

Book review

'Grasses of New South Wales'

University of New England Monographs. D.J.B. Wheeler, S.W.L. Jacobs, and B.E. Norton, Second Edition 1990. 320 pp.

The grass family Poaceae, or to use the older name, Gramineae, is the one of the most important of all plant families. Many grass species are used directly by man for food, indirectly for grazing or are significant weeds. With approximately 10,000 species it is also one of the largest of the flowering plant groups. Easy identification of grasses is thus of paramount importance and any book which facilitates access to Latin names and accepted common names is welcome.

One of the major stumbling blocks confronting the would-be identifier of grasses is the fact that the morphology of grass stems, leaves and flowering parts is different from most other plant families and a specialized terminology has developed. Grass flower structures for example, are highly evolved and are comprised of modified bracts rather than true floral segments characteristic of most other flowering plant families. Any grass identification manual has to help the reader cope with numerous terms as well as the small size of the grass parts used to discriminate the different genera and species.

The 'Grasses of New South Wales' was first published in 1982. The second edition is the same format as the first with added recent information on grass taxonomy and other data.

The aim of 'Grasses of New South Wales' is to help identify the New South Wales members of the family. It succeeds admirably. The initial chapters provide an excellent coverage of general aspects of the grass family with detailed text and simple, well executed line drawings of the various morphological characters which characterize the genera and species. As well, there is a simple explanation of how to use an identification key to name an unknown grass and a short, clear discussion of the complicated rules of botanical nomenclature.

The authors have presented three different keys to facilitate identification. The first two keys are classical style and are

intended for the initiated identifier who has grasped fundamental morphological terminology. The first key covers 21 pages and enables identification of 16 groups of grass genera which share habit and other characters. The individual genera are then keyed out in each group. The second key, 18 pages, keys out the genera directly and as with the first key, once a genus has been reached then the reader turns to the genus description which is located alphabetically in the central part of the book.

The third key is an excellent pictorial key to grass genera. The authors have allowed the user to eliminate grass-like plants such as the sedges, rushes and bulrushes as well as easily identify the grasses themselves. The pictorial key is a combination of the first two keys with pairs of concise descriptive characters and very clear drawings of the morphological features described.

The detailed genus descriptions apply to the whole of Australia and give general information about number of species, distribution, observations on economic importance and references to taxonomic and other relevant studies. Species descriptions are not large and really form part of the key but they have distribution information including occurrence in other States. A number of grasses are illustrated in large format in the text.

This spirally bound book is a must for anyone dealing with grasses. Even though it is intended primarily for New South Wales it will be invaluable for identification of grasses in other States as well as a compendium of general information.

Copies are available from the University of New England, Armidale, N.S.W. at a retail price of \$26 per copy plus \$2 postage and handling costs.

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