

BOOK REVIEW 2004 - #1

Mohlenbrock, R. H. Vascular Flora of Illinois. 2002. xiv + 490 pp; maps; dichotomous keys; glossary; index to families and genera; index to common names. Southern Illinois University Press, Carbondale and Edwardsville. Soft Cover. ISBN 0-8093-2421-0. Price: US \$50.00. Available from the Southern Illinois University Press, P.O. Box 3697, Carbondale, Illinois 62902-3697

We like this book! It has many features that are very useful to anyone trying to identify vascular plants from Illinois. First, the layout of the descriptive flora starts with the spore bearing plants (ferns and fern allies) followed by the gymnosperms, then the dicots, and finishes with the monocots. Within each of these four major groups the families, genera, and species are arranged alphabetically. This alphabetic arrangement makes the book extremely useful, particularly in large genera such as *Carex*. There is, however, no indication of the classification system used in the contents or with headings in the text. It is peculiar, for example, to see Selaginellaceae (Lycopodiophyta), Thelypteridaceae (Polypodiophyta), and Pinaceae and Cupressaceae (Pinophyta) on facing pages without any indication that one is looking at representatives of what are now generally taken as three divisions of the plant kingdom.

A very important feature of this work is the use of indented dichotomous keys. After many years of teaching we have found that students have a very hard time keying plants, mostly because they have difficulty keeping track of where they are in the key. This feature alone makes the book very user friendly.

Mohlenbrock does not appear to adhere to any one reference for overall taxonomic concepts. The treatment of the spore bearing plants is in line with the recent Flora of North America (Flora of North America, Editorial Committee, 1993+) but the rest of the text is a sort of à la carte approach. The Asteraceae show a puzzling proliferation of genera. Mohlenbrock provides a note at the beginning of *Eupatorium* (*sensu stricto*) advising the user to check the segregate genera as well. Such helpful notes are scattered throughout the text. *Aster* is treated in a traditional sense, such as Gleason and Cronquist (1991), to include such segregates as *Doellingeria* and *Ionactis*. With *Eupatorium* the segregates *Ageratina*, *Conoclinium*, and *Eupatoriadelphus* are recognized; however, this approach follows neither Gleason and Cronquist (1991) nor the USDA Plants Database (USDA, NRCS, 2002). Not to neglect the monocots, *Scirpus* is divided into *Schoenoplectus*, *Bolboschoenus*, *Trichophorum*, and *Scirpus* (*sensu stricto*), as in Volume 23 (2002) of the Flora of North America (Editorial Committee, 1993 +) that appeared about the same time as this book.

This manual is not a definitive accounting of the state's flora as was Jones and Fuller (1955). Although Mohlenbrock has done a good job of including new records for the state, many distribution records found within the past 15 years are not included. Statements of distribution seem little different from Mohlenbrock & Ladd (1978). Since 1978 botanists in all parts of the state have found hundreds of county records and significant range extensions. For example, *Pueraria lobata* (Willd.) Ohwi (kudzu) is stated to be sometimes escaping in the southern counties. In fact, there are Eastern Illinois University Herbarium records from as far north as Peoria County and this species is now the object

of control efforts by the Illinois Department of Natural Resources. *Acalypha deamii* (Weatherby) Ahles, is noted from four counties by Mohlenbrock. On the other hand, the Eastern Illinois University Herbarium alone has specimens from ten counties. Other examples could be cited.

Another very important feature of the book is "The Natural Divisions of Illinois", by Mohlenbrock's former student, John Schwegman. This summary of the state's 14 natural regions and their geological and biological features occupies pages 1-35 providing an excellent summary of the state's biodiversity. Scientific names in this section, unfortunately, were not updated to match those used in the descriptive flora. Also, one astonishing omission seems to be a reference section. Many botanists have contributed to our knowledge of the flora of Illinois, for example the manual by Floyd Swink and Gerould Wilhelm (1994) is a definitive work on the floristic elements of northeastern Illinois and northwestern Indiana. In addition, several new combinations are made at various points in the text, but these are not valid because they lack a reference to the place of publication of their basionyms.

In closing, we in Illinois are indeed fortunate to have an improved and updated identification guide for our state's flora over the author's previous edition (Mohlenbrock, 1986). Any taxonomist can find something to quibble over in another taxonomist's work. But the bottom line is that the indented format of the keys is appreciated and the alphabetic arrangement of taxa is handy. Both of these features are steps in the right direction. Any field oriented botanist will want a copy and will get a great deal of use out of it. But get a brick or a cookbook holder to keep the manual open. Its paperback binding will not lay flat and thus, it is impractical to hold it open while dissecting grass spikelets (or capitula of Asteraceae, if you prefer) at the same time.

Reviewers: Gordon C. Tucker and John E. Ebinger, Stover-Ebinger Herbarium (EIU), Department of Biological Sciences, Eastern Illinois University, Charleston, IL 61920. cfgct@eiu.edu; cfjee@eiu.edu

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