* Pascher**	**VU**	3	2	4	2	1	4	4	**20**
***Siderocelis sphaerica* Hindák**	**EN**	3	4	4	2	1	4	4	**22**
***Skujaster asteriferus* (Fott) Vodenicarov**	**CR**	4	4	4	4	1	4	4	**25**
***Spermatozopsis exsultans* Korshikov**	**VU**	3	2	4	2	1	4	1	**17**
***Sphaerellopsis fluviatilis* (Stein) Pascher**	**VU**	4	4	4	4	1	1	2	**20**
***Sphaeroplea annulina* var. *lata* Petkoff**	**DD**	–	–	–	–	–	–	–	–
***Sphaeroplea soleirolii* var. *crassisepta* (Rieth) Ramanathan**	**NT**	4	1	4	1	1	4	1	**16**
***Stigeoclonium thermale* A. Braun**	**VU**	3	3	4	3	1	2	4	**20**
***Tetrachlorella ornata* Korshikov**	**NT**	4	1	4	1	1	2	1	**14**
***Tetradesmus cumbricus* var. *apiculatus* Korshikov**	**VU**	4	1	4	1	1	4	4	**19**
***Tetradesmus lunatus* Korshikov**	**CR**	4	4	4	4	1	4	4	**25**
***Tetrastrum peterfii* Hortobágyi**	**EN**	3	4	4	3	1	4	4	**23**
***Tetrastrum hortobagyi* var. *regulare* Kirjakov et Vodeničarov**	**DD**	–	–	–	–	–	–	–	–
***Tetrastrum triacanthum* Korshikov**	**VU**	3	2	4	2	1	4	3	**19**
***Tetrastrum triangulare* (Chodat) Komárek**	**EN**	4	4	4	3	1	2	3	**21**
***Thorakomonas feldmannii* Bourrelly**	**VU**	4	1	4	1	1	4	4	**19**
***Thorakomonas irregularis* Korshikov**	**VU**	4	1	4	1	1	4	4	**19**
***Thorakomonas korschikoffii* Conrad**	**VU**	3	2	4	2	1	4	4	**20**
***Trochiscia nivalis* Lagerheim**	**VU**	4	1	4	4	1	3	2	**19**
***Trochiscia stellata* Vodenicharov et Benderliev**	**EN**	4	4	4	3	4	4	1	**24**
***Trochisciopsis tetraspora* f. *minor* Gärtner, Uzunov, Stoyneva, Kofler et Ingolić**	**CR**	4	4	4	4	4	4	4	**28**
***Uronema africanum* Borge**	**VU**	3	2	4	1	1	4	2	**17**
***Uronema confervicolum* Lagerheim**	**NT**	3	2	4	2	1	2	1	**15**
***Uronema elongatum* Hodgetts**	**VU**	3	4	4	2	1	2	4	**20**

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Ulothrix gigas (Vischer) Mattox et Bold	EN	4	4	4	4	1	4	1	22
Uronema intermedium Bourrelly	VU	3	2	4	2	1	4	4	20
Uronema terrestre Mitra	CR	4	4	4	4	1	4	4	25
Valkanoviella vaucheriae Bourrelly	EN	4	1	4	1	4	4	4	22
Wislouchiella planctonica Skvortzov	NT	4	1	4	1	1	4	1	16
STREPTOPHYTA									
Actinotaenium borgeanum (Skuja) Kouwets et Coesel	VU	3	4	4	2	1	3	1	18
Actinotaenium clevei (Lundell) Teiling	EN	4	4	4	4	1	4	1	22
Actinotaenium crassiusculum (De Bary) Teiling	EN	4	4	4	4	1	4	2	23
Actinotaenium cruciferum (De Bary) Teiling	VU	4	4	4	3	1	2	1	19
Actinotaenium cucurbitinum (Bisset) Teiling	VU	3	4	4	2	1	2	1	17
Actinotaenium lagenarioides (Roy) Teiling	EN	3	4	4	1	1	4	4	21
