Bookreview

BERICHTE DES GEOBOTANISCHES INSTITUTES DER ETH, STIFTUNG RÜBEL, VOL. 49,

Zürich 1982, 218 pp.

The 49. Volume of "Berichte" brings the annual report for 1981 prepared by the director of the Geobotanisches Institut, professor dr. ELIAS LANDOLT. After the report 8 English summaries of Ph.D. and diploma theses follow. The second part of "Berichte" contains 9 original scientific papers.

KRYSTYNA URBANSKA presents another paper from her research on cyanogenesis „Polymorphism of cyanogenesis in *Lotus alpinus* from Switzerland". She studied polymorphism of cyanogenesis in populations from both acidic silicate and carbonate and came to the conclusion that in acidic siliceous soils, cyanogenic plants are rare with a low HCN content, whereas upon carbonate cyanogenic phenotypes with high HCN contents prevail. Also the next paper by REGULA DICKENMANN applies to cyanogenesis, in this case in *Ranunculus montanus* s. l. from the Swiss Alps. The author came to similar conclusions as K. URBANSKA for *Lotus*, i. e. cyanogenic phenotypes were much more frequent on carbonate soils than on acidic silicate ones.

DORIS ZUUR-ISLER in "Germinating behaviour and early life phases of some species from alpine serpentine soils" describes the results of her experiments with 21 species germinationg in the laboratory as well as in the greenhouse on the parent serpentine soils and at the experimental plot in the study area. The author discusses, among other things, the variability observed in germination strategies and the possibility of using some apparently well-adapted species for the revegetation of the artificially graded alpine ski runs. The next paper by W. DIETL (in German) describes the influence of pasturing sheep on the composition, density and development of subalpine meadows.

The paper by ANDREAS KLEIN "Comparison of the vegetation on railway- and highway-verges in Kanton Baselland (Switzerland)" is also written in German. The author concludes that plant species on railway-verges indicate poor and dry soils and most of them belong to the *Mesobromion*. The verges along highways indicate fresher and richer soils.

ELIAS LANDOLT contributes to this volume of „Berichte" by the paper „Distribution pattern and ecophysiological characteristics of the European species of the *Lemnaceae*" in which he presents a corresponding set of ecophysiological characteristics to each of the climatic factors mentioned. Acidity and humidity are connected with the nutrient content of waters and its influence on the occurrence of individual duckweed species. URS KUHN and coauthors describe in the paper "Nutrient withdrawl in *Molinia coerulea* in autumn," (in German), the succesful decrease of N and P in the upper parts and their increase in lower parts of *Molinia coerulea* during the period of late summer and early autumn. The next paper, interesting principally from the methodical point of view, describes the ground water table measurements in straw-meadows.

In the last contribution ELIAS LANDOLT and coauthors present report on threatened and rare vascular plants of Switzerland.

JAN POKORNÝ