**S1 Table. Strain/specimens examined in this study.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Taxon | Designation | Origin | Elevation | Situation | Collection date |
| *Chloromonas muramotoi* sp. nov. | HkCl-57 (=NIES1-4284) | Green snow sample collected in Mt. Hakkoda, Aomori, Japan (40°38.83' N, 140°51.08' E) | 883 m | open area with sparse broadleaf trees | May 16, 2012 |
| *Chloromonas miwae* | Gassan-C2 | Green snow sample collected from site 130630Gs4G in Mt. Gassan, Yamagata, Japan (38°30.40' N, 139°59.87' E) | 815 m | shaded area by broadleaf trees | Jun 30, 2013 |
| *Chloromonas nivalis*3 | Hakkoda-Green | Green snow sample collected from site 160518Hk2G1 in Mt. Hakkoda, Aomori, Japan (40°39.22' N, 140°50.98' E) | 974 m | shaded area by conifers and broadleaf trees | May 18, 2016 |
|  | Tateyama-Green | Red snow sample collected from site 160612Ty2R in Mt. Tateyama, Toyama, Japan (36°34.10' N, 137°35.95' E) | 2,753 m | open, exposed area | Jun 12, 2016 |
|  | Tateyama-Orange | Red snow sample collected from site 160612Ty2R in Mt. Tateyama, Toyama, Japan (36°34.10' N, 137°35.95' E) | 2,753 m | open, exposed area | Jun 12, 2016 |

1Microbial Culture Collection at the National Institute for Environmental Studies [1,2].

2Specimen of field-collected cysts morphologically assignable to *C. nivalis* zygotes. For species identification, see [3]

3Identified based on the species diagnoses from previous studies [4,5].

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