

Werner Greuter. 2008.

Med-Checklist. A Critical Inventory of Vascular Plants of the Circum-Mediterranean Countries. Vol. 2. Dicotyledones (Compositae).

Edited by Werner Greuter and Eckhard von Raab-Straube (*Pilosella* by Siegfried Bräutigam & Werner Greuter; *Taraxacum* by Jan Kirschner, Jan Štěpánek & Werner Greuter).

OPTIMA Secretariat, Palermo, Med-Checklist Trust of OPTIMA, Genève, and Euro+Med Plantbase Secretariat, Berlin.
ISBN: 978-2-8279-0011-4. cclxxxvii + 798 pages; cloth.

Vladimir Vladimirov

Institute of Botany, Bulgarian Academy of Sciences,
Acad. Georgi Bonchev St., bl. 23, 1113 Sofia, Bulgaria,
e-mail: vdvlad@bio.bas.bg

The Med-Checklist series started in 1978, under the scientific authority of the Organisation for the Phyto-Taxonomic Investigation of the Mediterranean Area (OPTIMA). It was planned to comprise 6 volumes, of which volumes 1, 3 & 4 have been published so far. Some 20 years after the appearance of the latest Med-checklist volume, vol. 4 (1989), a new one recently (end of December 2008) the saw light! The book is devoted to *Compositae*, the largest family in the Mediterranean area. It comprises: **1).** An introductory chapter explaining the historical background and nature of Med-Checklist, its relation with the Euro+Med Plantbase project, taxonomic and geographic coverage and arrangements, preparation of the book, sources and references, acknowledgements, etc. **2).** A Checklist (synonymic catalogue, on 798 pp.) of the *Compositae* species and subspecies growing in the wild in the countries of the Mediterranean area; the taxa are arranged in alphabetical order by genera, then by species within a genus, and by subspecies within a species (or section, in *Taraxacum*). **3).** A list of basic Floras (Appendix I). **4).** Additional references (Appendix II). **5).** A list of genera arranged by tribes (Appendix III). **6).** An alphabetical list of the genera with tribes (Appendix IV). **7).** A list of excluded hybrids (Appendix V. Hybridae exclusae). **8).** An index of new names and combinations published in the volume (Appendix VI). **9).** An index of scientific names.

The first impression of the book is the awesome bulk, requiring physical strength and sufficient space to consult it! Surprisingly, it is not that heavy (printed



on thin paper) with its 1085 pages reflecting the huge amount of work carried out mainly by Werner Greuter, one of the founders of the series! The introductory part tells the reader how the book was prepared. Many collaborators from the Botanic Garden and Botanical Museum Berlin-Dahlem have taken part. An international network of experts have provided data and advice on particular countries and regions, and thus contributed to the accuracy, completeness and reliability of the volume. Siegfried Bräutigam co-authored the account of *Pilosella*; Jan Kirschner and Jan Štěpánek that of *Taraxacum*. Editorial work was shared with Eckhard von Raab Straube.

The Checklist is a comprehensive synonymic catalogue of all species and subspecies of the *Compositae* in the Mediterranean area, providing a correct nomenclature under current taxonomic standards. Furthermore, it gives territory-by-territory distribution for all listed taxa up to the aggregate level. A total of 278 genera, 4337 species and additional 2384 subspecies (6721 species and subspecies) are accepted, and more than 19000 names are recorded in the volume! The geographic coverage includes all countries surrounding the Mediterranean Sea plus Portugal, Bulgaria, Crimea (Ukraine), and Jordan. Whenever

the latest comprehensive and competent studies on particular groups for the Med-Checklist area were available, they were taken into account and featured in the Checklist, including for delimitation of genera, species and subspecies. Therefore, numerous differences from the well known taxonomic scheme in *Flora Europaea*, vol. 4 (1976), are to be found.

A few innovations were introduced in this book as compared to the previous Med-Checklist volumes. For instance, one can find sections listed under *Taraxacum* which was never allowed in the earlier volumes. And most importantly, one can find new names and combinations validly published here (listed in Appendix VI)!

The reader may disagree or feel uncomfortable with the taxonomic schemes adopted in some of the groups. As a person working on *Hieracium* s.l., I myself strongly favour the separation of *Pilosella* and *Hieracium* s.str. as two distinct genera, as accepted in Med-Checklist. I also favour the taxonomic treatment of the former genus but I dislike the taxonomic

concept adopted in the latter one (very broad species, most of them with numerous subspecies of unknown relations). However, I do have to admit that this is probably the best (if not the only possible!) treatment of this taxonomically very complex group for such a large area, considering the scarce information and lack of any contemporary work for most of the Mediterranean countries.

