

**Flora of Java.** Volume III, dealing with the Monocotyledons and closing with 20 pages of Addenda and Corrigenda and a full index to the whole work, brings this undertaking to a close; the monument to the long and assiduous study of the Flora of Java by the late Dr. C. A. Backer is complete. Dr. R. C. van den Brink and those associated with him are to be congratulated on the fulfilment of their charge. The size of the work receives some very necessary explanation in the Preface contributed by Dr. van Steenis, for the account of the native flora is considerably swollen by the inclusion of a very large number of species only known to occur in Java as cultivated plants. For instance, there are no native Iridaceae and only one or two are naturalized, yet the account of the family takes 10 pages. In *Dendrobium* there are about 60 native species, but just over 150 are keyed out, and no introduced orchid is known to be naturalized. The explanation is that in his early days in Java Backer had to deal with everything, wild and cultivated. Then, of course, over his long period in the country he saw plants escape from cultivation and become naturalized. Seeking a hard and fast line he decided to include everything, even the whole of the dispatch lists of the Bogor gardens! But of course when rare cultivated plants are included no flora can be up to date, and this wide scope undoubtedly makes the work unnecessarily burdensome for those whose interest is in the native and well-established flora.

Orchidaceae takes up a third of the volume and this part of the work is based on the late Dr. J. J. Smith's studies and an unpublished manuscript. There are some 10 pages of introductory matter and diagrams for this difficult family and the beginner will find these most helpful, though needing careful study. Some of the figures, for example fig. 6 which is a general view of the flower of *Platanthera susannae*, are not as clear as they should be, and fig. 13 shows a lateral petal lying outside the dorsal sepal. Gramineae, the next largest family, are elaborated by Ch. Monod de Froideville and are also given a useful introductory section. For Bamboos, usually collected when sterile, there is a separate key using characters of the culm sheaths. The Cyperaceae are by Dr. J. H. Kern, who on the whole takes a broad generic view, *Pycneus*, *Kyllinga* and *Mariscus* being retained within *Cyperus* which thus comprises just under 50 species in Java.

The Zingiberaceae is another family amongst tropical asiatic monocotyledons. The fact that there are only some 54 major species keyed out in 33 pages illustrates the complexities of the descriptive matter; there are more than twice that number in as many pages of Cyperaceae. Nevertheless, it must unfortunately be recorded that the descriptions do not by any means make everything clear, the trouble starting with the family description itself. Here secondary bracts are equated with the "outer bracteoles in the sense of Holttum" and the bracteoles with "inner bracteoles in the sense of Holttum": but Holttum does not use these terms! When we come to the description of *Hornstedtia* we read "each involucre bract . . . bearing in its axil very numerous secondary bracts (floral bracts), the outer ones of which (inner involucre bracts) still resemble the involucre bracts . . ." I fear this will completely baffle anyone examining *Hornstedtia*.

In the key to the genera there are three points to be noted. First at 3: there should be a note that the labellum forms a distinct tube with the base of the filament in *Amomum* sect. *Achasma* as well as in *Globba*. Secondly, the user needs to watch out for the lurking trichotomy at 6. Thirdly, the characters of *Kaempferia* and *Boesenbergia* at 10 have been interchanged.

Whatever criticisms may be made of selected parts of the Flora these three volumes are certain to be a primary source of reference to all workers in the floras of the Malay Archipelago for many years to come.

B. L. BURTT.

\* Flora of Java: Vol. III. C. A. Backer & R. C. Bakhuizen van den Brink. Pp. viii + 761. Wolters-Noordhoff. Groningen. 1968. Price Dfl. 93.60.

**Classica Botanica Americana.** In this series of reprints edited by Professor Joseph Ewan of Tulane University, Washington, two further volumes are now issued.

Volume IV\*, consisting of two volumes, is a reprint of the 1838-43 edition of Torrey and Gray's *Flora of North America*. This monumental though unfinished work is too well known for further comment but Professor Ewan's introduction and list of collectors cited in the *Flora* are useful and informative.

The reprint of *Reliquiae Baldwinianae*,\*\* published as Supplement II of the series, provides for most of us the first opportunity of reading selections from the correspondence of Dr. William Baldwin, compiled by his life-long friend and fellow medical student, Dr. William Darlington. When first published in 1843, at his own expense, the author himself distributed the few copies printed. Baldwin, naval surgeon and botanist, was born in 1779 and died at the early age of 41, but in this short period and despite ill health, he made various collections during his travels in the southern states and in South America.

The first half of the book consists of letters exchanged between Dr. Henry Muhlenberg and Baldwin. This correspondence, initiated by Muhlenberg in 1811, continued until his death in 1815, and its reading reveals the extent to which mutual friendship and respect for each other developed between these two men, even as they pursued their quest for botanical knowledge. Strange to say, they met only once.

Letters from Baldwin to Darlington written between 1817 and 1819 occupy most of the second half of the book. Here again we learn much of Baldwin's powers of observation, political, social and botanical, yet how can one convey the content of all the correspondence in this volume? At best one can but point to one facet of Baldwin's character in one of his own phrases—"my health has improved—as has always been the case when mind and body have both been actively employed".

Primarily to be read for pleasure, this book contains added interest in Professor Ewan's introduction and chronology of Baldwin's life, and the index to plant names, not contained in the original, increases its value as a reference work.

L. A. LAUENER.

\* *A Flora of North America*. By John Torrey and Asa Gray. 2 vols. xviii, 711 pp, xviii, 504 pp (1838-43). Reprint 1969. 9". Hafner Publishing Company, New York and London. (*Classica Botanica Americana*, vol. 4, edited by Joseph Ewan). Price \$45.00.

\*\* *Reliquiae Baldwinianae*. By William Darlington (ed.). 1xix, 346 pp (1843). Reprint 1969. 8½". Hafner Publishing Company, New York and London. (*Classica Botanica Americana*, Supplement II, edited by Joseph Ewan). Price \$12.50.