

## BOOK REVIEW

**Atlas of the Aegean Flora. Part 1: Text & Plates. Part 2: Maps.** A. Strid. Berlin: Botanic Garden and Botanical Museum Berlin, Freie Universität Berlin. 2016. Part 1: 700 pp, 48 colour plates. Part 2: 878 pp, 3362 colour distribution maps. ISBN 978 392 180 097 3. About £135 (hardback).

doi: [10.1017/S0960428616000172](https://doi.org/10.1017/S0960428616000172)

The Aegean Sea is located between the Greek and Anatolian peninsulas, covering an area of over 200,000 km<sup>2</sup> that includes the majority of the Greek islands. The unique floristic diversity of the Aegean island complexes, including the island of Crete and the coastal areas of continental Greece, are presented in this new book by Arne Strid, an expert on the Greek Flora.

Having published a book on the *Wild Flowers of Mount Olympus* (1980) and two volumes on the *Mountain Flora of Greece* (1986, 1991), the coasts and islands of the Aegean Sea are Strid's next fascinating botanical destination. The last publication to focus on the same area was *Flora Aegaea* (Rechinger, 1943), a massive piece of work, in German and Latin, summarising taxonomical and floristic data together with phytogeographical patterns that still hold up today (Strid, 1996). Since then, certain areas of floristic interest in the Aegean Sea have been studied individually or as part of wider island complexes, but this work is the first complete account of the flora of the islands and coastal areas of the Aegean in over 70 years.

Both parts are A4 hardcover volumes, quite big and heavy, making them more of a reference work for the library or the herbarium rather than for the field – or the island in this case. Strid's work is entitled *Atlas of the Aegean Flora*, although its contents include far more than the distribution maps one would expect in an atlas.

The first part is a 400-page volume with identification keys to species, descriptions and notes for about 3316 species. The introduction provides a concise overview of the existing literature and references the work was based on, along with some information about the area. The data for generating the distribution maps were drawn from the Flora Hellenica Database, an ongoing record of the Greek Flora, started in 1989 by Arne Strid, whereas the taxonomic and floristic information for the descriptions of the species is based on relevant literature and publications listed in the *Flora Hellenica Bibliography* (Strid, 2006). The plant groups presented are vascular cryptogams, gymnosperms and angiosperms, without further categorisation into monocots and eudicots. In each group, four taxonomic ranks are recognised and listed in alphabetical order: family, genus, species and subspecies. This is a helpful feature for a quick search without having to consult a taxonomic table. The taxonomy and nomenclature in the Atlas basically follow that of *Vascular Plants of Greece: An Annotated Checklist* (VPG) (Dimopoulos *et al.*, 2013) and the best available monographs and revisions, according to the author, in each case. Other sources, such as the *International*

*Code of Nomenclature for Algae, Fungi, and Plants* (ICN) (McNeill *et al.*, 2012), International Plant Names Index (IPNI, 2012–) and Euro+Med PlantBase (2006–) were used especially for nomenclature and synonymy. Further divergence from these sources is based on the author's personal experience and fieldwork. The fact that the reader has to consult VPG as a reference for taxonomy makes the use of the Atlas harder and sometimes problematic, because there are even further deviations from that. A review of the taxonomy used in the Atlas, as well as deviations from international standards of taxonomy and nomenclature such as the Angiosperm Phylogeny Group classification (APG) and ICN, is something that is really missing from the book. Some examples, such as Dipsacales still including Valerianaceae and Dipsacaceae, the genera *Sambucus* and *Viburnum* still in Caprifoliaceae rather than Adoxaceae, *Liquidambar* in Hamamelidaceae and not Altingiaceae, and *Cleome* as a part of Capparaceae, probably constitute some cases of what Strid considers 'disturbing rearrangements' resulting from molecular work. He clearly states that such rearrangements were followed only when there was a well-established consensus and also when morphological delineating characters were present, but still, an appendix with these deviations and some justification would be helpful. Veronicaceae is also a family that appears in both books, and it is not taxonomically congruent with APG, but most importantly neither with ICN. Veronicaceae, published in 1782, is the oldest name for this family, but Plantaginaceae, the current name, has priority as a conserved name. Furthermore, the ICN does not consider family names published before 1789 to be eligible for conservation, thus ruling out Veronicaceae.

