

BOOK REVIEWS

Peev, D. (Editor-in-Chief) 2012

Important Plant Areas in Bulgaria

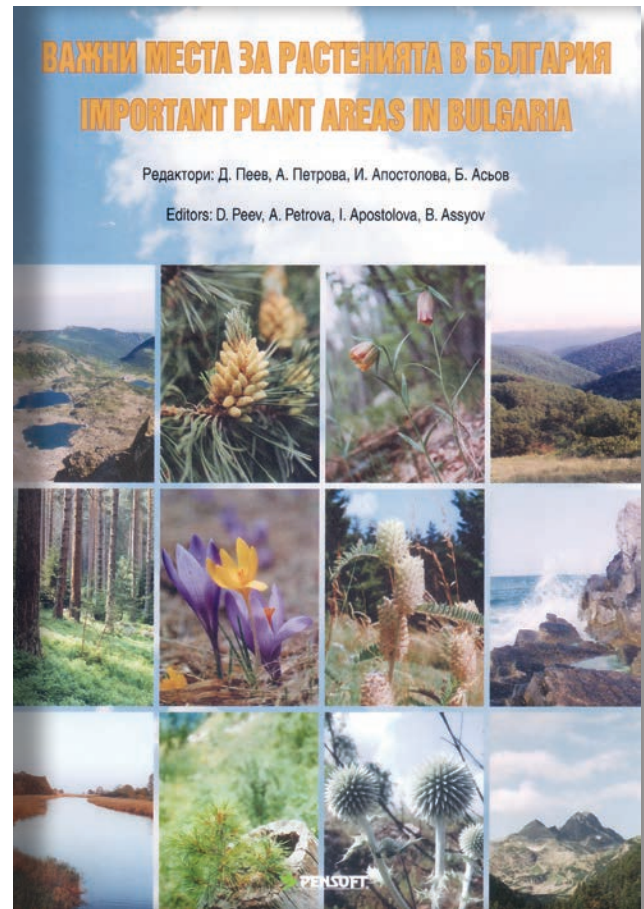
Pensoft Publishers on behalf of the Institute of Biodiversity and Ecosystem Research of the Bulgarian Academy of Sciences, Sofia-Moscow, 469 pp. ISBN 978-954-642-650-5.

Alexander Tashev

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The higher flora on the Balkan Peninsula is relatively little known and is particularly important on behalf of its geographical location as a migration bridge between the East and the West, varied relief with over 300 habitat units (CORINE Biotopes), and its geological history, according to which the earlier fossil floras in Bulgaria are dated back to the Neogene and the latest to the Late Quaternary. It was not accidental that in 1928 the English botanist William Turrill wrote: "The Balkans are richer in flora than any other comparable area in Europe". The extraordinarily varied relief of Bulgaria and the fact that its territory falls into various biogeographical zones, as well as the geohistorical development of the Balkans have preconditioned considerable richness of the Important Plant Areas (IPA) in Bulgaria. Even after the civilization boom in the 20th and early 21st centuries, there are still places left with relatively high degree of naturalness in the country.

At that level of botanical knowledge about the flora, vegetation and habitats in Bulgaria, a project related directly to the **Convention on Biological Diversity (CBD)** was carried out in the country in the period 2007–2010, related also to the diminishing number of plants across the world, as well as to deterioration of some important centres for their conservation. The project was a direct consequence of the implementation of Target 5 of the **Global Strategy for Plant Conservation** adopted in 2002 in the Hague by the countries which ratified CBD: **To protect 50% of the most important areas for plant diversity**. In order to achieve that target, a group of Bulgarian botanists developed an IPA network on the territory of Bulgaria with the following common



characteristics: 125 IPAs altogether, with a territory of about 1 403 770 ha under them. Quite naturally, most of the network (70%) coincided with that of NATURA 2000. It was absolutely logical, because the same criteria were applied during selection of the NATURA sites: species richness; habitat level; conservation concern, etc. The same relates to a great extent to the Important Bird Areas, where coincidence was also high: about 20%. A glance at the map of Bulgaria to see the location of IPAs would show their concentration on the periphery of the country, in the mountain areas and partially along the larger inland rivers. This also was logical, considering the zone of intensive agriculture.

