



Title	尾瀬の冰雪藻
Author(s)	松崎, 令; 野原, 精一; 鈴木, 石根; 河地, 正伸
Citation	低温科学, 80, 155-162
Issue Date	2022-03-31
DOI	10.14943/lowtemsci.80.155
Doc URL	<a href="http://hdl.handle.net/2115/85005">http://hdl.handle.net/2115/85005</a>
Type	bulletin (article)
Note	電子資料追加
Additional Information	There are other files related to this item in HUSCAP. Check the above URL.
File Information	10_p155-162_EM_LT80.pdf (電子資料)



[Instructions for use](#)

## 電子資料

### 尾瀬の冰雪藻

松崎 令<sup>1,2)</sup>, 野原 精一<sup>1)</sup>, 鈴木 石根<sup>2)</sup>, 河地 正伸<sup>1)</sup>

- 1) 国立環境研究所生物多様性領域
- 2) 筑波大学生命環境系

責任著者

松崎 令

〒305-8506 茨城県つくば市小野川 16-2

国立環境研究所 生物多様性領域

Tel: 029-850-2204 Fax: 029-850-2587

e-mail: matsuzaki.ryo@nies.go.jp

表 S1：尾瀬の彩雪から報告された微細藻類。

Taxon	Reference
<b>Cyanobacteria (シアノバクテリア)</b>	1,2
<i>Aphanocapsa nivalis</i> Lagerheim	1,2
<i>Oscillatoria</i> sp.	1
<i>Phormidium</i> sp.	1–3
<i>Romeria elegans</i> var. <i>nivicola</i> E. Kol	2,4
[= <i>Romeria nivicola</i> (E. Kol) O. & J. Komárek]	
<b>Euglenoids (ユーグレナ類)</b>	
<i>Euglena</i> sp.	1
<b>Diatoms (珪藻)</b>	
<i>Diatoma hyemalis</i> ('hyemale') (Roth) Heiberg	1,2,5
[= <i>Odontidium hyemale</i> (Roth) Kützing]	
<i>Diploneis</i> sp.	3
<i>Frustulia rhomboides</i> (Ehrenberg) De Toni	2
<i>Gonphonema subtile</i> Ehrenberg	1–3
<i>Hantzschia amphioxys</i> (Ehrenberg) Grunow	1,2
<i>Navicula pupula</i> var. <i>rectangularis</i> (W. Gregory) Cleve & Grunow	2,6
[= <i>Sellaphora rectangularis</i> (W. Gregory) Lange-Bertalot & Metzeltin]	
<i>Navicula</i> sp.	3
<i>Nitzschia palea</i> (Kützing) W. Smith	1
<i>Pinnularia gibba</i> var. <i>peckii</i> (G. Rabenhorst) Mayer	1–3
<i>Pinnularia viridis</i> (Nitzsch) Ehrenberg	2
<i>Rhoicosphenia curvata</i> (Kützing) Grunow	1,2
<b>Green algae (緑藻)</b>	
<i>Ancylonema</i> sp.	1
<i>Carteria miwae</i> Fukushima	2,7
[= <i>Chloromonas miwae</i> (Fukushima) Muramoto et al.]	
<i>Chlamydomonas bolyaiana</i> E. Kol sensu Fukushima 1963 (= <i>Chlainomonas</i> sp.)	2, this study
<i>Chlamydomonas nivalis</i> var. <i>kobayashii</i> Fukushima (see <i>Sanguina nivaloides</i> )	1–3
<i>Chloromonas fukushimae</i> Matsuzaki & Nozaki	8
<i>Chloromonas muramotoi</i> Matsuzaki et al.	this study
<i>Chodatella brevispina</i> F.E. Fritsch (= <i>Chloromonas</i> sp.)	1–3,9, this study
<i>Chloromonas</i> spp.	this study
<i>Chodatia tetrallantoidea</i> E. Kol [= <i>Deuterostichococcus tetrallantoidea</i> (E. Kol) Pröschold & Darienko]	1,10

<i>Oocystis lacustris</i> f. <i>nivalis</i> F.E. Fritsch (= <i>Chloromonas</i> sp.)	1,2, this study
<i>Raphidonema nivale</i> Lagerheim	1–3
<i>Raphidonema tatrae</i> (E. Kol) E. Kol	1–3
<i>Sanguina nivaloides</i> Procházková, Leya & Nedbalová	this study
<i>Scotiella</i> sp.	1,3
<i>Scotiella nivalis</i> (Chodat) F.E. Fritsch (= <i>Chloromonas</i> sp.)	1–3,9, this study
<i>Ulothrix tenerrima</i> Kützing	2
<i>Ulothrix</i> sp.	1–3
<i>Stichococcus bacillaris</i> Nägeli	2
<b>Golden algae (黄金色藻)</b>	
<i>Ochromonas smithii</i> Fukushima	2, this study

