

REVIEW

F. A. McCCLURE, *The Bamboos, a fresh perspective.* — Harvard University Press, Cambridge Mass. 1966. 347 pp. \$ 10.

Dr. McClure's studies on the bamboos date from a period of service in China, at first as an Agricultural Explorer, since 1931 as a Professor of Botany at Lingnan University in Canton. On field trips in the Chinese interior and in Indo-China he collected numerous living bamboos, which were transplanted and studied in the to-day still intact Lingnan Bamboo Garden he had early established. After in 1941 the war had forced him to leave China, he studied living bamboos in the West Indies, Central and South America, and after the war in India, East Pakistan, Java, and Luzon. Being particularly interested not only in morphology, but also in taxonomy, he revised the bamboo collections of several herbaria in the United States and Europe.

Proof of his comprehensive knowledge thus acquired is given in his book, which indeed brings the economically important and scientifically interesting, but for various reasons much neglected bamboos into fresh perspective. Students both in pure and applied botany will find here a wealth of information, based on the author's personal experience as well as on his familiarity with the pertinent literature.

Part I deals mainly with the ontogeny and morphology of the bamboos. Thoroughly discussed and illustrated by splendid, instructive line drawings and photographs are e.g. the rhizome system, the sheathing organs, the spikelet structure in comparison with that in non-bambusoid grasses, and the importance of the prophyllum for ascertaining the sequence in branching both in the vegetative and reproductive parts of the plant. The rejection of the terms monopodial and sympodial for the branching system of the rhizome, still recently used by Holttum, does not seem sufficiently justified. As in his opinion those terms are difficult to use in an unambiguous way, McClure replaces them by *pachymorph* and *leptomorph*: pachymorph for short and thick rhizomes, leptomorph for long and slender ones. He asserts that this simple subdivision holds good for nearly all bamboos, except only for a few species which can produce both pachymorph and leptomorph rhizomes. McClure coined the term *pseudospikelet* for a spikelet-like branch of an indeterminate bamboo inflorescence. Such a pseudospikelet is characterized by the bud-bearing bracts at its base, which bracts are lacking in the non-bambusoid grass spikelet. The same term has been proposed in a quite different sense, viz. for those 'spikelets' in *Cyperaceae* which are in fact sympodial in branching.

Throughout the book it is emphasized that relatively little is known about the bamboos. In the herbaria they are generally fragmentarily represented. For that reason studies on infraspecific variation, propagation, flowering and fruiting, distribution, ecology, etc. are suggested in Part II, where some thirty species of special importance are treated.

From Part III, in which the classification is discussed, it appears that, fortunately, the author does not agree with those botanists who split off the bamboos as a separate family. The group is here considered a subfamily, though it is admitted that because of the reticulate relationships the major divisions of *Gramineae* are possibly better retained at the tribe level.

In the extensive glossary clear definitions of the botanical terms as adopted by the author are found, several of which differing considerably from those in Jackson's Glossary or from conventional usage. The etymology of the Greek and Latin terms will be appreciated by many readers, but in what way do the Anglo-Saxon or Middle English forms of words like girdle, leaf, neck, shoot, etc. contribute to the understanding?

Printing and binding of the book are exemplary.

J. H. KERN