



## Lichens and bryophytes in relation to elevation and climate change

### Context:

In relation with the GLORIA project ([www.gloria.ac.at](http://www.gloria.ac.at)), vascular plant, bryophyte and lichen species are inventoried on four summits in Val d'Entremont (Valais) for 2001 to monitor climate change impact on alpine species. A complete resurvey is planned in 2022. Up to now, the evolution of the vascular plant communities was analyzed in common with other GLORIA summits (eg, Pauli et al. 2012; Rogora et al. 2018; Nicklas et al. 2021). Although lichen and bryophyte distribution on the summits was described (Vittoz et al. 2010), the evolution of their communities was only partly considered (Carron 2019).

### Aim of the study:

This study aims to study climate change impact on bryophytes and lichens on the four summits in relation to the evolution of vascular plant community. A welcome development will be the measurement in the field of some biological traits of the lichens and bryophytes to relate the evolution of the species populations with species characteristics. The analyzes can be considered in common with other GLORIA teams recording lichens and/or bryophytes (mainly in Northern Europe).

### Requested skills:

A good fitness to climb on mountain summits (up to 1000 m of ascending elevation) and to work in exposed locations. Interest to develop skills in identification of lichen and/or bryophyte species under the supervision of specialists. High availability in July and August for field work.

### Collaboration:

Field work in collaboration with the GLORIA team in Valais (Luca Miserere for bryophytes, Mathias Vust for lichens, Christophe Randin and Jean-Paul Theurillat for vascular plants).

**Keywords:** biological traits, bryophytes, climate change, elevation, GLORIA, lichens.

**Working place:** field work in Valais (Val de Bagnes, Val d'Entremont).

### References:

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