

## NOTES

### Additional Plants from the Midway Islands

A collection of plants from the Midway Islands, made by Dr. Hubert W. Frings, Department of Zoology, University of Hawaii, on April 16, 1962, includes four species not previously recorded from there. These are:

#### GRAMINEAE

*Polypogon monspeliensis* (L.) Desf.,  
Eastern Island.

#### CRUCIFERAE

*Coronopus didymus* (L.) J. E. Smith,  
Eastern Island.

#### EUPHORBIACEAE

*Euphorbia peplus* L., Sand Island.

#### PRIMULACEAE

*Anagallis arvensis* L., Sand and Eastern  
Islands.

All four of these species, although not native to Hawaii, are now found on the major islands of the Hawaiian chain and were probably introduced accidentally to Midway from Oahu. At various times ornamental plants, and the soil in which to grow them, have been taken to Midway from Honolulu. It is likely that seeds of the plants reported here reached Midway in such soil.

Dr. Frings' collection included 27 species of vascular plants, which he described as the more common species on the atoll. It is of interest to note that only 5 of these species (*Boerhavia diffusa* L.; *Tribulus cistoides* L.; *Ipomoea indica* (Burm. f.) Merr.; *I. pes-caprae* (L.) Sw.; *Scaevola sericea* Vahl) are native to Midway. This provides some indication of the changes in the flora, and concomitant changes in the ecosystem, which are related to man's activities on Midway.

This collection has been deposited in the herbarium of the B. P. Bishop Museum in Honolulu—Charles H. Lamoureux, Department of Botany, University of Hawaii, Honolulu, Hawaii.

### On Malayan Shores: A Review

S. H. Chuang. 1961. *On Malayan Shores*. Pp. xvi + 225; 112 numbered plates and frontispiece (13 plates and frontispiece in color), 28 text figures. 5.5 × 7.5 inches (14 × 19 cm). Published by Muwu Shosa, P. O. Box 1813, Singapore.

It is for this incredibly rich center of the great Indo-West Pacific marine flora and fauna that Dr. Chuang's small volume is intended as an introduction. He did not write the book for the specialist in any one group, or even for the trained marine biologist, but for the "amateur naturalist." With this aim he has avoided as much of the specialized language of zoology as

possible; his descriptions of plants and animals are short and point out only one to several salient characteristics; he uses no keys and gives no synonyms. On the other hand his illustrations are numerous and excellent: some 50 species are illustrated by line drawings in the text figures and over 500 are represented by clear reproductions of photographs in the 112 plates. He has limited himself to the more common and conspicuous species, as would be expected; he does not touch upon the fishes which have been dealt with in previous books.

The book is divided into two parts, the first is a general review of aspects of marine biology

applicable within the scope of the work, the second is a systematic review. The first section includes chapters on the chemistry of sea water, zonation of the shore, coral reefs, plankton, etc. There is also a chapter valuable for a trained biologist visiting the peninsula which discusses Malayan collecting localities (Chapter VI). The second portion is divided among seven phyla, although eight or nine additional phyla are discussed, with species named, in the chapter on animal life of Part I. The appendix gives faunal lists for four typical shore habitats. A glossary gives Malayan names for over 100 species. The bibliography is short and covers only those books cited in the text, not the systematic works from which the nomenclature was derived. The index is very complete, listing all systematic names applied to all taxa, English common names, topics discussed in the first part of the book, and authors cited; it even includes a glossary to some of the more technical terms used, as "siphonoglyph" and "periostracum."

While this book is addressed only to the

amateur, it obviously will be used by two other groups: students of biology in Malaya, and marine biologists visiting these waters for the first time. Having spent a year working on the adjacent Gulf of Thailand, and having briefly visited Malayan shores, I can attest how extremely valuable this volume will be to visitors. Moreover, because the fauna from India to Indonesia, from the Coral Sea to the South China Sea is basically the same, it will be of use to all visitors to the Western Pacific and adjacent Indian Ocean.

Admittedly the book has limitations: it is not an exhaustive scientific monograph on the flora and fauna. Yet if it were, it would not be one small volume, but many large volumes. Rather than disparage the book for omissions, we should commend the author for producing a volume of considerable value to biologists, and regret that books such as this are not available for other areas in the tropical Pacific.—*A. H. Banner, Department of Zoology, University of Hawaii, Honolulu, Hawaii.*

