

## Supplementary materials

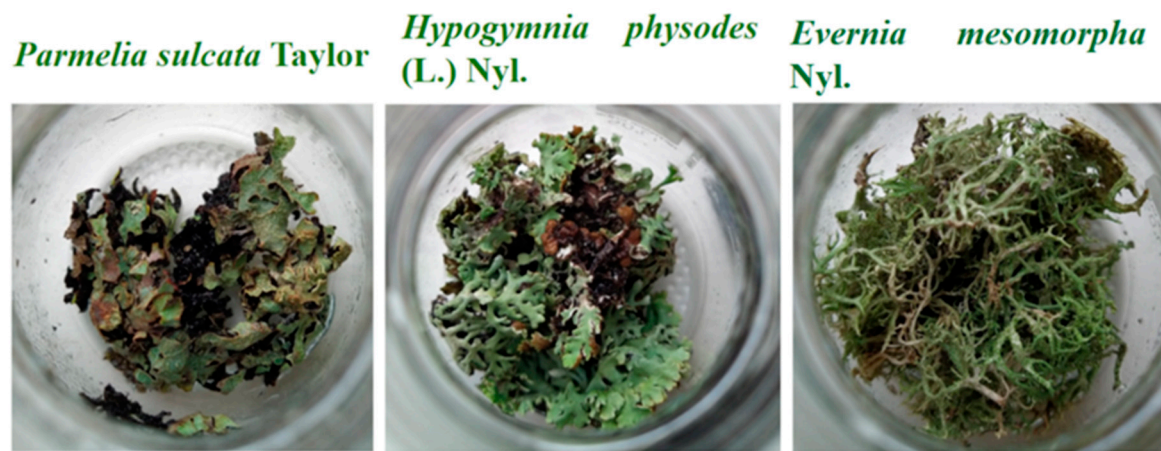


Figure S1. Examples of the studied ELs - *Parmelia sulcata*, *Hypogymnia physodes*, and *Evernia mesomorpha*.

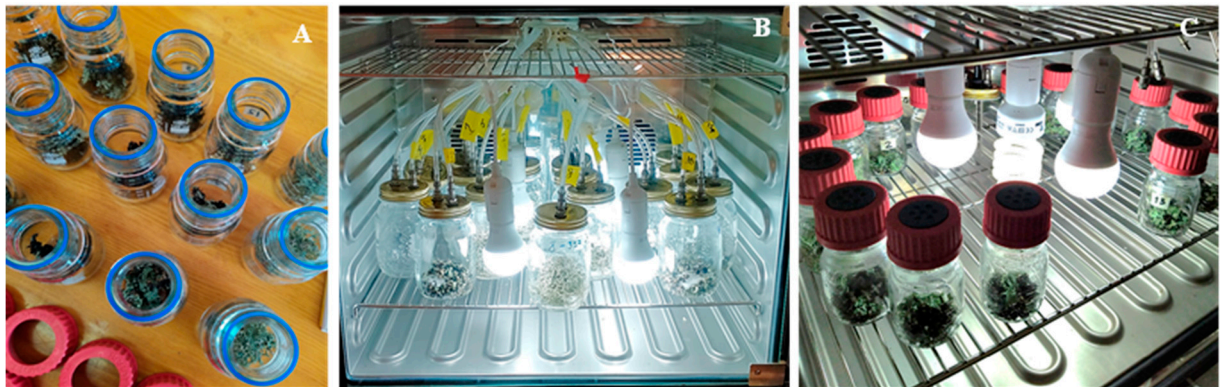


Figure S2. The EL sample prepared for incubation (A) and the setup of the first (B) and the second (C) incubation experiments.