Actinotaenium minutissimum (Nordstedt) Teiling	VU	3	4	4	2	1	3	1	18
Actinotaenium palangula (Brébisson ex Ralfs) Teiling	VU	3	4	4	2	1	2	1	17
Actinotaenium rufescens (Cleve) Teiling	NT	3	2	4	2	1	2	1	15
Actinotaenium turgidum (Brébisson ex Ralfs) Teiling	NT	3	2	4	2	1	2	1	15
"Arthrodesmus incus var. *ralfsii* forma Petkoff"	DD	–	–	–	–	–	–	–	–
Closterium acutum var. *subrectum* Petkoff	CR	3	3	4	4	4	4	4	26
Closterium bandericense Petkoff	CR	4	3	4	4	4	4	4	27
Closterium baillyanum var. *belassicense* Petkoff	EN	4	1	4	1	4	4	4	22
Closterium bicurvatum var. *major* Petkoff	DD	–	–	–	–	–	–	–	–
Closterium delpontei (Klebs) Wolle	NT	4	3	4	1	1	1	1	15
Closterium dianae var. *arcuatum* (Brébisson ex Ralfs) Rabenhorst	VU	3	4	4	2	1	2	1	17
Closterium dianae var. *arcuatum* f. *crassior* Roubal	CR	4	4	4	4	4	4	4	28
Closterium dianae var. *pseudodianae* (Roy) Krieger	VU	4	4	4	4	1	2	1	20
Closterium eboracense Turner	VU	3	4	4	2	1	2	1	17
Closterium ehrenbergii f. *curtum* Petkoff	DD	–	–	–	–	–	–	–	–
Closterium ehrenbergii f. *rhodopea* Petkoff	DD	–	–	–	–	–	–	–	–
Closterium incurvum f. *intermedia* Petkoff	DD	–	–	–	–	–	–	–	–
Closterium jenneri f. *longior* Petkoff	DD	–	–	–	–	–	–	–	–
Closterium jenneri f. *minus curvata* Petkoff	DD	–	–	–	–	–	–	–	–
Closterium macilentum Brébisson	NT	4	1	4	1	1	2	1	14

Taxon/Conservation status and criteria	CS	A	B	C	D	E	F	G	T
Closterium moniliferum f. *devnense* Petkoff	DD	–	–	–	–	–	–	–	–
Closterium parvulum f. *longior et latior* Petkoff	DD	–	–	–	–	–	–	–	–
Closterium pritchardianum Archer	NT	3	4	3	2	1	2	1	**16**
Closterium rostratum var. *brevirostratum* f. *longior* Petkoff	DD	–	–	–	–	–	–	–	–
Closterium rostratum var. *bulgaricum* Vodenicharov et Kabasanova	DD	–	–	–	–	–	–	–	–
Closterium setaceum Ehrenberg ex Ralfs	DD	–	–	–	–	–	–	–	–
Closterium venus var. *robustum* Petkoff	DD	–	–	–	–	–	–	–	–
"*Closterium venus* f. *major* Petkoff"	DD	–	–	–	–	–	–	–	–
Closterium ulna var. *striolatum-punctatum* Elenkin	EN	4	4	4	3	1	4	1	**21**
Cosmarium amoenum Brébisson ex Ralfs	VU	3	4	4	2	1	2	1	**17**
Cosmarium annulatum (Nägeli) De Bary	NT	3	2	4	2	1	2	1	**15**
Cosmarium bioculatum var. *depressum* (Schaarschmidt) Schmidle	VU	3	4	4	2	1	2	1	**17**
Cosmarium bulgaricum Roubal	CR	3	4	4	4	4	4	4	**27**
Closterium calosporum Wittrock	VU	3	4	4	2	1	2	1	**17**
Cosmarium conspersum var. *minor* Roubal	CR	4	1	4	4	4	4	4	**25**
Cosmarium cucumis f. *tetragona* Petkoff	CR	4	3	4	4	4	4	4	**27**
Cosmarium cymatopleurum f. *minor* Roubal	CR	4	4	4	4	4	4	4	**28**