---

1. Kobayashi, Y., and H. Fukushima (1954) On the Cryovegetations of the Ozegahara Moor and its environments. 尾瀬ヶ原, (尾瀬ヶ原総合学術調査団編): 585–589. 日本学術振興会, 東京.
2. Fukushima, H. (1963) Studies on cryophytes in Japan. *Journal of the Yokohama Municipal University, series C*, **43**, 1–146.
3. 小林義雄, 福島博 (1952) 日本に於ける赤雪と緑雪に就て II. 植物学雑誌, **65**, 128–136.
4. Komárek, O., and J. Komárek (2001) Contribution to the taxonomy and ecology of cryo-sestic algae in the summer season 1995–96 at King George Island, S. Shetland Islands. *Beihefte Nova Hedwigia*, **123**, 121–140.
5. *Index Nominum Algarum*. <https://ucjeps.berkeley.edu/cgi-bin/porp.cgi.pl?106641>. Accessed on August 26, 2021.
6. Lange-Bertalot, H., and D. Metzeltin (1996) Indicators of Oligotrophy. 800 taxa representative of three ecologically distinct lake types, Carbonate buffered-Oligodystrophic-Weakly buffered soft water. *Iconographia Diatomologica*, **2**, 1–390.
7. Muramoto, K., T. Nakada, T. Shitara, Y. Hara, and H. Nozaki (2010) Re-examination of the snow algal species *Chloromonas miwae* (Fukushima) Muramoto et al., comb. nov. (Volvocales, Chlorophyceae) from Japan, based on molecular phylogeny and cultured material. *Eur. J. Phycol.*, **45**, 27–37.
8. Matsuzaki, R., M. Kawachi, H. Nozaki, S. Nohara, and I. Suzuki (2020) Sexual reproduction of the snow alga *Chloromonas fukushimae* (Volvocales, Chlorophyceae) induced using cultured materials. *PLoS One*, **15**, e0238265.
9. Matsuzaki, R., H. Kawai-Toyooka, Y. Hara, and H. Nozaki (2015) Revisiting the taxonomic significance of aplanozygote morphologies of two cosmopolitan snow species of the genus *Chloromonas* (Volvocales, Chlorophyceae). *Phycologia*, **54**, 491–502.
10. Pröschold, T., T. Darienko., and M. D. Guiry (2020) Nomenclatural corrections in the green algal genus *Deuterostichococcus* Pröschold & Darienko (Trebouxiophyceae). *Not. Algarum*, **137**, 1–2.

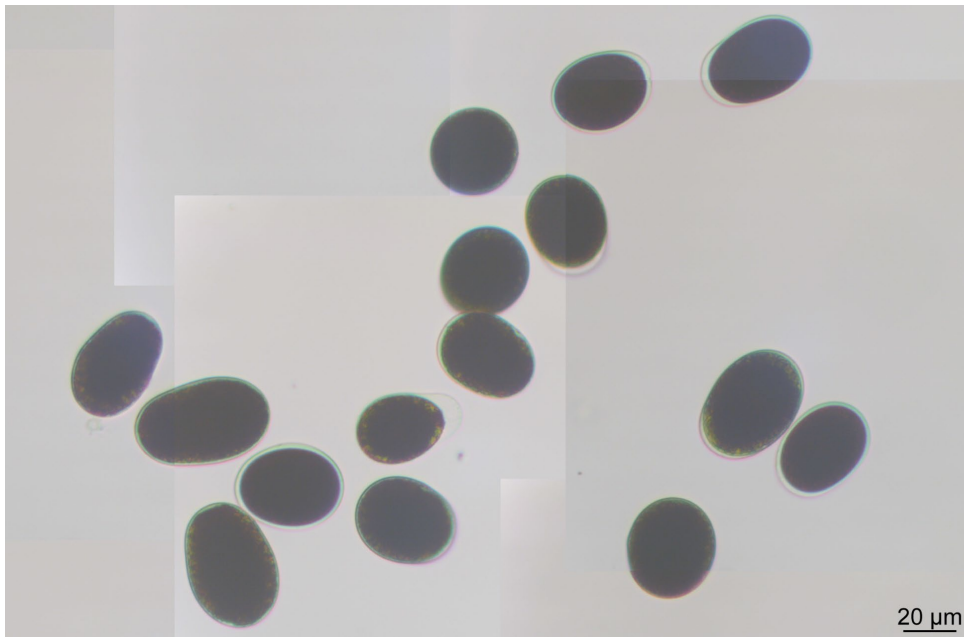


図 S1 : DNA 抽出に供した, *Chlainomonas* sp. の栄養細胞と推定される尾瀬産の細胞. 分割撮影した複数の写真を 1 枚に結合した.

