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[English]

Feindifferenzierung der Vegetation nach dem Mikrorelief entlang eines Transekts auf der Südseite des Ebensteins

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At the south-slope of Mount Ebenstein (Hochschwab, Styria) a transect was installed along an altitudinal gradient in 1996, from the summit (2115 m a.s.l.) unto 1820 m a.s.l.. Every 10 meter along the microrelief all vascular plant species were recorded on three adjacent plots of 1 m². A more detailed protocol was used every 20 m:

- total plant cover and
- cover of each species was recorded, as well as
- cover of bare soil, scree and rock,
- soil depth,
- inclination and
- altitude.

The plots were marked with nails and photographed, in order to be used for long-term monitoring of climate warming impacts on alpine vegetation. A TWINSPAN ordination was performed with data of 84 1 m²-plots to reveal similarity structures of the plant assemblages and to identify vegetation types. Ordination results were reassessed in a Discriminant Analysis, using abiotic habitat parameters. Furthermore, species groups with similar distribution patterns, that might show similar response to changing environmental parameters, were defined; Ellenberg indicator values were used to characterise these groups.

Within the transect, eight different vegetation types were described. Altitude and soil depth were the best explanatory variables for discriminating these vegetation types. Distribution patterns of species groups and vegetation types were analysed and discussed, particularly in regards to possible response to climate warming.