

Table S1. Sample type to use in this study.

| Locality | No. Samples examined | Sample type* | | | | Sampling period (dd/mm/yy) |
|-------------------------|-------------------------|--------------|--------|------------|-------------------------|-------------------------------|
| | | Soil | Mosses | Algal mats | Dead birds and feathers | |
| Sôya Coast | | | | | | |
| Ongule Islands | | | | | | |
| East Ongul Is. | 54 | 52 | 2 | 0 | 2 | 23/12/2006-01/01/2007 |
| West Ongul Is. | 13 | 8 | 5 | 5 | 0 | 08/01/2007-09/01/2007 |
| Ongul Kalven Is. | 7 | 6 | 1 | 0 | 3 | 22/01/2007-25/01/2007 |
| Langhovde | 40 | 14 | 18 | 8 | 5 | 10/02/2007 |
| Skarvsnes | 125 | 45 | 38 | 51 | 9 | 17/01/2007-21/01/2007 |
| Skallen | 11 | 7 | 5 | 2 | 0 | 10/01/2007-16/01/2007 |
| Rundvågshetta | 14 | 11 | 7 | 1 | 0 | 03/02/2007-09/02/2007 |
| Prince Harald Coast | | | | | | |
| Riiser-Larsen Peninsula | 13 | 2 | 10 | 0 | 2 | 04/01/2007-07/01/2007 |
| Total | 277 | 145 | 152 | 67 | 21 | 02/01/2007-03/01/2007 |

* Some samples consisted of more than one type. Ex.: mosses contained moss thalli and soils.

Table S2. Fungal isolates grown on frozen PDA.

| Fungal taxa | Allied species from ITS sequence | Sequence similarity (%) |
|--------------------|--|--------------------------------|
| Ascomycota | <i>Geomyces</i> sp. T489/9b (AY345348) | 99 |
| | <i>Geomyces</i> sp. C239/10G (AY345347) | 99 |
| | <i>Phialocephala</i> sp. 1896 (AM922212) | 98 |
| | <i>Phoma herbarum</i> KUC3024 (DQ912692) | 100 |
| | <i>Tetracladium</i> sp. CBS 118523 (AJ890435) | 96 |
| | <i>Thelebolus</i> sp. BC18 (DQ317351) | 99 |
| | <i>Ascomycete</i> sp. K94-020 (EF485234) | 99 |
| Basidiomycota | <i>Dioszegia fristingensis</i> PYCC 5861 ^T (AY562158) | 99 |
| | <i>Mrakia gelida</i> CBS 5272 (KY104296) | 99 |
| | <i>Rhodotorula glacialis</i> T8Rg (JQ857032) | 99 |
| | <i>Glaciozyma antarctica</i> CBS 5942 ^T | 97-100 |