

## Flora of Florida Volume IV (Dicotyledons, Combretaceae through Amaranthaceae)

By R. P. Wunderlin, B. F. Hansen, and A. R. Franck. 2017. University Press of Florida. 384 pages, 69.95 USD, Cloth.

Richard Wunderlin and Bruce Hanson began their comprehensive, multi-volume *Flora of Florida* with the 2000 publication of *Volume I, Pteridophytes and Gymnosperms* (University Press of Florida). When more than a decade passed without another volume appearing, it seemed that the task might have just been too big an order. The publication of Volumes II and III in 2015 importantly demonstrated that the *Flora of Florida* project was indeed alive and well and that plans were underway to see all 10 volumes published by 2020 (see reviews in *The Canadian Field-Naturalist* 130: 248–249). Happily, the publication of Volume IV indicates that progress continues to be made.

Volume IV follows the format and structure of its predecessors, being a sturdily bound, hard-cover book with small but easily-readable type. The native and non-native species of the 31 families are covered, each providing detailed, clear physical descriptions employing precise but not overly technical terminology. No glossary (nor illustrations) are provided although representative generic illustrations are tentatively planned for future volumes (R. Wunderlin, personal communication, 2016).

The number of taxa covered in Volume IV is unstated but using as a measure the species per page coverage of Volume I where that number is provided, it seems there are approximately 450 species discussed here. Volumes I through IV then, now cover about 45% of the over 4000 vascular plants known to occur in Florida. In addition to a significant number of uniquely or predominately southern/tropical plants in groups such as Rutaceae and Melastomataceae, Volume IV includes species treatments of large families that are important and familiar to Canadian botanists, including Polygonaceae, Brassicaceae, Caryophyllaceae, and Onagraceae. This is one of the strengths of the *Flora* for northern users: providing a very different regional perspective on complicated taxa that we struggle with here, like the

*Polygonum aviculare* L., *Brassica rapa* L., and *Oenothera biennis* L. species complexes. Once again, effective species identification keys taken or updated from Wunderlin's *Guide to the Vascular Plants of Florida* (1998, University Press of Florida) are placed immediately after each genus description. Alphabetically arranged species treatments follow, each beginning with a comprehensively annotated list of synonyms. The thoroughness of synonymy is truly impressive: there are 38 provided for Field Mustard *Brassica rapa* (= *Brassica campestris* L.) alone. These constitute valuable taxonomic/nomenclatural histories that are of use in taxonomic studies anywhere.

I will repeat the same complaint lodged in reviews of Volumes II and III regarding the absence of page headers to identify the family to which that page's treatments apply; such headers would greatly simplify finding particular treatments without frequent reliance on the (thankfully very good) index. The absence of Florida range maps for each taxon reduces the clarity of the broadly expressed distributional statements. However, the online *Atlas of Florida Plants* (<http://florida.plantatlas.usf.edu>) serves this purpose admirably. For the present, at least.

This volume and its companions are important contributions to floristic documentation in North America *per se*, not just in regard to botanical investigations in the third most floristically diverse part of the United States. This window into such an important part of the continental flora is also worthwhile for Canadian studies involving the many species of northern North America that also reach the Deep South. And, of course, *Flora of Florida* is a great resource for serious Canadian botanical "Snow Birds", of which there are a large and growing number.

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