

Acknowledgements

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- WATT, J. M., BREYER-BRANDWIZK, M. G.: Liliaceae. — In: WATT, J. M. (ed.): Medicinal and Poisonous Plants of Southern and Eastern Africa. 2nd Edition. Pp. 691–695. E. & S. Livingstone Ltd., Edinburgh—London 1962.

Figures at the end of the issue.

BOOK REVIEW

MARKHAM, K. R.: *TECHNIQUES OF FLAVONOID IDENTIFICATION*. — Academic Press, London 1982. Pp. xii + 113. £ 9.40 (boards).

The appearance of a practical laboratory manual which is devoted to the many and involved techniques of flavonoid isolation and identification is to be particularly welcomed. The flavonoids, as a class of secondary plant constituents, have been implicated in many biological processes; this booklet will prove to be an invaluable aid to anyone, botanist or chemist, who wishes to study these compounds.

The manual begins with a general introduction to the flavonoids, which is a masterpiece of clarity. Then follows a chapter on isolation and analytical techniques. Ultraviolet-visible absorption spectroscopy has long been a standard technique in flavonoid identification and there is a chapter which deals with the practical techniques which are available. Following this is a chapter on hydrolysis and the analysis of glycoside derivatives, then a chapter on chemical methods used in flavonoid structure elucidation. For more recent methods, there follows a very illuminating chapter on the usefulness of $^1\text{H-NMR}$, $^{13}\text{C-NMR}$ and mass spectroscopy data in flavonoid structure elucidation. A chapter on the confirmation of flavonoid structures by direct comparison with standard flavonoids concludes the manual. It is of particular value to have a list of commercial sources of flavonoid standards. Relatively few flavonoids are obtainable as pure standards; reference to the first chapter provides a brief guide to the distribution of different flavonoid types, and their best sources, in the plant kingdom. The large treatises by Harborne, Mabry and Mabry 'The Flavonoids' (1975) and by Harborne and Mabry 'The Flavonoids: Advances in Research' (1982) are excellent sources of more detailed distribution data.

Dr Markham has collected together a wealth of practical data in this small volume which will prove to be quite indispensable in any laboratory where flavonoids require investigation. It is a real pleasure to be able to recommend a practical laboratory manual of such lucidity and scholarship.

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