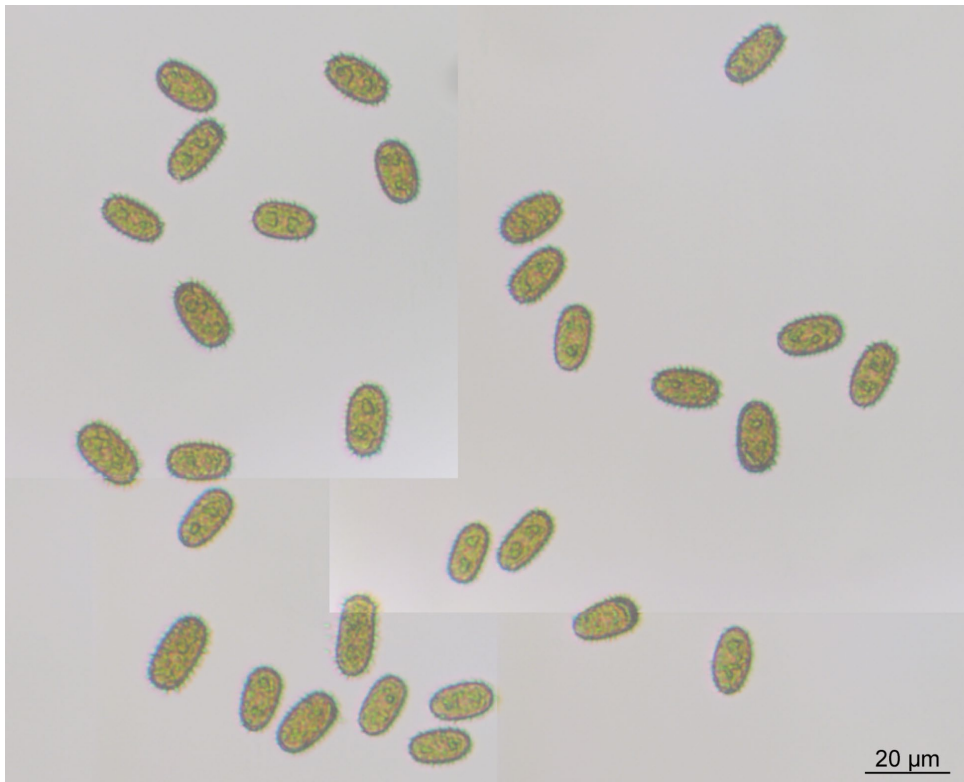


図 S2 : DNA 抽出に供した, *Chodatella brevispina* (= *Chloromonas* のシスト) と推定される尾瀬産の細胞. 分割撮影した複数の写真を 1 枚に結合した.

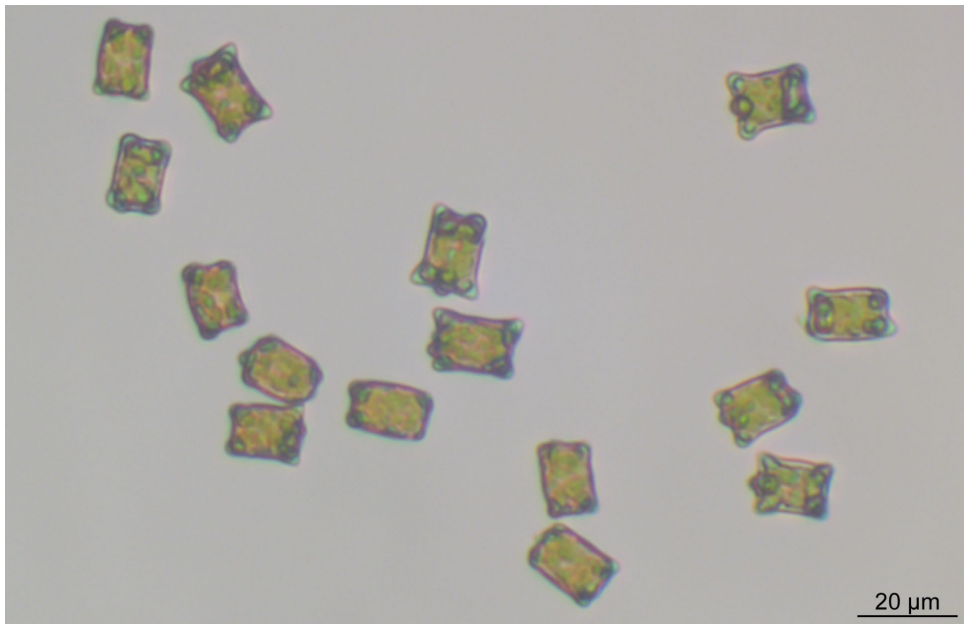


図 S3 : DNA 抽出に供した, *Oocystis lacustris* f. *nivalis* のシストと推定される尾瀬産の細胞.