Cosmarium bipunctatum Börgesen	VU	4	4	4	3	1	2	1	**19**
Cosmarium bireme var. *galiciense* Gutwinski	CR	4	4	4	4	1	4	4	**25**
Cosmarium biretum Brébisson ex Ralfs	VU	4	4	4	3	1	2	1	**19**
Cosmarium broomei Thwaites ex Ralfs	VU	4	1	4	3	1	2	4	**19**
Cosmarium calcareum Wittrock	VU	4	4	4	3	1	2	1	**19**
Cosmarium circulare var. *messikommeri* Krieger et Gerloff	EN	4	4	4	3	1	4	1	**21**
Cosmarium conspersum var. *latum* (Brébisson) West et G. S. West	VU	3	1	4	2	1	2	4	**17**
Cosmarium controversum West	EN	4	4	4	4	1	4	1	**22**
Cosmarium cylindricum Ralfs	NT	3	2	4	2	1	3	1	**16**
Cosmarium debaryi Archer	NT	2	4	4	2	1	2	1	**16**
Cosmarium galeritum var. *sultanlarum* Petkoff	CR	4	4	4	3	4	4	4	**27**
Cosmarium hammeri Reinsch	NT	3	2	4	2	1	2	1	**15**
Cosmarium hammeri var. *homalodermum* (Nordstedt) West et G. S. West	NT	2	2	4	2	1	2	1	**14**
Cosmarium hexalobum Nordstedt	VU	4	4	4	3	1	2	1	**19**
Cosmarium hornavanense Gutwinski	VU	4	4	4	4	1	2	1	**20**
„*Cosmarium hornavanense* forma Petkoff“	DD	–	–	–	–	–	–	–	–

Taxon/Conservation status and criteria	CS	A	B	C	D	E	F	G	T
Cosmarium hornavanense var. *minor* Roubal	CR	3	2	4	4	4	4	4	25
Cosmarium kjellmanii Wille	NT	3	1	4	1	1	2	1	13
Cosmarium logiense var. *retusum* Petkoff	CR	4	4	4	4	4	4	4	28
Cosmarium laeve f. *fix retusa* Petkoff	CR	4	4	4	4	4	4	4	28
Cosmarium minimum West et G. S. West	VU	4	4	4	4	1	2	1	20
Cosmarium moniliforme Ralfs	NT	4	1	4	1	1	2	1	14
Cosmarium nasutum f. *aperta* Roubal	CR	4	3	4	4	4	4	4	27
Cosmarium notabile f. *media* Petkoff	CR	4	4	4	4	4	4	4	28
Cosmarium novae-semliae Wille	VU	3	4	4	2	1	2	1	17
Cosmarium novae-semliae forma Petkoff	DD	–	–	–	–	–	–	–	–
Cosmarium obsoletum (Hantzsch) Reinsch	NT	3	2	4	2	1	2	1	15
Cosmarium obtusatum forma Petkoff	DD	–	–	–	–	–	–	–	–
Cosmarium ornatum Ralfs ex Ralfs	VU	4	4	4	3	1	2	1	19
Cosmarium pardalis Cohn	NT	3	1	4	1	1	2	4	16
Cosmarium punctulatum var. *subpunctulatum* f. *major* Petkoff	DD	–	–	–	–	–	–	–	–
Cosmarium quadratum var. *compressum* Roubal	CR	4	4	4	4	4	4	4	28
Cosmarium quadrifarium Lundell	VU	3	4	4	2	1	2	3	19
Cosmarium quadrum Lundell	NT	3	2	4	2	1	2	1	15
Cosmarium regnesi Reinsch	VU	4	1	4	3	1	2	4	19
Cosmarium speciosissimum Schmidle	EN	3	4	4	2	1	4	4	22
Cosmarium speciosum var. *biforme* f. *minor* Petkoff	CR	3	4	4	4	4	4	4	27
Cosmarium sportella Brébisson ex Kützing	VU	3	4	4	2	1	2	1	17
Cosmarium sportella f. *intermedium* Petkoff	CR	4	4	4	4	4	4	4	28
Cosmarium subcucumis f. *minor* Petkoff	CR	4	4	4	4	4	4	4	28
Cosmarium thwaitesii f. *minor* Petkoff	DD	–	–	–	–	–	–	–	–
