

Book review: Broomrapes of Britain & Ireland

Author: Domina, Gianniantonio

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Willdenowia

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GIANNIANTONIO DOMINA¹

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Thorogood C. & Rumsey F., Broomrapes of Britain & Ireland. – BSBI Handbook 22. – Durham: Botanical Society of Britain and Ireland, 2021. – ISBN 978-0-901-15859-8. – 15 × 21 cm, 325 g, 150 pp, 76 figures, 19 maps, softback. – Price: GBP 17. – Available at https://www.summerfieldbooks.com/product/broomrapes-of-britain-ireland-bsbi-handbook-no-22

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Broomrapes are beautiful – few could deny the attractiveness of their colours and silhouettes. In addition, the veil of mysticism linked to their parasitism, and our limited understanding of their biology, make them an irresistible subject. Despite this, professional botanists' interest in these plants has been limited, and collections in herbaria are often neglected or identified poorly.

Chris Thorogood and Fred Rumsey are two excellent botanists, from the University of Oxford Botanic Garden and London's Natural History Museum respectively, who have dedicated their research to the taxonomic and biological study of this group.

The book presented here is not only an excellent read but also a good field manual. The rich photographic assortment (117 photos) illustrates the variability of this group in Britain and Ireland. Although there are only 15 species occurring in the region (11 *Orobanche* L., two *Phelipanche* Pomel and two *Lathraea* L.), the authors have comfortably filled 150 pages and have certainly adopted a rigorous selection of the material to be included. The inclusion of scientific research by the two authors on the *Orobanche minor* Sm. group presented in Thorogood & Rumsey (2020) might be anticipated, but the 17 pages of that article, limited as it is by its scientific style and journal formalities, might be considered aseptic or cold compared with the accounts of this new book.

This book provides an account for each taxon consisting of conservation status, remarks, description, key distinguishing features, similar species, host, habitat and distribution. Every account also includes greyscale drawings of the species, numerous photographs and maps showing the distribution ascertained in the last 20 years, the records from 1930 to 1999, and pre-1930. In cases in which species show a preference for a particular host, maps also depict the distribution of the host plant in the background. All the illustrations are by Chris Thorogood who, I have just discovered from looking on the web, is a superb botanical artist. The colour illustrations on the front cover are oil paintings created specifically for this book.

The other chapters that complete the book are: Acknowledgements, Introduction, The Broomrape family, Life cycle and biology, Non-photosynthetic plants in Britain and Ireland, Habitats and ecology, Taxonomic history, Identification, Keys to the species of Britain and Ireland, Using and understanding the species accounts, Other cultivated species, Glossary of terms, References and Further reading and the Index, which includes scientific names and common names.

All taxa are treated at the species level with the exception of *Orobanche reticulata* Wallr., of which subsp. *pallidiflora* (Wimm. & Grab.) Hayek is reported, and *O. minor*, which is presented with two subspecies, which

¹ Department of Agricultural, Food and Forest Sciences, University of Palermo, viale delle Scienze, bldg. 4, I-90128 – Palermo, Italy; e-mail: gianniantonio.domina@unipa.it

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include three varieties, and one variety and one form, respectively. The authors seem to have some trouble representing the substantial variability of *O. minor*. Since *Flora europaea* (Tutin & al. 1964), subspecies have been generally used to identify taxa with precise barriers. Varieties have fallen out of use in European taxonomy. The morphological variability in these plants can be influenced by the host plant and, in the long run, the preference to a specific host can lead to divergence and speciation (Thorogood & al. 2008, 2009; Domina 2018). However, a taxonomic consensus for this group remains to be agreed.

Particularly interesting are the chapters on hybrids and the cultivation of these parasites, which enrich floristic research and illuminate these little-known aspects of the plants' biology.

Overall, this book is a must-have for all those who deal with parasitic plants but also informative reading for those interested in floristics, conservation and more generally in plant biology.

One regret is the lack of a hard cover, which would have made this book a better companion for walks in the field.

References

- Domina G. 2018: Host-driven morphological variability in *Orobanche crenata* (*Orobanchaceae*). Turk. J. Bot. **42:** 502–509.
- Thorogood C. J. & Rumsey F. J. 2020: An account of common broomrape *Orobanche minor* (*Orobanchaceae*) in the British Isles. British & Irish Bot. **2:** 223–239.
- Thorogood C. J., Rumsey F. J., Harris S. A. & Hiscock S. J. 2008: Host-driven divergence in the parasitic plant *Orobanche minor* Sm. (*Orobanchaceae*). Molec. Ecol. **17:** 4289–4303.
- Thorogood C. J., Rumsey F. J. & Hiscock S. J. 2009: Host-specific races in the holoparasitic angiosperm *Orobanche minor*: implications for speciation in parasitic plants. Ann. Bot. **103**: 1005–1014.
- Tutin T. G., Heywood V. H., Burges N. A., Valentine D. H., Walters S. M. & Webb D. A. (ed.) 1964: Flora europaea **1.** *Lycopodiaceae* to *Platanaceae*. Cambridge: Cambridge University Press.

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