The Med-Checklist, vol.2, provides very exhaustive, nomenclaturally correct information about the *Compositae* and sets up a “common language” for all botanists and other interested experts from all Mediterranean countries. I am very glad to have this volume at my personal disposal and strongly recommend anyone interested in the *Compositae* taxonomy and distribution, authors of Floras and Field Guides, botanical libraries, etc. to obtain a copy. It is an excellent reference book, available for only Euro 120 (plus shipping charges) from: OPTIMA Secretariat, c/o Orto Botanico, Via Lincoln 2/A, 90123 Palermo (secr@optima-bot.org) (25% discount for regular OPTIMA members!).

Matevski, V., Čarni, A., Kostadinovski, M., Košir, P., Šilc, U. & Zelnik, I. 2008.

Flora and Vegetation of the Macedonian Steppe

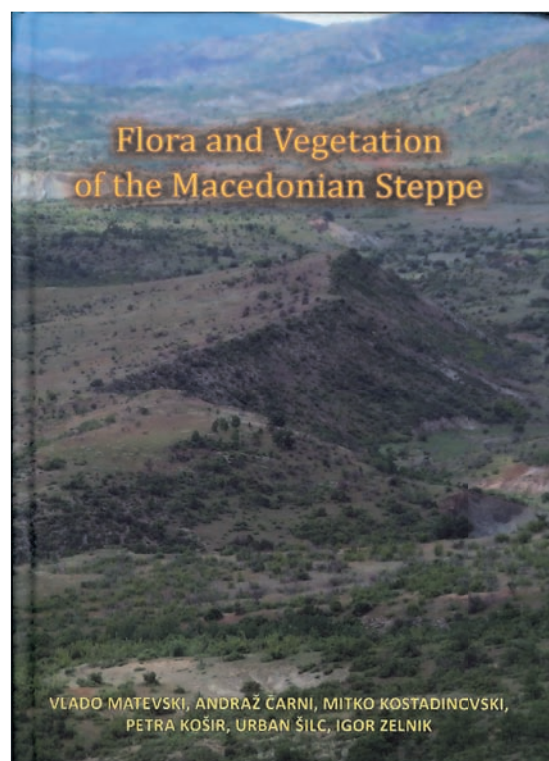
Založba ZRC, Ljubljana, 96 pp., ISBN 978-961-254-105-7.

Hardback. 14.30 €

Iva Apostolova

Institute of Botany, Bulgarian Academy of Sciences,
Acad. Georgi Bonchev St., bl. 23, 1113 Sofia, Bulgaria,
e-mail: iva@bio.bas.bg

The study has been conducted within the framework of a joint project carried out by the Institute of Biology at the Scientific Research Centre of the Slovenian Academy of Sciences and Arts in Ljubljana and the Faculty of Natural Sciences and Mathematics at the University of Ss. Cyril and Methodius in Skopje. The main purpose of the book is to reveal the natural significance of the observed area and to suggest measures for preservation of priority species and habitats.



The central part of the Republic of Macedonia, which lies in the triangle between Veles, Štip and Negotino, is a relatively large area different from the rest of the country. The book offers information about the botanical treasures of this region. Although the title is focused on the steppe vegetation, it includes quite diverse vegetation types (e.g. dry grasslands, meadows, halophytic communities, forests).

The bedrock of the region is composed of Paleogenic and seldom of Neogenic sediments. All Paleogenic sediments are of marine origin and therefore extremely salt-rich. As a result of severe erosion there is a shallow soil substrate which determines the distribution of the endemic flora. The annual precipitation of 460 mm and mean annual temperature of 13.3°C clearly encourage the development of secondary steppe grasslands. The potential natural vegetation of the region consists of forests comprising mostly *Carpinus orientalis*, *Quercus pubescens*, *Q. frainetto* and *Fraxinus ornus*. Contemporary vegetation results from long-time anthropogenic influence, forest clearing and, in the near past, the place was a military training area. Actually, the military activities have had some positive effect on the preservation of biodiversity, because the land was not used intensively. However, there could be mentioned some negative consequences too, such as soil compression, erosion and fires.

The information was collected mostly by field research during 2006-2007. The vegetation was defined on the floristic-ecological principles. On the basis of vegetation data the habitats of European significance have been defined.

The following species are described in detail: *Hedysarum macedonicum* Bornm., *Astragalus cernjavskii* Stoj., *Tulipa mariannae* Lindtner, *Onobrychis megalophylla* Boiss., *Ferulago macedonica* Micevski & Mayer, *Salvia jurisicii* Košanin, *Potentilla tridentula* Velen., *Heptaptera macedonica* (Bornm.) Tutin, *Cardopatum corymbosum* (L.) Pers., *Galatella villosa* (L.) Rchb., *Artemisia maritima* L., *Krascheninnikovia ceratoides* (L.) Gueldenst., *Camphorosma monspeliaca* L., *Camphorosma annua* Pall., *Astragalus parnassi* Boiss., *Morina persica* L., and *Convolvulus holosericeus* M. Bieb. The book

also gives all registered localities in the country. A distribution map and colour photographs illustrate each species.

