**Supplementary Table S3:** Summary table showing fungal biomarker species in both fractions (bulk soil and rhizosphere soil of *R. glacialis*) detected by LEfSe at LDA score > 3.5. Taxonomic classification is given in parenthesis. Species are sorted by descending LDA score.

|  |  |
| --- | --- |
| FRACTION | Biomarker species |
| Bulk | *Capronia* spp. (Herpotrichiellaceae - Ascomycota) |
| Leotiomycetes unclassified (Leotiomycetes - Ascomycota) |
| Leotiomycetes unclassified (Leotiomycetes - Ascomycota) |
| Leotiomycetes unclassified (Leotiomycetes - Ascomycota) |
| *Acarospora* spp. (Acarosporaceae - Ascomycota) |
| Helotiales unclassified (Ascomycota) |
| *Placynthiella* sp. (Lecanoromycetes - Ascomycota) |
| Rhizosphere | *Tetracladium* sp. (Helotiales family incertae sedis - Ascomycota) |
| *Tetracladium* sp. (Helotiales family incertae sedis - Ascomycota) |
| *Tetracladium* sp. (Helotiales family incertae sedis - Ascomycota) |
| *Tetracladium* sp. (Helotiales family incertae sedis - Ascomycota) |
| *Cryptococcus* sp. (Tremellales family incertae sedis - Basidiomycota) |
| *Dioszegia* spp. (Tremellales family incertae sedis - Basidiomycota) |
| *Haptocillium* spp. (Ophiocordycipitaceae - Ascomycota) |
| Ascomycota unclassified |
| Tremellomycetes unclassified |