

Biodiversity and conservation of terricolous lichens and bryophytes in continental lowlands of northern Italy: the role of different dry habitat types

Gabriele Gheza^{1,2}, Silvia Assini^{1*}, Chiara Lelli², Lorenzo Marini³, Helmut Mayrhofer⁴, Juri Nascimbene²

¹ Department of Earth and Environmental Sciences, University of Pavia, Via S. Epifanio 14, 27100 Pavia, Italy

² Department of Biological, Geological and Environmental Sciences, University of Bologna, Via Irnerio 42, 40126 Bologna, Italy

³ DAFNAE Department, University of Padova, Viale dell'Università 16, 35020 Legnaro (PD), Italy

⁴ Institute of Biology, Division of Plant Sciences, NAWI Graz, University of Graz, Holteigasse 6, 8010 Graz, Austria

*corresponding author: silviapaola.assini@unipv.it

Online Resource 2

Variables included in the formulation of GLMMs and PERMANOVA.

The formulation of the GLMMs included the following variables:

Species richness in heathlands ~ % cover of therophytes + % cover of hemicryptophytes + % cover of phanerophytes + pH + annual precipitation + mean annual temperature.

Species richness in acidic dry grasslands ~ % cover of therophytes + % cover of hemicryptophytes + % cover of phanerophytes + pH + mean annual temperature + % cover of the shrub layer.

Species richness in calcareous dry grasslands ~ % cover of therophytes + % cover of hemicryptophytes + % cover of phanerophytes + pH + annual precipitation + % cover of the herb layer.

The formulation of the PERMANOVA included the following variables:

Species assemblage in heathlands ~ % cover of therophytes + % cover of hemicryptophytes + % cover of phanerophytes + pH + annual precipitation + mean annual temperature.

Species assemblage in acidic dry grasslands ~ % cover of therophytes + % cover of hemicryptophytes + % cover of phanerophytes + pH + mean annual temperature + % cover of the shrub layer.

Species assemblage in calcareous dry grasslands ~ % cover of therophytes + % cover of hemicryptophytes + % cover of phanerophytes + pH + annual precipitation + % cover of the herb layer.