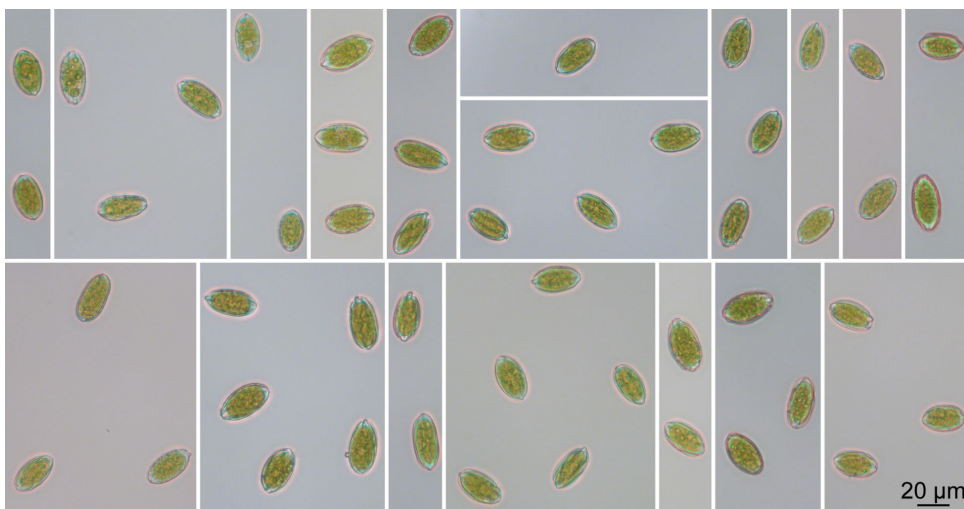


図 S4 : DNA 抽出に供した, *Scotiella nivalis* (= *Chloromonas* のシスト) と推定される尾瀬産の細胞. 写真はすべて等倍率.

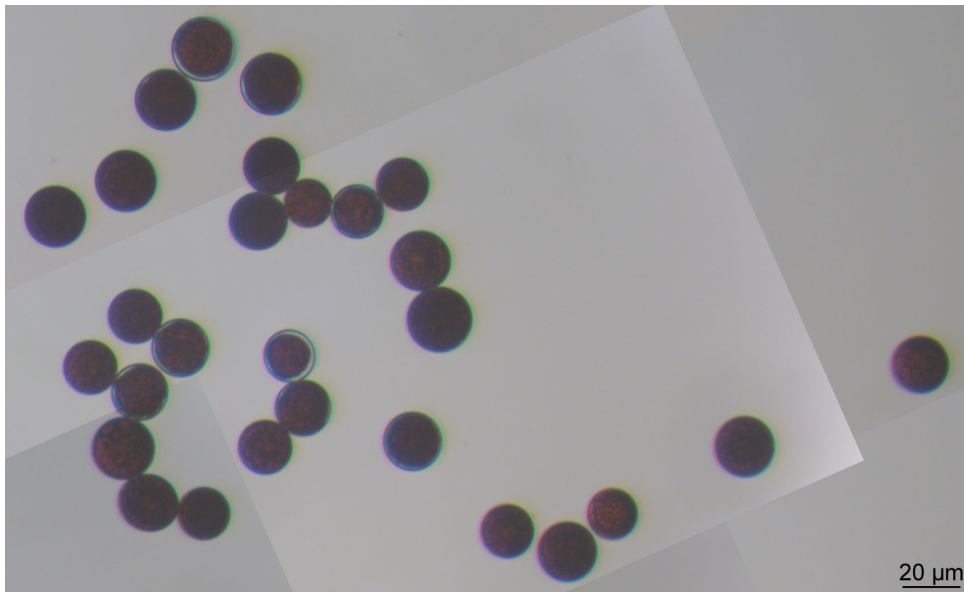


図 S5 : DNA 抽出に供した, *Sanguina nivaloides* のシストと推定される尾瀬産の細胞. 分割撮影した複数の写真を 1 枚に結合した.