Cosmarium vogesiacum Lemaire	EN	3	4	4	4	1	4	1	21
Cosmarium tumens Nordstedt	VU	4	1	4	1	1	3	4	18
Cylindrocystis jenneri (Ralfs) West et G. S. West	VU	4	4	4	3	1	2	1	19
Euastrum binale var. *retusum* f. *minor* Petkoff	CR	4	4	4	4	4	4	4	28
Euastrum bulgaricum Petkoff	CR	4	3	4	4	4	4	4	27
Euastrum crassangulatum var. *conicum* Roubal	CR	4	3	4	4	4	4	4	27
Euastrum crassangulatum var. *recte granulatum* Roubal	CR	4	1	4	4	4	4	4	25
Euastrum delpontei var. *tetragonum* Petkoff	EN	4	1	4	1	4	4	4	22
Euastrum denticulatum f. *minor* Petkoff	CR	4	4	4	4	4	4	4	28
Euastrum dubium var. *spinulosum* Petkoff	CR	3	3	4	4	4	4	4	26

Taxon/Conservation status and criteria	CS	A	B	C	D	E	F	G	T
Euastrum erosum Lundell	VU	3	3	4	4	1	2	1	**18**
Euastrum erosum f. *minor* Roubal	EN	3	1	4	4	4	4	4	**24**
Euastrum gayanum De Toni	VU	4	4	4	4	1	2	1	**20**
Euastrum insulare (Wittrock) Roy	VU	3	4	4	2	1	2	1	**17**
Euastrum montanum West et G. S. West	VU	4	4	3	4	1	2	1	**19**
Euastrum transiens Gay	EN	4	4	3	4	1	4	1	**21**
Euastrum montanum var. *cosmariiforme* Roubal	CR	4	1	4	4	4	4	4	**25**
Euastrum montanum f. *major* Roubal	CR	3	3	4	4	4	4	4	**26**
Euastrum retusum f. *intermedia* Petkoff	CR	4	4	4	4	4	4	4	**28**
Euastrum sublobatum var. *simile* Roubal	CR	4	1	4	4	4	4	4	**25**
Euastrum verrucosum var. *polymorphum* Petkoff	CR	3	3	4	4	4	4	4	**26**
Genicularia spirotaenia (De Bary) De Bary	VU	3	4	4	2	1	2	2	**18**
Mesotaenium degreyi Turner	VU	3	4	4	4	1	2	1	**19**
Mesotaenium chlamydosporum var. *violascens* (De Bary) Krieger	NT	4	1	4	1	1	3	1	**15**
Mesotaenium endlicherianum var. *grande* f. *brevior* Petkoff	DD	–	–	–	–	–	–	–	–
Mesotaenium macrococcum (Kützing ex Kützing) Roy et Bisset	VU	3	4	4	2	1	2	1	**17**
Mesotaenium mirificum Archer	EN	4	4	4	3	1	4	4	24
Micrasterias apiculata Meneghini ex Ralfs	VU	3	2	4	2	1	2	4	**18**
Micrasterias crux-melitensis (Ehrenberg) Trevisan	VU	3	2	4	2	1	4	4	**20**
Micrasterias thomasiana Archer	NT	3	2	4	1	1	2	1	**14**
Micrasterias papilifera var. *glabra* f. *riloensis* Petkoff	CR	4	4	4	4	4	4	4	**28**
Mougeotia faveolatospora Kirjakov	NT	4	1	4	1	1	4	1	**16**
Mougeotia angusta (Hassall) Czurda	NT	4	3	4	1	1	2	1	**16**
Netrium digitus var. *bulgaricum* Roubal	CR	3	2	4	4	4	4	4	**25**
Netrium digitus var. *constrictum* f. *minor* Petkoff	CR	3	4	4	3	4	4	4	**25**
Netrium digitus var. *lamellosum* (Brébisson ex Kützing) Grönblad	VU	3	2	4	2	1	2	4	**18**
Netrium digitus f. *rhomboideum* (Grönblad) Kossinskaja	VU	3	4	4	2	1	3	1	**18**
