

involved, the work is not completely uniform in quality but, in general, the volume is very good and the course must have been a great success. Although the "rapid manuscript reproduction" method was used to produce the book, its production was apparently delayed. Even so, the approach taken by the contributors was a sound and basic one. As such, the value of the volume will not be diminished quickly by what might be called "built-in obsolescence."

This volume can be recommended without hesitation to anyone seeking a "primer" on the subject of plant cell tissue and organ culture.

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REVISION DER GATTUNG *Pulicaria* (COMPOSITAE-INULEAE) FÜR AFRIKA, MAKARONESIEN UND ARABIEN. *Phanerogamarum Monographiae, Tomus 14.*

By *Elsayed Gamal-Eldin. J. Cramer, Vaduz.* DM 80 (subscription); DM 100 (regular). 390 p. (includes figures and distribution maps) + 8 pl.; ill.; index for the special section. 1981.

#### 100 FAMILIES OF FLOWERING PLANTS.

By *Michael Hickey and Clive King; Foreword by S. M. Walters. Cambridge and New York.* \$66.00 (hardcover); \$19.95 (paper). xix + 567 p.; ill.; families/genera index. 1981.

Traditional instruction in plant taxonomy and horticulture, particularly in European universities, involves long hours in the laboratory, frequently in lieu of field studies. The work involves observation, dissection and detailed drawing of representative specimens of the major plant families. This book was written to aid students and staff involved in this activity and it succeeds admirably.

One hundred selected angiosperm families are described with a discussion of the distribution, botanical characteristics, economic importance and classification of each one. In addition, descriptions of a representative species for each family, accompanied by line drawings, are provided. Each family entry concludes with a section on alternative taxa for study in cases where the major species is unavailable.

Although the 100 species include a wide range of life forms and exhibit considerable structural complexity, a large proportion are members of the European flora or are of horticultural merit. As a result, the work is unlikely to gain a wide audience among students from North America or in tropical countries. Descriptions and the coverage of economic uses and ornamental values will appeal to students of horticultural botany. Details of the

pollination system of each representative species are given, providing a functional background from which to interpret the drawings of floral structure. A similar treatment of dispersal syndromes to accompany the drawings of fruit and seed characters would have been a useful addition. The book is remarkably free of errors, although the details of pollen size relationships among the floral morphs in tristylous *Lythrum salicaria* (p. 211) are incorrect. Each morph produces pollen of two size classes and not one as stated.

Perhaps the greatest merit of the work is that it provides 100 detailed and high quality drawings of reproductive structures with accompanying descriptions, presented together in an easily accessible form. This should make the book invaluable for teachers of plant taxonomy who emphasize careful observation and illustration as the key to understanding plant relationships.

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#### INTERIOR PLANTSCAPES: INSTALLATION, MAINTENANCE, AND MANAGEMENT.

By *George H. Manaker. Prentice-Hall, Englewood Cliffs (New Jersey).* \$17.95. xi + 283 p.; ill.; plants and general indexes. 1981.

This is a very good basic textbook for people interested or involved in the indoor culture, maintenance and management of plants. The book will be most useful at the associate or bachelor degree level, or may be used by advanced, vocationally oriented agriculture students.

The book begins with a brief introduction of the origins and history of indoor plant use. There is a discussion of each component of the interior environment, with chapters on light, temperature, atmosphere, planters, growth media, nutrition, moisture, plant problems, acclimatization, recommended plants, and installation and maintenance contracts. There is good coverage in most areas but acclimatization, and installation and maintenance contracts could have been expanded due to their importance in the success or failure of a plant business.

The book has both a general index and an index of plants, a convenience when looking for information about a particular plant. Each chapter has a brief summary and a list of references. A useful glossary is included, but the definitions need improvement in some cases, as on p. 239 where ethylene (C<sub>2</sub>H<sub>4</sub>) is listed as a, "colorless gas produced by plants and hydrocarbon combustion, which is phytotoxic." This emphasizes the phytotoxicity of plant-produced ethylene and gives too much weight to the hydrocarbon combustion of ethylene produced in plant response. This is not the rule, except in a few very special situations. Ethylene is