The project was implemented by the Bulgarian Biodiversity Foundation, Botanical Garden of the Bulgarian Academy of Sciences, Bulgarian Fund for Nature Association, Institute for Sun-Earth Interactions, and Bulgarian Academy of Sciences. The partner-organisations were the Ministry

of Environment and Waters, National Nature Conservation Office, Regional Inspectorates for Environment and Waters in Sofia, Varna, Burgas, Pleven, and Shumen, Directorates of the National and Nature Parks, and of the following NGOs: Bulgarian Society for the Protection of Birds and the Rhodopi Project. In the course of the project development, data from the NATURA 2000 Project were used, as well as data provided by the state forestry farms and by experts from the St Kliment Ohridski University of Sofia (Biological and Medical Faculties), University of Forestry and the National Museum of Natural History.

The territory of the country was divided into four general zones, with different number of IPAs described in them: 28 in Northeast Bulgaria, 27 in Northwest Bulgaria, 33 in Southeast Bulgaria, and 37 in Southwest Bulgaria. These 125 areas include in full or some major parts of priority and important habitats with various degree of conservation concern related to all IUCN categories. A considerable portion (about 80%) of the IPA network falls into protected territories. In many cases they were declared protected particularly because of the plant genetic fund contained by them. Development of the IPA network is a significant add-on to the network of Important Bird Areas, NATURA 2000, etc.

The results of the project implementation were published in a de luxe edition. In the introduction to the book, the approaches to the development of IPAs are described: concepts and methodology. In that part, for the first time a comparison is made of the species and subspecies diversity in the floras of the Balkan counties. Balkan and local endemic elements are compared in them too. The international IPA Program is characterized as a mechanism for identification and protection of the best places for plant conservation in the world. IPAs are determined as *“sites with natural and semi-natural vegetation of exceptional botanical richness and/or endemic species, and/or vegetation of high botanical importance”*. The main criteria for determining IPAs are listed (according to Anderson 2002), each with detailed characteristic: Criterion A (Threatened Species), Criterion B (Richness) and Criterion C (Threatened Habitats). The approaches used for determining IPAs are given and application of these criteria in Bulgaria is described, supported by Tables of Species arranged according to the criteria A(i) and A(ii) and criteria A(iii) and A(iv).

The second part of the book presents the outcomes of the project development: general characteristic of

the IPA network in Bulgaria and detailed characteristic of each of the 125 IPAs in the country.

Each IPA entry is based on the following scheme: IPAs name, code (starting from BGIPA001 and up to BGIPA125), area in hectares, geographical coordinates and altitude, administrative unit and biogeographical zone. Then follows a general description of the zone, which includes geographical location, description of borders, relief and vegetation cover. The next point provides characterisation of the botanical importance of the site, including the conservation goal. The latter is reduced to conservation of rare plant and fungal species and habitats described in that part: the species are listed according to Criterion A and the habitats according to Criterion C. The extent of investigation of the site is also mentioned. The next point deals with IPAs relation to the protected territories under NATURA 2000, as well as the various categories of protected territories which fall into IPAs. The point “Management of the Territory” shows the State structures in charge of the characterized territory, and the point “Land Use” describes the modes of land management in IPAs. The point “Threats” lists all adverse anthropogenic factors threatening the integrity of rare species and habitats. The point “Recommendations” describes the measures needed for better protection of the rare species and habitats. Each entry ends with “References” point, which lists the literature used for the project development and the authors who did it by systematic groups. Unfortunately, the references of some IPAs are not quite complete. The book is amply supplied by high-quality photographs made by the authors, which illustrate excellently the habitats and rare species occurring in each IPA.

The described IPAs include both large-area territories, with a recognized environmental status, such as Rila and Pirin Mts, Mt Slavyanka, territories of the Rhodopi Mts (Dobrostan, Mursalitsa in the region of Trigrad, parts of the valley of river Arda, etc.), the Western Balkan Range, Vratsa Balkan Divide, Central Balkan, Sinite Kamani, and small territories, usually with localities of relict or endemic species, or rare habitats (Krusheto, Izvoro, Sivino, Manole, Taushan Tepe, etc.).