Netrium naegelii (Brébisson ex Archer) West	NT	2	4	4	2	1	2	1	**16**
Onychonema filiforme (Ralfs) Roy et Bisset	VU	3	4	4	2	1	2	4	**20**
Penium asperum Petkoff	CR	3	2	4	4	4	4	4	**25**
Penium curtum f. *majus* Wille	CR	4	4	4	4	1	4	4	**25**
"Penium navicula var. *inflatum* f. *longior* et *tenuor* Petkoff"	DD	–	–	–	–	–	–	–	–

Taxon/Conservation status and criteria	CS	A	B	C	D	E	F	G	T
Penium polymorphum (Perty) Perty	NT	4	1	4	1	1	2	1	**14**
Penium spirospermum f. *longior* Petkoff	DD	–	–	–	–	–	–	–	–
Roya anglica G. S. West	VU	4	4	4	1	1	2	1	**17**
Roya pseudoclosterium (Roy) West et G. S. West	EN	4	4	4	3	1	4	4	**24**
Sphaerozosma aubertianum f. *archeri* (Gutwinski) Petlovany	EN	4	4	4	4	1	4	1	**22**
Sphaerozosma vertebratum Brébisson ex Ralfs	VU	3	4	4	2	1	2	1	**17**
Spirogyra acumbentis Vodenicarov	EN	4	4	4	4	4	2	1	**23**
Spirogyra adnata var. obscura Petkoff	DD	–	–	–	–	–	–	–	–
Spirogyra areolata f. *subinflata* Petkoff	DD	–	–	–	–	–	–	–	–
Spirogyra cavata Vodenicarov	EN	4	1	4	1	4	4	4	**22**
Spirogyra columbiana Czurda	VU	3	2	4	2	1	4	3	**19**
Spirogyra jugalis (Dillwyn) Kützing	DD	–	–	–	–	–	–	–	–
Spirogyra neglecta f. *minor* Petkoff	DD	–	–	–	–	–	–	–	–
Spirogyra nitida f. *varians* Petkoff	DD	–	–	–	–	–	–	–	–
Spirogyra spinescens Kirjakov	CR	4	4	4	1	4	4	4	**25**
Spirotaenia erythrocephala Itzigsohn	EN	4	4	4	3	1	4	1	**21**
Spirotaenia fusiformis West et G. S. West	EN	4	4	4	4	1	4	1	**22**
Spirotaenia turfosa West et G. S. West	EN	4	4	4	4	1	4	1	**22**
Spondylosium papillosum West et G. S. West	EN	3	4	4	2	1	3	4	**21**
Spondylosium pygmaeum Cooke	VU	3	4	4	2	1	2	4	**20**
Staurastrum arachne Ralfs ex Ralfs	VU	4	4	4	4	1	2	1	**20**
Staurastrum avicula var. *lunatum* (Ralfs) Coesel et Meesters	VU	3	2	4	2	1	2	4	**18**
Staurastrum bieneanum Rabenhorst	VU	3	4	4	2	1	2	1	**17**
Staurastrum brevispina Brébisson	NT	3	1	4	2	1	2	3	**16**
Staurastrum capitulum Brébisson	VU	3	4	4	2	1	2	2	**18**
Staurastrum echinatum f. *minor* Petkoff	CR	4	4	4	4	4	4	4	**28**
Staurastrum forficulatum var. *subsenarium* (West et G. S. West) Coesel et Meesters	CR	4	4	4	4	1	4	4	**25**
Staurastrum furcigerum f. *armigerum* Nordstedt	DD	–	–	–	–	–	–	–	–
Staurastrum hexacerum Wittrock	VU	3	1	4	2	1	2	4	**17**
Staurastrum hystrix Ralfs	EN	4	4	4	4	1	2	4	**23**
Staurastrum inconspicuum Nordstedt	DD	–	–	–	–	–	–	–	–
Staurastrum inflexum Brébisson	NT	4	1	4	1	1	2	3	**16**
Staurastrum insigne Lundell	VU	4	2	4	2	1	3	4	**20**
Staurastrum lanceolatum Archer	VU	3	4	4	2	1	3	1	**18**
