MacKenzie, D.: **Perennial Ground Covers.** - Timber Press, Portland 1997. 379 pp. GBP 37.50. ISBN 0-88192-368-0.

Readers are provided by a comprehensive treatise of perennial ground covers frequently used in modern landscaping because of their material, environmental and aesthetic benefits. They are often a practical alternative to turf grass reducing maintenance work and expense.

General part of this book contains valuable information concerning choosing the right plant species, propagation, planting and maintenance of ground covers. There are chapters on using native plants, variegated plants, ferns and ornamental grasses as ground covers too. The second and greater special part covers more than 300 genera of herbaceous and woody plants that can be used as ground covers. It provides detailed descriptive and cultural information on the most important species and varieties. Information on hardiness, propagation methods and pests are included. The extensive text is further illustrated by an impressive selection of 316 full coloured photographs. Very useful is a table with more than 800 species in alphabetical order describing plant type, height, bloom season, foliage, light and soil requirements.

The book is oriented to American readers therefore it contains a wide spectrum of plant species which are fit for the different climatic conditions in the USA, consequently very hardy species on the one hand and thermophilous species suitable only for south states on the other hand. Nevertheless it is useful for readers from Central Europe too, because a lot of described species prosper in this area.

D. MacKenzie has been involved in ground covers since 1983 as a grower, breeder, and research worker, therefore readers are provided with information based on firsthand practical experience. His book shows a great variability of plants included into perennial ground covers and brings a practical manual enables to select proper plants and to find ground cover solutions for any need. It will be a resource for professionals as well for home gardeners and for all people being interested in perennial ground covers.

F. ŠRÁMEK (*Průhonice*)

Wildi, O., Orlóci, L.: **Numerical Exploration of Community Patterns. A Guide to the Use of MULVA-5.** (2^{nd} revised edition). - SPB Academic Publishing, Amsterdam 1996. 171 pp. NLG 65.00. ISBN 90-5103-114-9.

Quantitative analysis of complex patterns in plant communities is not possible without use of an array of modern numerical methods. Suitable computer programs make their application now quite fast and easy. The program package MULVA-5, which is described in the reviewed book, belongs to the most popular among plant ecologists. It was developed from its ancestor MULVA-4 after implication of numerous improvements which emerged from practical use of the older version.

MULVA-5 comprises as many as 31 different subroutines ("tasks"), each with its own input and output. They can be used separately or as modules of a variety of specialy-designed complex models. Cluster analysis, ranking, autocorrelation, discriminant and component analysis may be mentioned as examples of the most common options. The program package includes also several subroutines for handling and comparing of vegetation relevés, as well as for identification of vegetation types from observed species composition. The first half of the book is devoted to the formal description of individual tasks and to the outline of underlying operation system. The second part of the volume offers a tutorial with many examples of practical application of all tasks, including import of data from other programs (*e.g.*, EXCEL), and graphical display of results. The whole book is written in a very clear and concise style, which makes it well understandable even to biologists without any special mathematical background. It is recommended to all plant ecologists and potential users of MULVA-5 as an indispensable guide and reference book.

J. GLOSER (*Brno*)