

## Bookreviews

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GENETISCH-ÖKOLOGISCHE UNTERSUCHUNGEN AN *RANUNCULUS MONTANUS* WILLD. S. L. AUS DER ALPINEN STUFE VON DAVOS (GRAUBÜNDEN)

Veröff. Geobot. Inst. Rübel (Zürich), 78. Heft, 1982, Abb. 30, 89 pp.

The study represents a detailed analysis of populations of tetraploid species *Ranunculus montanus* s. str. and diploid species *R. grenierianus* and *R. carinthiacus* from dolomitic and silicate substrates in the vicinity of Davos, canton Graubünden, in the eastern part of the Central Alps. Morphological and cytological characters of the taxa are examined, reproduction biology and behaviour of populations related to the ecological factors are described based on both field observations and laboratory experiments. Particularly detailed is the study of the microdistributional pattern of the above-mentioned buttercups in relation to the local microrelief and soil conditions on Mount Jakobshorn (2 590 m above sea level) southeast of Davos.

The ecological characterizations are used by the author directly to solve problems of inter- and intrapopulation structures within the aggregate species *R. montanus*. An exceptionally valuable approach in this rather short publication is the concept of functional interrelations of ecological factors, genetic variability, and species divergence. Ecological factors, for example, may be important in divergence of species and in reproductive isolation. The author's analysis of phenotypic changes, which are undoubtedly genetically controlled, emphasizes the functional relevancy of studied populations to the pertinent ecological niche in the alpine environment.

The results of the reviewed study are very promising for further development of close cooperation between plant taxonomy and plant ecology. It is important to keep in mind that ecological genetics is the field which, using evolutionary-ecological methods, can evaluate ecological relationships of taxonomic species.

BOHDAN KŘÍŽA

FRANCIS ROSE

## THE WILD FLOWER KEY

Frederik Warne, London 1981, 480 pp.

The book represents a guide to plant identification in the field. At the beginning, it should be emphasized, that the author has succeeded in a tremendous task: to describe over 1400 species and to illustrate about 1000 of them in a small booklet. The instructions for use are followed by an illustrated glossary of plant terminology, identification keys and by the main text with descriptions and illustrations of plants. In addition to the General key to plants in flower, the original Vegetative keys for identification of plants not in flower are also given. Valuable vegetative keys are arranged in accordance with the typical habitats of the plants covered here and are supplemented by pen-and-ink drawings of important details, mainly of leaves.

The main part of the text (pp. 95—462) comprises descriptions of c. 1450 species arranged according to their families, with both English (if any) and scientific names, concise morphological diagnoses and data on the geographical distribution and on the plant's normal habitat. The author included all the native and long-established introduced species of flowering plants of the British Isles (except for many Grasses, Sedges and Rushes and for a few „critical“ groups of species) and most of other species occurring in north-west Europe (north France, the Netherlands, Belgium, Denmark and north F.R.G.). The excellent illustrations in colour often picture only one or two details of the species. The details, however, are chosen carefully and represent a valuable aid for verifying the correct determination.

Last but not least, we must appreciate the attention paid to the conservation of wild flora. The reader is several times strongly urged not to dig up wild plants, but “to take this book to the plant in the field instead of taking the plant home to the book“.

JAN ŠTĚPÁNEK