The various IPAs were developed by a large team of Bulgarian botanists: K. Angelova, I. Apostolova, B. Assyov, S. Bancheva, D. Venkova, V. Vladimirov, N. Valyovska, A. Ganeva, V. Georgiev, Ch. Gussev, M. Gyosheva, M. Delcheva, Y. Marinov, K. Metodiev, T. Meshinev, R. Natcheva, D. Peev, A. Petrova, Zh. Spiridonov, D. Stoykov, S. Stoyanov, V. Trifonov, and

S. Tsoneva. The book is edited by D. Peev, A. Petrova, I. Apostolova, and B. Assyov.

The great advantage of the book is that all IPA entries, as well as the other texts are presented both in Bulgarian and in English and the book could be found in the Internet following the link http://www.academia.edu/2103138/Important_Plant_Areas_in_Bulgaria. This ensures an easy access to it for a wide range of readers in Bulgaria and abroad. The publication was supported financially by the Scientific Research Fund at the Ministry of Education, Youth and Science and co-financed by Plantlife International.

William T. Stearn, Peter H. Davis & Kit Tan. 2012

Peonies of Greece

A taxonomic and historical survey of the genus *Paeonia* in Greece

Colour plates: Niki Goulandris

The Goulandris Natural History Museum, Kifissia – Greece.

133 pp. Hardback. ISBN: 978-960-464-364-6.

Vladimir Vladimirov

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P*eonies of Greece* was first published in 1984 with text prepared by W. T. Stearn and P. H. Davis. Taxonomic studies on the genus worldwide has necessitated substantial changes in the taxonomy of the genus in the Mediterranean area. The authors of the present work are eminent botanists. William T. Stearn began his studies on *Paeonia* in 1935. He is part-author of *Wild Flowers of Greece* (1968), edited almost all volumes of *Annales Musei Goulandris* (1977–1999) and is best known for his publication *Botanical Latin* (4th ed. 2004). Peter H. Davis devoted most of his life to the exploration of the flora of the Near East and is best known for the monumental multi-volume *Flora of Turkey and the East Aegean Islands* (vols 1-9, 1965–1985, with supplemental vols 10-11, 1988 & 2001). Kit Tan is deeply involved in research on the biodiversity of the flora of Turkey and the Balkan Peninsula. She is well known for authoring/

The arrival of this beautifully laid out book is very timely and relevant. It will provide a valuable source of information about the important plant areas in Bulgaria both to Nature-lovers in the country and to professional botanists, phytocoenologists and ecologists in Bulgaria and abroad. It will assist all ecologists in Bulgaria in their campaigns against various investment projects which may threaten up with extinction valuable parts of the Bulgarian flora. In order to let it play an effective and not simply a wishful (as presently) part, it needs to gain a legal status.



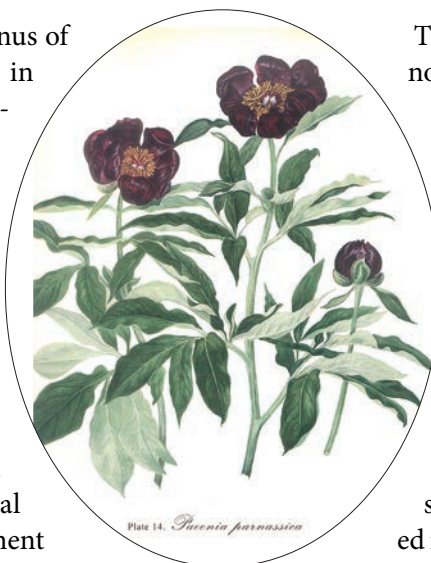
co-authoring or editing/co-editing several major publications, including *Flora of Turkey and the East Aegean Islands*, *Mountain Flora of Greece*, *Flora Hellenica* and *Endemic Plants of Greece*. The excellent colour plates in the book are the work of Niki Goulandris. She is the current president of the Goulandris Natural History Museum and is a well known personality in the fields of ecology and culture, with numerous awards and nominations, including “Woman of Europe” by the European Community Commission in 1991.

Paeonia L. is a relatively small genus of vascular plants, with *ca.* 30 species in the northern hemisphere, but is notorious for its difficulties in species delimitation. Many species have long been used as garden ornamentals and some have a repute of medicinal value. The genus is represented in Europe by *ca.* 20 native species (cf. Euro+Med Plant Base) of which 6 are present in Greece.

The book includes several chapters: I. Historical Introduction; II. General Morphology; III. General Distribution; IV. Taxonomic treatment of the Greek species; V. Cultivation; VI. Bibliography.

The first chapter of the book is a historical introduction to the genus. It gives information on the origin of the name *Paeonia* and species recognition and use since ancient times, i.e. since Dioscorides' and Pliny's accounts of *Paeonia* until the present day understanding of the species in the Mediterranean and especially in Greece.