The study of vegetation results in a systematic overlook over the vegetation types of the region: weed (*Stellarietea mediae*) and ruderal communities (*Artemisietea*), communities of salted sites (*Puccinellio-Salicornietea*), dry grasslands and steppe communities (*Festuco-Brometea*), meadows (*Molinio-Arrhenatheretea*), wetland communities (*Phragmiti-Magnocaricetea*), riverine forests (*Salicetea purpureae*, *Quercu-Fagetea*), and thermophilous scrublands and forests (*Quercetea pubescentis*). There are descriptions of new syntaxa and nomenclatural corrections, as *Eryngio campestris-Paliurion spinae-christi*, *Jasmini fruticantis-Paliurium spinae-christi*, *Pistacio terebinthi-Juniperetum oxycedri*, *Carpino orientalis-Quercetum frainetto*, *Salvio verbenacae-Avenetum barbatae*, *Onopodum Marrubietum peregrini* and *Pegonetum harmalae*.

All community types are referred to respective EUNIS and Palearctic habitats. There appear to be well developed priority habitats of semi-natural dry grasslands and steppe communities of the class *Festuco-Brometea*, inland salt steppes with *Camphorosma monspeliaca*, arborescent matorral with *Juniperus oxycedrus*, and *Quercus frainetto* woods. Some other important habitats were discovered on smaller areas.

The six most important localities for further conservation have been established. The most interesting botanical site is Orlovo Brdo, where all endemic species are concentrated. It has been proposed for restricted access and very low-intensity agriculture as immediate measures for preservation. That area hosts the classic localities of four endemic species and should be forbidden for any plant collection.

The book will be important to botanists interested in the Balkan flora and vegetation. It will be of value to the Bulgarian phytosociologists who need information from neighboring countries for comparative analyses.

The publication is of great interest to the experts in botany, vegetation ecology and nature protection. The book also provides useful information to a wider public interested in the plant world.

DAISIE. 2009.

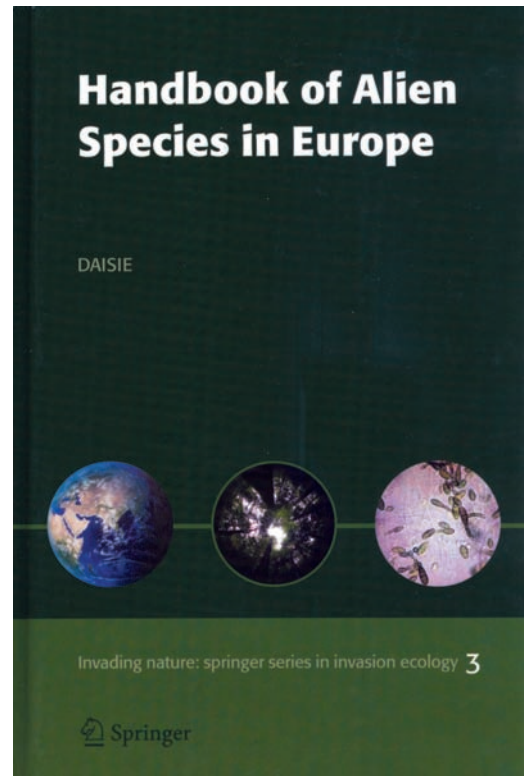
Handbook of Alien Species in Europe. – In: Drake, J.A. (series ed.)
Invading Nature: Springer Series in Invasion Ecology. Vol. 3.

Springer. Hardback, 399+xxviii pp. ISBN: 978-1-4020-8279-5,
e-ISBN: 978-1-4020-8280-1.

Vladimir Vladimirov

The book is the third volume in a series dealing with the invasive species and invasion ecology. It is the result of the EU-funded project Delivering Alien Invasive Species Inventory for Europe (DAISIE) and represents the first Europe-wide presentation of the scale and impact of biological invasions on the continent. The *Handbook* comprises 14 Articles, most of which are devoted to the alien species by major taxonomic groups of organisms. Of particular interest to the readers of *Phytologia Balcanica* may be the following chapters: **1)** A pan-European inventory of alien species: rationale, implementations and implications for managing biological invasions; **2)** Alien fungi of Europe; **3)** Alien bryophytes and lichens of Europe; **4)** Alien vascular plants of Europe; **10 & 11)** Introduction to the List of Alien Taxa & List of Species Alien in Europe and to Europe; **12)** One hundred of the most invasive alien species in Europe; **13)** Species accounts of 100 of the most invasive alien species in Europe. At the end, the book is supplied with a glossary of the main technical terms used in the handbook (chapter 14) and taxonomic index.

The *Handbook of Alien Species in Europe* summarises the major research findings in the field and addresses the invasion trends, pathways, economic and ecological impacts of alien species. About 11 000 alien



species recorded in Europe are listed. Each of the fact sheets for 100 of the most invasive alien species is supplemented with a distribution map and colour illustration. A regularly updated free-access internet database (<http://www.europe-aliens.org>) complements the book and gives additional information. Both the *Handbook* and the database provide a solid basis for future research, management and control of alien invasive species in Europe.

Available from Springer: www.springer.com