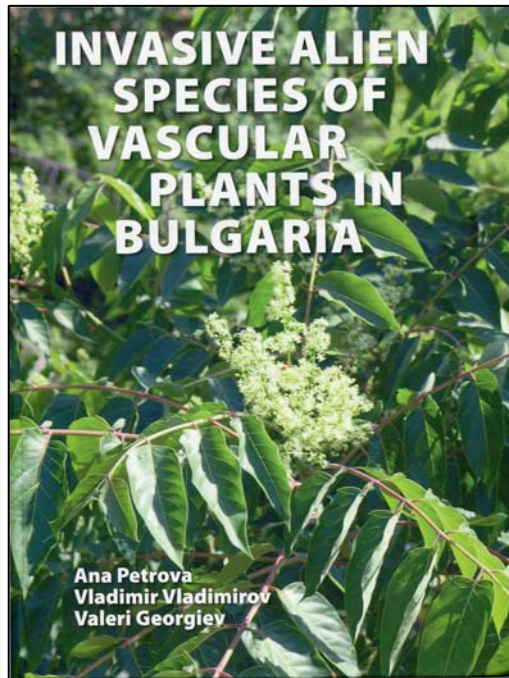


## **BOOK REVIEW**

ANA PETROVA, VLADIMIR VLADIMIROV, VALERI GEORGIEV, *Invasive alien species of vascular plants in Bulgaria*, Sofia, 2013, 319 p., 242 photos, 60 maps, and 434 references.



In 2013 a very valuable book was published at Sofia, namely *Invasive alien species of vascular plants in Bulgaria*, as an output of a national scientific project called “Biology, Ecology and Control of the Invasive Alien Species in the Bulgarian flora” (DO 02-194, 2009-2012), financed by the National Science Fund of the Ministry of Education, Youth and Science of the Republic of Bulgaria. The authors are well known Bulgarian botanists: Ana Petrova, Vladimir Vladimirov, and Valeri Georgiev.

The book has been published in very good technical conditions, with color, detailed photographs, and lot of references for every described plant species.

In the first part of the book, the authors presented a well documented analysis concerning the next principal issues: the impact of invasive species on natural biodiversity; ways and pathways for introduction of the invasive alien plants; international and Bulgarian legislation, organizations and documents related to the invasive alien species; the terminology related to alien plants used in the book; the current state of knowledge on invasive plant species in Europe, Balkan region and Bulgaria; the control of the invasive alien species.

Of the invasive alien species spread in Bulgaria, the authors separated a number of 10 species of the worst invasive (“Top 10”), including the following ones: *Acer negundo*,

*Ailanthus altissima*, *Ambrosia artemisiifolia*, *Bidens frondosus*, *Elodea nuttallii*, *Fallopia × bohemica*, *Opuntia humifusa*, *Paspalum distichum*, and *Robinia pseudacacia*.

We note that the authors consider as invasive those alien species whose introduction and / or spread threaten native biodiversity and natural ecosystems. This definition, which is in the spirit of the Convention on Biological Diversity, differs to some extent from the approach of Richardson et al. (2000), who proposed that the term 'invasive' should be used, without any implication to environmental or economic impact, in order to designate those naturalized species which have a great potential to spread over a considerable area (the cited authors consider the plants, not necessarily alien, that have harmful economic or environmental effects, as weeds and / or transformers).

In the main section of the book, the authors described a number of 60 alien vascular plants species, from 25 plant families, which are invasive and potentially invasive on the territory of Bulgaria. These 60 species were chosen based on the available data in the botanical references, as well as on the author's experience. Among these, 44 species are of American origins, the others being originated in Asia, Australia, Africa, the Mediterranean region, etc. For each species the authors presented comprehensive information about its morphology, biology and ecology, origin and distribution, control, and finally, a list of main references. Each species is illustrated with high quality original photographs, and distribution maps in Bulgaria, using the UTM-grid network (10 × 10 km grid squares).

We consider this book as an exceptional editorial issue and recommend it warmly to anyone interested in botany, not only in the study of alien plants.

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