The next chapter deals with the general morphology, providing the distinctive features of the genus with special emphasis on the Greek taxa. In the chapter "General Distribution" are discussed the distribution patterns of the species. The genus is represented by three sections: *P.* sect. *Moutan*, confined to eastern Asia, *P.* sect. *Onaepia* from western North America, and the largest *P.* sect. *Paeonia*, to which all European taxa belong. The authors provide evidence about the relic nature of the species in the Balkans and outline the connections of the present distribution patterns of the species with the palaeography of the Aegean. The text is well supported by three distribution maps (figs 22-24) based on the available locality records.



The fourth chapter presents the taxonomic treatment of the Greek taxa. The chapter begins with a brief description of the genus and a determination key for the Greek species. The following species are included: *Paeonia clusii*, *P. daurica*, *P. mascula*, *P. corsica*, *P. peregrina* and *P. parnassica*. Each species is featured with brief morphological description, including chromosome number, habitats and flowering period, distribution in Greece and external distribution. The subspecies, when recognized, are treated in the same manner. For each taxon detailed synonymy is given, as well as citation of the protologue and references to illustrations and icons. At the end of each taxon very interesting and useful remarks are provided on the discovery, further collecting and understanding of the taxon in Greece.

Chapter five provides detailed and useful guidance on how to cultivate the species, the best growing conditions for the different taxa, presenting the author's (W.T.S.) own observations and experience in Greece, U.K. and Central Europe.

In Chapter six 59 references are listed.

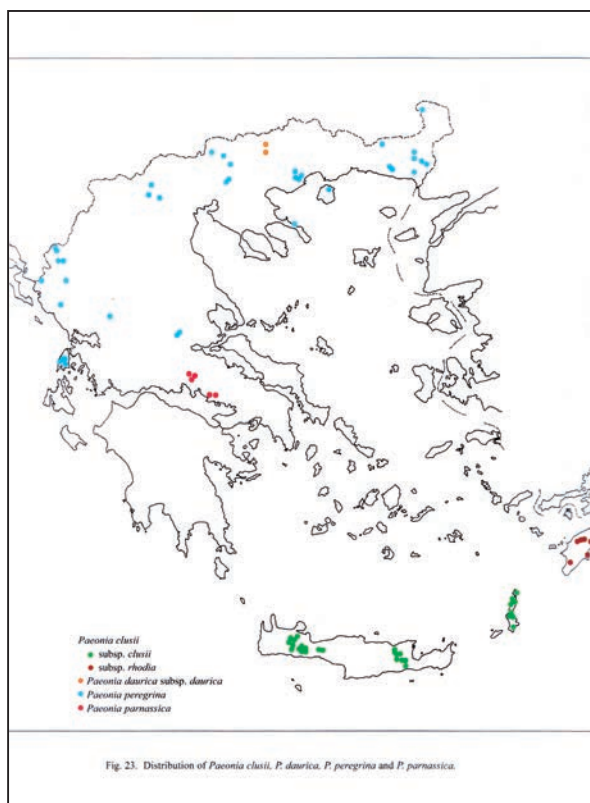


Fig. 23. Distribution of *Paeonia clusii*, *P. daurica*, *P. peregrina* and *P. parnassica*.

The book is luxurious, royal-looking with the colour plate of *Paeonia mascula* subsp. *hellenica* on its jacket. It is amply illustrated with drawings of *Paeonia* species from older books, detailed distribution maps of the taxa, as well as 12 excellent colour plates painted by N. Goulondris.

Although reflecting Hong's *Peonies of the World* (2010), the authors present their own taxonomic understanding of the genus in Greece. Therefore, differences exist, e.g. *P. saueri* Hong & al., a recently described species from S Albania and NE Greece, is treated as conspecific with *P. peregrina*.

Do obtain a copy of the book to enjoy reading about these spectacular plants! You will learn much about the history of the genus, the Greek taxa, and ... who the best conservationist of the *Paeonia* species was in ancient times! This is an

excellent and very reliable source of information for the Eastern Mediterranean and Balkan species of *Paeonia*, of undisputable interest to any professional botanist, gardener or to everyone interested in botanical art.

