Book Reviews

Yatskievych, George. 2006. Steyermark's Flora of Missouri. Volume 2. (Dicots, Acanthaceae through Fabaceae, first part.) Missouri Botanical Garden Press, St. Louis, Missouri. $48.00. 1,181 pages. Hardcover, 193 full-page plates of black and white illustrations. ISBN 1-930723-49-0.

This much-awaited volume follows the publication of Volume 1 in 1999, which treated the ferns, gymnosperms, and monocots of Missouri. The first volume, with its extensive introductory material and updated taxonomy, provided a model for a modern state flora, one that has influenced flora-writers in other states. In the Preface of Volume 2, the author describes the overwhelming work involved in such projects, when he points out that, after the project was initiated in 1987, it took 3 years to review the literature, another 3 years to do the illustrations, 6 years to write the first volume, and another 6 years to write the second volume. The third volume is now in progress, and the author is hopeful that this final volume will be produced in a shorter time period, but pragmatic when he states that it is difficult to predict the endpoint.

This second volume continues to use the same system of vegetation classification described in the first volume. The author references several recent works that provide differing views on the natural plant communities of Missouri, but to avoid confusion, is maintaining the same system of classification throughout the three volumes.

In the current volume, dicot families are covered alphabetically, from the Acanthaceae to the Fabaceae (excluding the Faboideae). Although the first volume mostly followed traditional Cronquistian classification, this second volume incorporates some (not all) of the recently proposed changes in classification based on molecular and phylogenetic studies. The author admits that his treatment is still somewhat conservative, but does include the following changes: 1) the legumes in a single family, the Fabaceae; 2) the Ericaceae to include the Monotropaceae; 3) segregating the Ehretiaceae and Heliotropiaceae from the Boraginaceae; 4) the Convolvulaceae to include the Cuscutaceae; 5) and the Scrophulariaceae to include the Callitrichaceae and the Buddlejaceae. Other recent recommendations which the author does not accept are the inclusion of the Aceraceae in the Sapindaceae, the combining of the Apocynaceae and the Asclepiadaceae, the lumping of the Apiaceae and the Araliaceae, and the splitting up of the Caprifoliaceae into several families.

Included in the volume are 45 families, 343 genera, 906 species (of which 329 are introduced), 65 infraspecific taxa (of which 6 are introduced), and 62 hybrids, for a total of 1033 taxa. There is no key to families, which is planned for volume three.

The Asteraceae is by far the largest family treated in the volume, with 104 genera, and 404 taxa. Unlike most regional floras which provide a direct key to genera in the Asteraceae, the author instead provides a key to tribes, and then under each tribe provides a key to genera. Although necessarily somewhat technical, the author seems to have gone to great lengths to include more readily observable features to help segregate the various tribal groupings. The recent splitting of traditional *Aster* into several segregate genera is followed in the text, and *Euthamia* is treated separately from *Solidago*, but *Oligoneuron* is included. Species previously treated as *Gnaphalium* are now classified in *Gamochaeta* or *Pseudognaphalium*.

The second largest family is the Brassicaceae, with 41 genera and 92 taxa. The treatment of taxa is mostly traditional, but includes some recent taxonomic innovations, such as the segregation of *Turritis* and *Boechera* from *Arabis*, the treatment of *Lesquerella* as *Physaria*, and several others.

The typical format for a family treatment is as follows: detailed family description and taxonomic notes; key to genera (sometimes separate keys to flowering and fruiting material); detailed genus description (if more than one species), taxonomic notes, and in most cases including a note on number of species and distribution worldwide; key to species; scientific and common names of the species; references to plate and map numbers; detailed species description; chromosome numbers; flowering period; status as native or introduced; Missouri distribution; United States distribution; habitat; and taxonomic notes. A state map with county distributions is provided for each species. There are 193 full-page plates of line drawings, each plate with illustrations of several species (usually 3–5). The drawings are very well done and illustrate the diagnostic features of the species. The volume concludes with a 18-page glossary, 35 pages of literature cited, and a 42-page index to scientific and common names. As in the first volume, there is a state map and county finder listing inside the front cover, and a family index and a ruler inside the back cover.

In his Preface the author acknowledges that this series of volumes would not have come to be without the unique arrangement that exists in the state between the Missouri Department of Conservation and the Missouri Botanical Garden. He also acknowledges the numerous people who have worked in the background, including colleagues, students, volunteers, as well as the artists and funding sources that helped to make this project happen. These volumes being produced by the author and his associates, under