

BOOK REVIEW

CULIȚĂ SÎRBU, ADRIAN OPREA, *Adventive plants species in Romania's flora*, "Ion Ionescu de la Brad" Publishing House, Iași, 2011, 733 p., 142 photos, 1584 ref.



At the end of year 2011 was published at the "Ion Ionescu de la Brad" Publishing House within the Agricultural and Veterinary Medicine University, the book *Adventive plants species in Romania's flora*, written by two botanists from Iași, Culiță Sîrbu and Adrian Oprea. Published in very good technical condition, the book contains a lot of data on non-native plant species entered over time in Romanian territory.

In the introduction chapter of this volume, the authors clarify terms which are being widely used in botanical foreign or Romanian literature, such as adventive plants species, synanthropic plants (anthropophytes), archaeophytes, neophytes, occasional species, naturalized, invasive etc.

In the volume's pages there are extensively treated, in systematic order, 671 species of adventive vascular plants mentioned from the country's territory, specifying, for each species, the following aspects: phylum, class, subclass, order, family, genus and species, scientific name (including the most common synonyms), popular name, geographical origin, general spreading area, short historical considerations on their introduction in Europe and Romania, historical, chorological, biological and phytocoenological aspects, the invasive character, their impact on natural ecosystems, agriculture or other economic sectors and human health, recommendations for management of invasive species, their spreading in Romania based on literature data and field surveys of the authors in the last 10 years. For each species, the invasive capacity, the potential and actual effects on natural and agricultural ecosystems, the impact on the economy and human health are emphasized.

Other issues are focused on the origin of the taxon, the global areal of the species, its first records in Europe and Romania. Then, the environmental requirements, preferred habitats which are in many cases invaded are presented. At the end of each sheet are presented the choronyms where the species was cited by various authors or even identified by the book's authors in the Romanian flora.

For certain species, some taxonomic considerations are made, the authors composing original identification keys of the related species, more difficult to identify, present in Romania's flora, for example *Azolla*, *Reynoutria*, *Oenothera*, *Amaranthus* etc. genera.

For many species which have become invasive in our country the possibilities of their control are discussed.

Although an extensive bibliography has been used, in some species cases it was not possible a detailed overview of all these aspects. It remains in the responsibility of the authors for any reprinting of this material in the future.

The authors indicate that, of the 671 adventive plant species inventoried in Romania at the time of this volume editing, a total of 112 species are considered invasive, due to their high capacity to spread in nature and, in some cases, to their proved negative impacts on natural biodiversity, economy and human health.

The volume includes 142 original color photographs of the most common species of adventive plants in our country and the localities where the photographs were taken.

The bibliography contains 1584 titles, older and actual, as well as various internet sites addresses consulted. Each paper/website is cited/quoted in the volume. Wherever was possible, the authors intended that the references cited for the species treated in this volume to be the primary ones, and only where it was not possible, data were taken by other authors.

The extensive work of both authors is the result of a long and hard activity of many coronyms registrations, of search and identification of the primary sources of citation for the species in the literature, of systematization and standardization of information etc., all with a critical look on each taxon included in this volume.

Taking into account the above, we believe that this volume will contribute to the information the scientific community and specialized institutions on the potential or on the actual impact of the invasion of adventive plants. It may guide also the development of certain policies at national level in order to prevent and combat the plant invasion phenomenon which will ensure that the principles set out in various international conventions to which Romania is a part are respected (*Convention on the Conservation of European Wildlife and Natural Habitats* – Bern, 1979; *European Strategy on Adventive Invasive Species* - Bern, 2002, etc.).

Aspects of migration history of the adventive species in Romania, the current geographic spreading, their impact on natural biodiversity, economy and human health etc., which are treated in this book, can concur to the satisfaction of the need for knowledge of those interested in plant biology, and to the enrichment of general knowledge of the public.

The paper is ending with the alphabetical index of scientific and popular names of species included in ample volume of the two authors.

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