BOOK ANNOUNCEMENTS

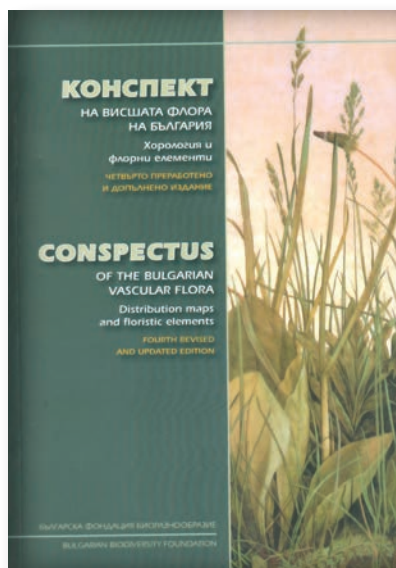
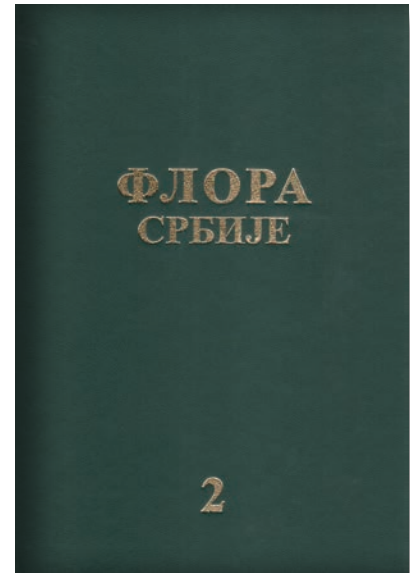
Stevanović, V. (ed.). 2012

The Flora of Serbia. Vol. 2

2nd revised and enlarged edition. Serbian Acad. Sci. Arts, Belgrade. 619+xiv pp. Hardback.
ISBN 978-86-7025-574-6 (in Serbo-Croatian).

Content: Contents, Preface, [Taxonomic treatment of the included groups], Distribution of the taxa in Serbia, Index of Serbian vernacular names, Index alphabeticus [of Latin names].

The volume includes taxonomic treatment of the following groups of vascular plants: *Berberidaceae*, *Papaveraceae*, *Fumariaceae*, *Platanaceae*, *Moraceae*, *Cannabaceae*, *Ulmaceae*, *Urticaceae*, *Fagaceae*, *Betulaceae*, *Corylaceae*, *Juglandaceae*, *Phytolaccaceae*, and *Caryophyllaceae*. Presentation of the taxa follows the conventions already established in the previous volume, i.e. with identification keys, for families and genera – accepted name and original publication, morphological description, for species – current taxonomic name, synonyms, detailed morphological description, habitats, general distribution, floristic element, distribution in Serbia, usage and notes (if any). The species are illustrated with precise drawings on a total of 66 plates. Provided are 10 × 10 km UTM distribution maps for 142 species.



Assyov, B. & Petrova, A. (eds). 2012

Conspectus of the Bulgarian Vascular Flora *Distribution maps and floristic elements*

4th revised and updated edition. Sofia. 490 pp. Softback.
ISBN-978-954-9959-58-1 (in Bulgarian and English).

Content: Foreword to the fourth edition, Forwards to the third and second editions, How to use the Conspectus, Map of the floristic regions and subregions in Bulgaria, Map of the floristic elements, [treatment of all species in the Bulgarian flora], References, List of the genera and their families, List of the families and their genera.

This fourth revised and updated edition contains information on 4102 species of vascular plants in the Bulgarian flora (including some doubtfully recorded taxa). For each species is provided the currently accepted Latin name and authority, map of distribution in Bulgaria by floristic regions and subregions, elevation, floristic element and legal protection status. The book is intended for professional botanists, students, plant conservation authorities and all who are interested in the Bulgarian vascular plants.



Petrova, A., Assyov, B., Karakiev, T.,
Dimitrova, M. & Vasilev, R. 2012

***The Plants of the Chepan–Dragoman
Important Plant Area***

Botanical Garden – BAS, Balkani Wildlife Society & Bulgarian Biodiversity Foundation, Sofia. Paperback. ISBN 978-619-90035-1-0, 978-954-9959-61-1, 978-954-90122-5-5 (in Bulgarian).

The book presents 120 species of vascular plants occurring in the Chepan–Dragoman Important Plant Area. Endemics, taxa of conservation concern and attractive species have been included. Each species is illustrated with one or two colour photographs and is featured with a concise text, arranged under the following headings: description and biology, habitats and populations, distribution in Bulgaria and general distribution, conservation status, threats and conservation measures, similar species. When appropriate, some interesting facts about the species are presented, e.g. connected with its name, discovery or usage. The species are arranged alphabetically by Latin family names, and then by Latin binominal name of the species. Indices of the Latin and Bulgarian names of the species, list of the literature sources used for preparation of the book and a map of the site are supplemented at the end.



