

Mabberley's Plant-book. A Portable Dictionary of Plants, their Classification and Uses. D. J. Mabberley. Cambridge University Press, Cambridge, UK. 2008. 3rd edn. xviii + 1021 pp. Price: £50.00/US\$ 90.00.

In the 20 years since this book appeared first, it has become an essential reference text for anyone studying, growing or writing about plants. It is a worthy and even improved and updated successor to the classic publication, A Dictionary of the Flowering Plants and Ferns by J. C. Willis (Cambridge University Press, 1931, 6th edn). Generations of botanists were dependent on Willis as a vade mecum, and so is it now with David Mabberley.

Mabberley is currently the Director of the University of Washington Botanic Gardens and Chair in Horticultural Science, University of Washington, Seattle, USA. He also holds other positions: Extraordinary Professor, National Herbarium, University of Leiden, Leiden, The Netherlands; Adjunct Professor, University of Western Sydney; and Honorary Research Associate, Royal Botanic Gardens, Sydney, Australia.

This is the seventh printing of this book since it first appeared in 1987. This present third edition contains over 24,000 entries, providing information on every family and genus of the seedbearing plants (including gymnosperms), plus ferns and club mosses. It contains taxonomic details and uses along with English and vernacular names.

The book includes the following: introduction (9 pages), how to use this book (3 pages), dictionary (927 pages), the system for arrangement of vascular plants (12 pages), acknowledgement of sources, including periodicals (17 pages), abbreviations and symbols used, including

floras, handbooks, websites and author names (61 pages).

The author has generally used in this edition, the classifications used in K. Kubitzki's, The Families and Genera of Vascular Plants (1990) and the Angiosperm Phylogeny Group (APG) classifications. So far, eight volumes of Kubitzki have appeared. Its classification has been slightly modified in the APG classification, which incorporates the findings from molecular systematics and other recent work. (APG II: An update of the Angiosperm Phylogeny Group classification for the orders and families of flowering plants. Bot. J. Linn. Soc., 2003, 141, 399-436) and the updates subsequently provided by P. F. Stevens in the APG website, www.mobot.org/MOBOT/ research/APweb (presently version 8).

In the 'Introduction', the principles and rationale for following the taxonomic line are succinctly presented in nine closely printed pages. This takes into consideration the great advances being made in molecular systematics and genetics. It recognizes that monophyletic groups are scientifically more meaningful. The most remarkable outcome of these modern classifications (Kubitzki and AGP II) has been that they broadly reflect the traditional classification based on the examination of herbarium sheets and classical taxonomy.

The author has followed a conservative approach in splitting families and genera. But, it has also resulted in some notable mergers and splits. For instance, okra (lady's finger) in now Hibiscus esculentus, and tomato, Solanum lycopersicum. Amaranthaceae now includes Chenopodiaceae, Asclepediaceae is back in Apocynaceae, and Abelmoschus is in Hibiscus, and so on. The unresolved problems of the 58 very large genera (having 500 + species) are also pointed out. The author laments that 'with the imminent destruction of the remaining wild habitats and concomitant extinctions, exacerbated by global warming, we will never know what the future holds. We can carry on with much of today's more fashionable biology "after Rome burns", but the basis of systematics will just be impossible in the future' (p. xi).

The more than 24,000 entries in the dictionary are compressed into 927 pages. Since much formation is included in each entry, it is given in a 'telegraphic' language. One entry is given below as an example.

'Anisodus Link ex Spreng. (~Scopolia). Solanaceae (1). 4 temp. E. As. R: A. T. Hunziker, Gen. Solan. (2001) 361. A. luridus Link ex Spreng. (A. stramoniifolinus) – yak fodder in Himal.'

'Anisodus first described by Curt Polycarp Joachim Sprengler (1766-1833), who validated the name first suggested by Johann Heinrich Friedrich Link (1767-1851). Closely allied to and sometimes included in the genus Scopolia [see that entry]. Family Solanaceae [see that entry for further details] subfamily Solanoideae. Four species indigenous in temperate east Asia. Revision published in A. T. Hunziker, Genera Solanacearum, beginning on page 361. One of these is Anisodus luridus first described by Curt Polycarp Joachim Sprengel (1766-1833), who validated the name first suggested by Johann Hendrich Friedrich Link (1767-1851), a synonym is Anisodus stramoniifolius; it is used as fodder for yaks in the Himalaya.'

Condensation has saved nearly three-fourths length.

The present reviewer has been using the 'Plant-book' for the past over 20 years. Only now has he noticed a printing/proof reader's error. Angiosperm phylogeny is misspelt as 'phylogeyt' (p. 927).

There are also a few, albeit minor errors in spelling and facts. Some examples: Sama is more correctly chama (p. 763), halvah is not Sesamum indicum (p. 388), but a sweetmeat preparation of Asia from the Middle East, to southwest, south, and southeast Asia. While in the Middle East, it is made from sesame powder and honey, elsewhere, it is made from rice or wheat flour and sugar or molasses. In the coconut (Cocos, p. 199), it is the unopened inflorescence, about 40 cm long, that is tapped for toddy and not the stalk. Further, coconut fruit retains its viability in sea water for more than 100 days (Purseglove 1985). Rice is described as the world's most important food plant and wheat the most cultivated of all plants, providing 20% of calories to humankind. According to FAO statistics (www.faostat.org), the area and production of the two crops (2007) were: wheat: 217.4 mha, 607.0 mt and rice paddy: 156.9 mha and 651.7 mt. Rice provides about 21% calories and wheat 20% to humans. These are but minor distractions in a volume that should find a place on the table of everyone interested in plants, especially students, teachers, botanists, and horticulturists. It is surely worth its price.