**SUPPLEMENTARY DATA**

**Supplementary Table S1.** *Circinaria hispida* and *Flavoparmelia soredians*: Lichen mycobionts associated with *Trebouxia* T1–T4 and F1 lineages based on > 98% sequence similarity detected by Leavitt *et al*. (2015) and Voytsekhovich & Beck (2015).

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| --- | --- |
|  | **Lichen mycobionts associated with *Trebouxia* lineagesdetected in *Circinaria hispida* and *Flavoparmelia soredians* based on > 98% sequence similarity** |
| T1 | *Parmelia*, *Protoparmeliopsis*, *Montanelia*, *Xanthoparmelia*, *Lecanora, Candelariella* *vitellina*, *Circinaria* *contorta*, *Diploschistes* *diacapsis*, *Porpidia* *crustulata* |
| T2 | - |
| T3 | *Protoparmeliopsis*, *Xanthoparmelia*, *Gyalolechia*, *Fulgensia*, *Lecidea*, *Lecidella*, *Psora* |
| T4 | *Aspicilia, Protoparmeliopsis*, *Rhizoplaca*, *Xanthoparmelia*, *Buellia*, *Fulgensia*, *Lecidella*, *Peltigera*, *Psora*, *Squamarina, “Aspicilia desertorum”, Rusavskia papillifera* |
| F1 | *Melanohalea, Punctelia, Flavoparmelia, Physcia, Teloschistes, Xanthoria* |