Stanev, S. 2013

***Notable Bulgarian Botanists/
Stars Are Dying in the Mountain***

[Бележити български ботаници/Звезди гаснат в планината].

Paisij Hilendarski Univ. Press, Plovdiv. 504 pp. Hardback. ISBN 978-954-423-821-6 (in Bulgarian).

The present publication combines two separate books by the prominent promoter of botanical knowledge, Prof. Stefan Stanev. The book comprises the 3rd edition of *Notable Bulgarian Botanists* [Бележити български ботаници], supplemented by seven new and intriguing stories about notable Bulgarian botanists: Dimitar Delipavlov, Dimitar Vodenicharov, Ivan Bondev, Emanuil Palamarev, Ivan Assenov, Stephan Kozhuharov and Bogdan Kuzmanov. *Stars Are Dying in the Mountain* [Звезди гаснат в планината] was published for the first time in 1975, with entries about 16 species and, owing to the great readers' interest, has undergone several editions ever since. The present book contains its 6th edition with excit-

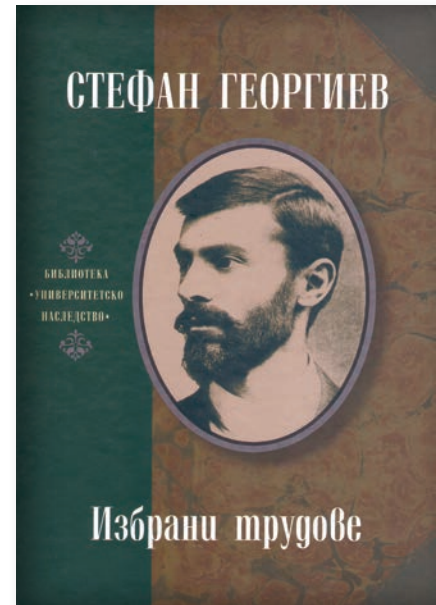
ing entries about the history of now 31 species of rare plants in the Bulgarian flora. As compared to the latest 5th ed., three new species are included: *Geum bulgaricum*, *Potentilla fruticosa* and *Gentiana lutea*. The book is illustrated, including with colour photographs of the plant species in it.

Stanev, S. 2013

Stefan Georgiev. Selected publications

St. Kliment Ohridski Univ. Press, Sofia. 264 pp. Hardback.
ISBN 978-954-07-2858-2 (in Bulgarian).

Stefan Georgiev was the first Bulgarian professor in Botany. The book begins with the intriguing biography and professional achievements of S. Georgiev, presented with a great respect by the author. It contains the major works of Prof. Stefan Georgiev published in Bulgarian, including *Materials on the flora of South Bulgaria (Thrace)* (1889), *The Rhodopes and Rila Mts and their plant world* (1890-1891), and *Ranunculaceae in Bulgaria* (1900). A complete list of all publications of Prof. S. Georgiev is supplemented at the end of the book. The edition provides an opportunity to the explorers of the Bulgarian and Balkan flora to access easily these important works, copies of which now remaining only in few libraries.



Tsoneva, S., Georgiev, V., Valchev, V. & Ganeva, A. 2012

Atlas of Aquatic and Wetland Plants in Bulgaria

IBER-BAS, Sofia. 200 pp. Hardback. ISBN 978-954-9746-28-0 (in Bulgarian).



Content: Foreword, Structure and contents of the Atlas, Water macrophytes – definition and notes, Water macrophytes in Bulgaria, Water mosses, [colour photos and treatment of the included species], References, Index to the Bulgarian names, Index to the Latin names, and Glossary of terms.

The Atlas contains generalised information about the diversity of aquatic macrophytes (ferns, seed plants and mosses) in Bulgaria and presents data on the morphology, biology, distribution and importance of a significant part of the widespread and common species in the country, as well as on some protected and rare plants. The book contains original colour photographs of 150 species

of vascular plants and 13 species of mosses. The taxa are grouped according to their most common growth form into six groups: floating on the water surface, unattached; floating on the water surface, anchored; submersed in the water, unattached/anchored; coastal plants; attached mosses.

