REVISION OF THE NEW SOUTH WALES TRIPHORIDAE

BY CHARLES F. LASERON, F.R.Z.S.

Honorary Correspondent, Australian Museum.

(Figures 1—30)

INTRODUCTION.

Few groups of mollusca have presented more difficulties to local conchologists than the Triphoridae. Their small size, close resemblance to each other, and the difficulty of obtaining good and adequate material have led largely to their neglect. Yet few groups are more fascinating and worthy of a close examination. Fortunately the late Charles Hedley (1902) revised the local species, and laid a solid foundation on which future workers could build. In his excellent paper not the least service he rendered was to collate and clear up anomalies in the earlier literature, and to illustrate and expand the inadequate descriptions of previously named species. He described several new species, and in all listed fifteen species from the coast of New South Wales.

Since Hedley's paper no further work has been published in New South Wales, though Hedley himself described and reviewed some Queensland and Pacific Island species. May added to the Tasmanian list and Verco did work in South Australia, while B. C. Cotton and F. K. Godfrey proposed a comprehensive classification for the southern Australian species. In New Zealand Sutor, Finlay and Powell also did work on the New Zealand forms.

The present paper is based mainly on the collections made by my son John and myself during the last twenty years. During that time we have endeavoured to build up series of the different species, to find out the limits of their variability and something of their habitats and distribution. It is rather surprising the number of hitherto undescribed species that have thus come to light. It is to be regretted that the rather rare opportunities were not taken to note something of the animals themselves, for the structure of the operculum, the radula, and the detailed anatomy must be the keys that will ultimately unlock the problems of their phylogenetic relationship.

In addition to our own collection I am indebted to members of the Marine Section of the Royal Zoological Society of New South Wales who have passed material on to me for study, particularly to Miss E. Duff and Mrs. L. H. Woolacott, to Messrs. E. F. Holland, T. A. Garrard and David McAlpine, and also to Mr. Tom Iredale who sorted out a number of white specimens from Manly Ocean Beach. An examination of the material in the Australian Museum was rather disappointing, as most of the specimens have deteriorated through sweating in the glass tubes. It was only possible to check here and there on Hedley's work. This is regrettable, because with two of his species Hedley made an extraordinary and unusual mistake by drawing as type one species and describing another. The confusion thus created will, I think, be straightened out when discussing the two species in question, cinerca and nocturna. Curiously enough the material in the Museum collected earlier by the late John Brazier is in much better condition. One specimen, selected as type of a new species, was collected in 1878. Brazier's specimens were all neatly mounted on cards and annotated in his own writing.

All types and also all specimens illustrated in this paper have been presented to the Australian Museum, where they will be kept intact as a type collection for future reference.