Staurastrum longipes (Nordstedt) Teiling	VU	3	4	4	2	1	2	4	**20**

Taxon/Conservation status and criteria	CS	A	B	C	D	E	F	G	T
Staurastrum margaritaceum Meneghini ex Ralfs	EN	3	4	4	3	1	2	4	**21**
Staurastrum muricatiforme var. *minus* Roubal	CR	4	3	4	4	4	4	4	**27**
Staurastrum punctulatum f. *minor* Petkoff	DD	–	–	–	–	–	–	–	–
Staurastrum pyramidatum West	NT	3	2	4	2	1	2	1	**15**
Staurastrum rugulosum Brébisson ex Ralfs	EN	4	4	4	4	1	3	4	**24**
Staurastrum saxonicum Bulnheim	EN	4	4	4	4	1	4	1	**22**
Staurastrum senarium var. *spinosum* Roubal	CR	4	1	4	4	4	4	4	**25**
Staurastrum sexcostatum var. *productum* forma Petkoff	DD	–	–	–	–	–	–	–	–
Staurastrum striolatum (Nägeli) Archer	VU	4	4	4	3	1	2	1	**19**
Staurastrum subpunctulatum Gay	EN	4	4	4	4	1	3	4	**24**
Staurastrum tohopecaligense var. *trifurcatum* West et G. S. West	EN	4	4	4	4	1	3	3	**23**
Staurastrum turgescens De Notaris	VU	4	4	4	3	1	2	1	**19**
Staurastrum vestitum var. *orbelicum* Petkoff	DD	–	–	–	–	–	–	–	–
Staurastrum vestitum var. *semivestitum* f. *intermedium* Petkoff	DD	–	–	–	–	–	–	–	–
Staurodesmus clepsydra (Nordstedt) Teiling	NT	4	1	4	1	1	2	1	**14**
Staurodesmus extensus (O. F. Andersson) Teiling	VU	4	4	4	3	1	2	1	**19**
Staurodesmus mucronatus var. *delicatulus* (G. S. West) Teiling	EN	4	4	4	3	1	4	2	**22**
Staurodesmus pterosporus (Lundell) Bourrelly	VU	4	4	4	4	1	2	1	**20**
Tetmemorus granulatus Brébisson ex Ralfs	VU	3	3	3	4	1	2	1	**17**
Tetmemorus intermedius Woronichin	DD	–	–	–	–	–	–	–	–
Tetmemorus laevis var. *minutus* (De Bary) Willi Krieger	VU	3	4	4	2	1	4	1	**19**
Tortitaenia alpina (Schmidle) Brook	EN	4	4	4	4	1	4	1	**22**
Xanthidium basidentatum (Børgesen) Coesel	EN	4	4	4	4	1	3	4	**24**
Xanthidium fasciculatum var. oronense West et G. S. West	VU	3	4	4	3	1	4	1	**20**
Zygnema chalybeospermum Hansgirg	NT	3	2	4	2	1	3	1	**16**
Zygnema ericetorum var. *scrobiculatum* Petkoff	DD	–	–	–	–	–	–	–	–
Zygnema vaginatum Klebs	VU	3	4	4	3	1	3	1	**19**

CONFLICT OF INTERESTS

The authors declare that there is no conflict of interests regarding the publication of this article. The paper was prepared after the idea of the first author and the contribution to the list is as follows: the list of diatoms was prepared by Ts. Isheva and P. Ivanov; list for all other groups was prepared by B. Uzunov and M. Stoyneva-Gärtner, where B. Uzunov made aeroterrestrial and Pirin algae and the background of the distribution in Bulgaria was prepared by P. Hristova.

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