In the account of each species, next to the name there is a reference to its distribution map, which is in the second part, and a plate number, if available. In some cases, the plate cited is from VPG, again making it quite useful to have this third book by your side. Nevertheless, the keys to determine the species are dichotomous, non-indented and easy to use without the need of a microscope. The descriptions of the species are followed by all sorts of interesting information, from habitat description, ploidy level and endemism to historical, taxonomic and nomenclatural facts.

At the end of the first part, there are 48 colour plates in total. They include photographs of 16 habitats and vegetation types and 421 species portraits, photographed by Strid. In the habitat plates, the reader can find information about the dominant and endemic species, while the diversity of the Greek landscapes is unfolded. The species plates include common plants that constitute the main element of the vegetation mosaic and also rare and endemic species of the Greek islands. Although the captions at the foot of the page are numbered, the photographs are not, and this can be a little confusing.

Finally, an index of all species and families included in the book, in alphabetical order, makes the search for species and also their photos very easy for the reader.

Part 2 includes 3362 colour distribution maps, at a scale of 1:1000, mounted four to a page. The subspecies are mapped with different symbols in the same distribution map as the species. The information provided for each species map is rich in detail and includes ecology, altitude and flowering time of the species, but also distribution

in extra-Aegean Greece and worldwide. Information about conservation status and endemism is also provided.

There is no doubt that the *Atlas of the Aegean Flora* is an outstanding achievement, built on a lifetime of fieldwork and research in Greece, which puts together floristic data that were scattered in several resources, or that have not been revised since Rechinger's work in 1943. *Atlas of the Aegean Flora*, which serves as a Flora of the Aegean area complemented by the *sensu stricto* Atlas, with a distribution map for each and every species recorded, is in my opinion one of the most comprehensive works on the Greek Flora. Besides the morphological descriptions and distribution, the information provided in both parts about nomenclature and its origins, phytosociology and even ethnobotany are all little bits of 'nice things to know' for each species. The only drawbacks are the frustrating taxonomic system in accordance with *Vascular Plants of Greece*, and the feeling that in some points *Atlas of the Aegean Flora* is in continuity with the former and not a book one can use independently.

#### REFERENCES

- DIMOPOULOS, P., RAUS, T., BERGMEIER, E., CONSTANTINIDIS, T., IATROU, G., KOKKINI, S., STRID, A. & TZANOUDAKIS, D. (2013). *Vascular Plants of Greece: An Annotated Checklist*. Berlin: Botanic Garden and Botanical Museum Berlin-Dahlem; Athens: Hellenic Botanical Society.
- EURO+MED (2006–). *Euro+Med PlantBase – the information resource for Euro-Mediterranean plant diversity*. Online. Available: <http://ww2.bgbm.org/EuroPlusMed/>
- IPNI (2012–). *The International Plant Names Index*. Online. Available: <http://www.ipni.org>
- MCNEILL, J., BARRIE, F. R., BUCK, W. R., DEMOULIN, V., GREUTER, W., HAWKSWORTH, D. L., HERENDEEN, P. S., KNAPP, S., MARHOLD, K., PRADO, J., PRUD'HOMME VAN REINE, W. F., SMITH, G. F., WIERSEMA, J. H. & TURLAND, N. J. (eds and comps) (2012). *International Code of Nomenclature for Algae, Fungi, and Plants (Melbourne Code), Adopted by the Eighteenth International Botanical Congress Melbourne, Australia, July 2011. Regnum Vegetabile 154*. Ruggell: A. R. G. Gantner Verlag K.G./Koeltz Scientific Books.
- RECHINGER, K. H. (1943). *Flora Aegaea. Flora der Inseln und Halbinseln des ägäischen Meeres*. Akad. Wiss. Wien, Math.-Naturwiss. Kl., Denkschr. Vienna: Springer.
- STRID, A. (1980). *Wild Flowers of Mount Olympus*. Kifissia: Goulandris Natural History Museum.
- STRID, A. (1986). *Mountain Flora of Greece*, vol. 1. Cambridge: Cambridge University Press.
- STRID, A. (1996). Phytogeographia Aegaea and the Flora Hellenica Database. *Ann. Naturhist. Mus. Wien*, B 98: 279–289.
- STRID, A. (ed.) (2006). *Flora Hellenica Bibliography*, 2nd edition. Krakow: W. Szafer Institute of Botany, Polish Academy of Sciences.
- STRID, A. & TAN, K. (1991). *Mountain Flora of Greece*, vol. 2. Edinburgh: Edinburgh University Press.

MARITA G. PAPAGIANNI