

The National Vegetation Survey of Romania

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The geological, geomorphological and climatic diversity of the Romanian territory has determined in the course of the geological periods the appearance and the maintenance of an important contingent of higher plants of different phytogeographical origins, inclusive endemic species, as well as of plant associations, many of them having local floristic peculiarities, such as regional syntaxa.

The floristic, taxonomic and chorological data concerning the cormophyte species identified or described in Romania since the 18th century have been systematised and published in the monograph «The Romanian Flora», volumes I-XIII (1952-1976).

The phytosociological research proper was initiated in Romania by Prof. Borza who, after describing the methodological principles of the Zürich-Montpellier school (Borza, 1926), published the first geobotanical synthesis of vegetation from the Retezat Mountains (Borza, 1934). After the publishing of this work, phytosociological research has developed and extended both to other massifs of the Romanian Carpathians (Șerbănescu, 1939; Paucă, 1941; Morariu, 1942; etc.) and to certain semi-natural or anthropic plant formations (Topa, 1939; Zölyomi 1939; Safta, 1943; Morariu, 1943; Soó, 1949; etc.). Since the 1950s, phytosociological research has been carried out systematically throughout the country, focusing on collecting geobotanical information for the elaboration of doctorate theses, on the one hand (cir. 65), and on publishing a geobotanical monograph similar to the «Romanian Flora», on the other.

This research has led to the publication of more than 30 local monographs and more than 800 papers, including over 30,000 phytosociological relevés.

The austere economic measures imposed in our country after 1980 for the payment of external debts did not allow the financing of such a research project, as specialists had foreseen it.

However, geobotanical research are pursued and several specialists from the Biological Institutes of Bucharest, Cluj-Napoca and Iași publish important papers, necessary for the elaboration of a national geobotanical monograph, such as: «Phytosociological and Ecological characterization of Spontaneous Species in Romanian Flora» (Sanda *et al.*, 1980), «The Conspectus of Grassland Vegetation from Romania» (Popescu *et al.*, 1983), «The Prodrumus of Plant Associations from the Romanian Carpathians» (Coldea, 1991), and «The Phytosociological Bibliography of Romania» (Sanda *et al.*, manuscript).

The first step in the realization of the monographic paper «Romanian Plant Communities» was made in 1995 when we managed to obtain the financing of the project by the Research and Technology Ministry. The research activity as part of this project will be pursued until the end of 1998, and will consist of extracting the phytosociological data from the bibliography, processing relevés and integrating them into associations, subassociations and superior syntaxa, on the basis of characteristic and differential species, according to the principles of the Zürich-Montpellier school. The coordinator of the project is Coldea from the Institute of Biological Research of Cluj-Napoca, and the principal collaborators are Sanda and Popescu from the Biological Institute of Bucharest, Stefan and Sărbu from the Institute of Biological Research of Iasi, and Coste from the Agricultural University of Timisoara.

Field research will also be carried out in certain vegetation types with scattered distribution on the Romanian territory and consequently less studied so far, such as the taxa *Utricularietea intermedio-minoris*, *Litoretetea uniflorae* and *Violetea calaminariae*, in order to collect new relevés to complete the present data.

During the period of 1995-1998, while the project will be carried on, the financial support will amount to 110,000,000 lei (57,000 USD) and will totalise cir. 200 person-months.

The project will be finalised by the publication of the work: «Romanian Plant Communities» in three volumes: «Natural Grassland Vegetation», «Synanthropic non forest Vegetation», and «Forest and Bush Vegetation».

For each class of vegetation and its syntaxa hierarchically organized, a separate text will be presented, including the main floristic-ecologic data concerning: the pedo-climatic conditions, geographical distribution, local floristic peculiarities compared to their general European character reported in the literature, and the vegetation dynamics.

The basic syntaxonomic unit in the plant description will be the plant association, according to the concept of the Zürich-Montpellier school. On the basis of differential species, subassociations will be also delimited which will show especially their affinities with other «related» associations and subassociations, as well as their tendency to syndynamic evolution.

Synthetic phytosociological tables will be presented for each association and subassociation and the component species will be hierarchically grouped by syntaxa, according to their coenotic affinities.

Description of syntaxa will include (a) the scientific name of the syntaxon, (b) an extensive list of synonyms, (c) the characteristic species combination with differential taxa, dominant taxa and constant companions, (d) the characteristics of the syntaxon proper, including description of physiognomy, syntaxonomy, synecology, and syndynamics.

A special attention will be paid to the revision of the scientific name of the syntaxa, and to the validation of certain regional syntaxa described before 1975, according to the provisions of the Code of Phytosociological Nomenclature (Barkman *et al.* 1986).

The nomenclature of the species will be in accordance with once the list of cormophytes elaborated and published by Sanda *et al.* (1983) and updated on the occasion of the initiation of this project.

On the occasion of the accomplishment of this national project, a geobotanical database will be set up, which will be accessible to specialists from Romania and abroad.

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