Hejný, S., Slavík, B. (ed.): **Květena České Socialistické Republiky**. (Flora of Bohemia.) Volumes 1 and 2. - Academia, Praha 1988 and 1989, respectively. Pp. 557 (Vol. 1) and 540 (Vol.2).

In our country there was a long-term need for a modern publication on the Czech flora since in all neigbouring countries similar works had been published earlier. In the second half of the 20th century, the activities of man have led to extensive and unfortunately irreversible changes and so a number of autochthonous-plant species have become rare and endangered. However, it had lasted 40 long years before the Flora of the Czech Socialist Republic (1988), representing a voluminous up-to-date work based on the present botanical science, appeared in the bookshops. The book was prepared by the Institut of Botany of the Czechoslovak Academy of Sciences, Průhonice, under the leadership of S. Hejný and B. Slavík. The preparatory work was very demanding because the coordination of the approaches of the team of about 25 taxonomists required to desing a set of general instructions as most of the team members are on the staff of other institution than the Institute of Botany at Průhonice.

The Flora of the ČSR will have approximately 8 volumes. Two of them have already been published.

More than one third of the first volume deals with general subjetcts in several chapters. After a short history of botanical research in Bohemia and Moravia and chapter concerning the inorganic nature and its relation to flora, there is a description of the basic types of the plant communities and survery of higher vegetation units; the survey has been prepared by prominent Czech geobotanists. The general part particularly focuses on very detailed description of the phytogeography of the Czech flora, which is illustrated by 50 netmaps of the distribution of selected species and by a regional phytogeographical division. This has been elaborated for the first time and according to it, Bohemia and Moravia are divided into 99 phytogeographical districts, some of which are subdivided into subdistricts. The division is complete by a map. After a list of basic literature, there is a short of the taxonomic categories (genera, species, subspecies), while the general trend of the Flora is a narrower concept of the genera and species. The chapter is important, containing a technological vocabulary and supplemented with drawings and the system based on the classification by Takhtajan (1973). The English summary and the Czech-English minivocabulary may be useful for foreing users of the Flora. The general part is accompanied by 44 black-and-white photographs of geomorphologically and vegetationally typical regions of Bohemia and Moravia. In actual fact, it represents and original and scientific base of flora, which is not common in publications of that type.

The special part begins with the key of families which is followed by taxonomical description. The Flora covers all autochtonus, naturalise, escaped, introduced and often cultivated vascular plants. The greatest details are dealt with the autochvascular plants. The greatest details are dealt with the autochthonous species and the following characteristics are given: the valid name, synonyms, exsiccata, description, the nuber of chromosomes, the variation, ecology and coenology, the distribution in the Czech Republic, the total area and its partical significance. With variable species, the subspecies are described in the same order. Foreing species - if not economically significant - are treated only briefly. The basic relevant literature is given as far as the families and genera are concerned.

The first volume deals with ferns (*Lycopodiophyta, Equisetophyta and Polypodiophyta*), gymnosperms (*Pinophyta*) and angiosperms (*Magnoliophyta*), the phylogenetically most ancient dicotyledone orders - Magnoliales, Laurales, Aristolochiales, Nymphaeales, Ranunculales, then with Papaverales and the predominantly anemogamous Hamamelidales and Urticales. The volume ends with a list of Czech and Latin species.

The graphical design of the Flora is very beatiful which is helped by using different types of letters and two columns of setting. The line-drawings (on the basis of the live plant material) made by two authors using the same technique are very instructive. The big size of the book is also benefical.

The Flora of the ČSR will surely serve as an indispensable tool for the experts in biology, agriculture, forestry, nature conservation and ecology, but it will assist to everybody who is more

interested in our plant world. It is regrettable that the book does not cover the whole of Czechoslovakia and therefore the Flora of Slovakia (*ed.* J. Futák *et al.*), the work on which started in 1966, should be published as soon as possible.

The second volume, entitled Flora of the Czech Republic, begins with an introduction giving a precise information on the use of flora cintained in the first volume (also in English) and explaining the selected abbreviations and symbols. The text itself continues in the amentiferous series of the first volume and covers the orders of Fagales, Betulales and Juglandales. These are followed by the group of orders sometimes amalgamated as *Centrospermae, e.g. Caryophyllales, Chenopodiales, Polygonales and Plumbaginales*, then there are 8 orders in the serial order: *Paeonilaes, Theales, Violales, Cucurbitales, Begoniales, Tamaricales* and *Ericales*; some of these show evolutional relationships.

The second volume ddeals with the difficult taxonomic genera for the critical evaluation of which we have waited for years. A number of them are important for the practice in agriculture and forestry.

V. ZELENÝ (*Praha*)

Lozan, J.J.: **Angewandte Statistik für Naturwissenschaftler**. (Pareys Studientexte 74) - Verlag Paul Parey, Berlin - Hamburg 1992 237 pp., in German.

The increasing use of statistics by non-statisticians, as a method to explore data sets and to provide an improved summary of results may well demand the best approach or the most suitable test. Non-statistians become confused by the apparent competing claims for different approaches or the seemingly academic disputes over the various methods. The aim of this publication is to provide the statistical methods necessary for the biologist to analyze the results of assays and to detect effects of treatments above the 'noise' of biological variability. The core of this publications represents 108 types of different experiments with their statistical evaluation. In 9 chapters 72 different statistical tests are described in detail. It is a pity that the author did not deal with some important topics such as the Poisson distribution and with the analyses of covariance. The users of this publication will find a very useful glossary of most frequent statistical terms in German, English and in Spanish.

This publication will be of immense practical use to biologist in various areas of scientific and applied research.

V. POKORNÝ (*Praha*)