## REVIEW

E.P. KLUCKING: Leaf Venation Patterns. 4. Melastomataceae. J. Cramer, Berlin, Stuttgart, 1989, 283 pp., 118 plates. Bound. Price DM 260.00. ISBN 3-443-50004-8.

The present book gives extensive descriptions and photographs of the leaf venation patterns of 485 (out of c. 3000-4750) species representing 79 (out of c. 215-240) genera of the Melastomataceae and 70 (out of c. 360) species belonging to 3 (out of 4) genera of the closely allied Memecylaceae. The descriptions are followed by a key to the four main groups and 40 patterns distinguished. This key, which is illustrated by the first ten plates, is the only place where the patterns are defined; under the descriptions they are not even mentioned.

The patterns are described per genus. If there is more than one type in a genus these different types are all fully described separately and marked by a capital, without any reference to the patterns given at the end. Under each description is/are mentioned the species, under each species the one collection number of a leaf on which the description has been based. Each genus is ended up by an often extensive discussion. Nearly every specimen used is illustrated by a photograph of the cleared leaf.

The value of this great enterprise – the three preceding volumes treat the Annonaceae, Lauraceae, and Myrtaceae respectively, other families might be expected in the near future – could be high, especially for paleo-botanists, if only the venation patterns show good characters and are specific. This seems to be a weak point, however. The only genus of which a great number of species has been studied is *Miconia*: out of the about 700 species the leaves of 132 have been studied. These 132 species appeared to represent 17 patterns belonging to all three main groups distinguished in the Melastomataceae. On the other hand the type AC-2 is known from 18 genera, to cite only one example. This seems rather a warning to the paleobotanist against too optimistic identifications. (Moreover, the identifications of specimens studied are those mentioned on the sheets, which may be right or wrong.) And the difference between the types, and even between the groups, are rather artificial and often slight and gradually only (PAR and AR; AC 23–29 and P).

As this series is important and is intended to be continued, a few critical remarks may be made. The descriptions are difficult to read as they consist of one sentence c. 30 lines long! The number of typing errors is rather large and they are sometimes confusing or at least disturbing. The photographs are not always clear. The price seems extravagant.

P.W. LEENHOUTS