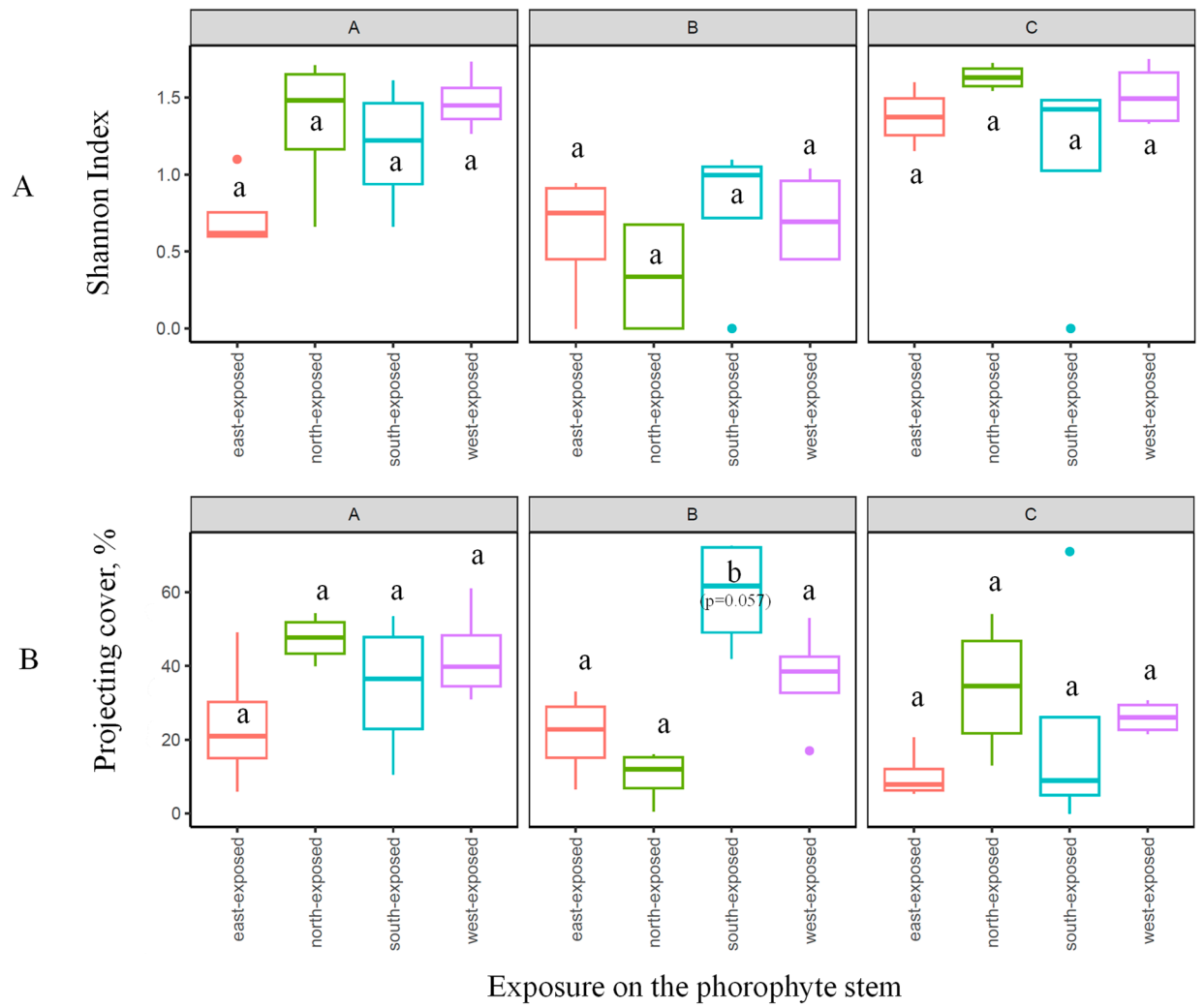


Figure S3. Shannon index (A) and projecting cover (B) of ELs depending on the ELs exposure on the phorophytes at various study plots (A, B, and C).

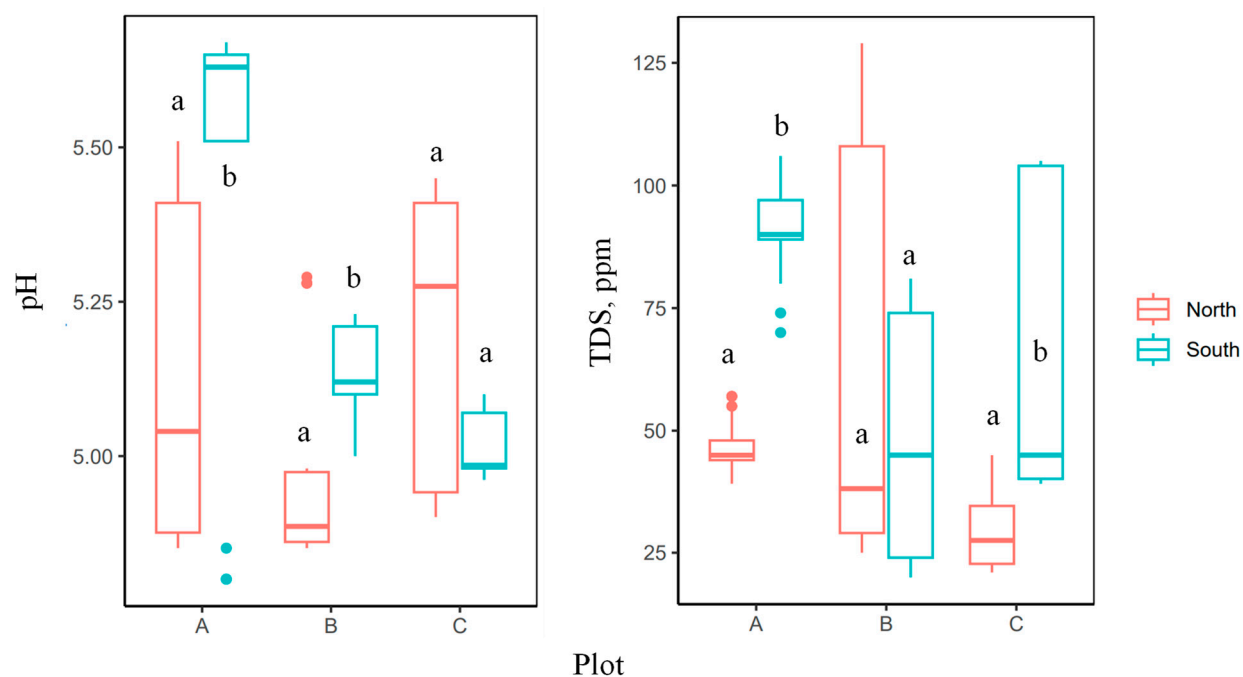


Figure S4. pH and TDS in birch bark depending on the exposure in the phorophytes stem at various study plots (A, B, and C).

**The method for measuring the pH and TDS in birch bark.** pH and TDS in birch bark were measured according to Tsurykau and Khramchankova [76]. For that, we sampled bark pieces of the thickness of 1-2 cm from all model trees at the south- and north-exposed stem areas at the 1 m height. Bark samples were air-dried and milled with a laboratory grinder. Then, to the milled bark sample (2.4 g), ultrapure water (40 ml) obtained from the Milli-Q system was added. All samples were analyzed in 3 replicates using a BLE-C600 water quality tester after 24 hours.