

FLORA AND VEGETATION OF THE TECUCI PLAIN
BY ADRIAN OPREA
BOOK REVIEW

Presentation. In 2021, the book *Flora and Vegetation of the Tecuci Plain*, written by Dr. Adrian Oprea, after six years of work, is published in Iasi by the “Alexandru Ioan Cuza” University Publishing House. The qualities of this book led me, even at my age, to express them in writing in order to inform readers, accompanied by small comments.

The book is voluminous (597 pages), divided into five comprehensive chapters, two indexes, 43 original colour photographs and an extensive bibliography.

The first chapter contains the physico-geographical characterisation of the Tecuci Plain in which all the ecological factors influencing plant life are analysed and documented, including wind (wind), phenolic (solar illumination) and the quite active anthropic factors. Towards the end he discusses at length 16 habitat types of the Tecuci Plain, a plateau with alluvial sand, terraces and valleys.

The second chapter, *The Vascular Flora*, is very well developed and covers all the taxa identified from incengium to form, but what interests us more is how the author presents one species out of 1484 [compared to 560 previously known, the author's number has increased by adding cultivated species], reported to 108 families: scientific name, author, synonyms, Romanian name, bioform, geoelement, ecological characterization [LTURN], chromosome number, followed by chorology, first after others, then the original one which covers most of the space of the book. The most *species-rich families* are Asteraceae, Poaceae, Fabaceae, Rosaceae... If we refer to bioforms, hemicryptophytes (46%) and therophytes (28%) dominate, or to geoelements, Eurasian and European ones dominate, and endemic ones, as subtaxons, are only 16, i.e. 1.13%. Two previously erroneously cited species [*Legousia hybrida*, *Rosa sempervirens*] are removed and, on the other hand, four species are cited for the first time from the Moldavian area [*Bassia sempervirens*, *Panicum dichotomiflorus*, *Cyperus serotinus*, *Lepidium neglectum*]. Only the cenotic character is missing from the characterisation of the species, which we find in the vegetation. This important chapter occupies over 200 pages.

The third chapter presents plant associations. Before his research 51 associations had already been reported. A. Oprea carried out 600 surveys on areas of 25–100 m² in meadows and 400–1000 m² in forests, from which he uses 577 surveys [each survey has the locality and date of recording] from 39 localities and identifies 107 associations, including some new to science [*Balloto nigrae* – *Ailanthetum altissimae*, *Fraxino pallisae* – *Quercetum*

pedunculiflorae, *Kochietum scopariae*, *Eragrostio poaeoides* – *Tribuletum terrestris*] or new to Moldova [*Elodetm canadensis*, *Scabioso ucrainicae* – *Artemisietum campestris*]. Many associations have few species, more numerous are the wild ones. Each association is described at length and is accompanied by a synthetic table with five or ten relevés, according to the phytocenological method, i.e. with species grouped in cenotaxons according to their phytocenological role. In the description the relief, substrate, distribution, characteristic species, stratification, economic importance, bioform and phytogeographic spectrum are presented. The chapter is concluded at the end of the book by a map of the associations represented by figures.

The fourth chapter presents the valorisation of wild plants. It lists 387 species that are used in a complex way as food, fodder, medicinal, honey, industrial, ornamental, fixing, toxic, pest and weed. For each category, a list of species is given.

The last chapter deals with nature conservation, as this lowland area is strongly influenced by the anthropogenic factor. There are all sorts of lists of rare plants [*Achillea ochroleuca*, *Astragalus dasyanthus*, *Galanthus elwsii*, etc.] and discussions of protected areas, such as the well-known Hanul Conachi sand dunes reserve where many rare and interesting species also grow [*Allium guttatum*, *Astragalus varius*, *Centaurea vladescui*, *Echium maculatum*].

The book is also made widely known to English speakers.

Comments. To be objective is to expose also those lapses of the author with which I disagree:

- The chaotic arrangement of species within families, even if he adds their alphabetical listing, appears unusual to us;

- The old spelling of some binomials, like *Robinia pseudacacia*, corrected, *R. Pseudoacacia* or incomplete as in *Silene heuffeli-i* and *Polycnemum heuffeli-i*, remaining complete in *Juncus gerardi*;

- Careless use of paired terms, “cenotaxonomic conspectus of plant associations” and “nature conservation and preservation”, without being used, these being pleonasms within botany;

- The plural, relevee, is more common, and therefore correct, than the one used, relevees;

- I do not agree with the appendices of species names which take up some 40 pages of the book;

- The names of taxon authors are not always abbreviated, as Oprea says [e.g. Borza, Schur];

- He talks a lot about the rarity of *Echium* when *rossicum*, when *russicum*, and in the list there is another one, *Echium maculatum*;

- The ordering of the species subtaxons starts with the one bearing the species name, not as the author does with *Tragopogon pratensis* and puts it last among the subtaxons;

- In many places *Fraxinus angustifolia* is cited, but in the list it appears correctly, *F.a. subsp. oxycarpa*;

–I think the seven synonyms were not necessary for *Quercus rubra*, an exotic, cultivated plant.

Conclusion. I, as an experienced botanist, consider the book a beautiful achievement in Romanian botany by its breadth, complexity, documentation and original scientific results. The fact that Adrian Oprea collaborated on Determinator (2013) popularized it, and the book proves that the botanist is on the rise, which I wish him. He knew how to make nice and advertise himself through the book's offerings.

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