

# The Swain Reefs Expedition: CRINOIDEA

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## SUMMARY

Eighteen species of crinoids collected at the Swain Reefs, 21° 43' S. : 152° 25'E.; N.E. of the Capricorn Channel, are discussed, one of these, the unusual five-armed *Eudiocrinus serripinna* A. H. Clark, representing a genus new to the Australian fauna. The range of two other species, *Oligometra serripinna* (P. H. Carpenter) and *Ptilometra australis* (Witton), are extended into Queensland waters by the expedition's work.

## INTRODUCTION

Some difficulty is involved in the identification of Australian crinoids because of the frequent differences of opinion between the crinoid specialist, Mr A. H. Clark, working on preserved material, and Dr H. L. Clark, whose interests were wider but who had considerable experience of live echinoderms of Australia, though less of crinoids as a group. Being in the same position as A. H. Clark, without knowledge of the species in life, I have tended to follow his dispositions of the species to a greater extent than those of H. L. Clark. Nevertheless I should state that I consider the number of valid species could be reduced further, the distinction between at least four pairs of nominal species being poorly-founded. These are *Comatella nigra* and *stelligera*, *Comatula pectinata* and *purpurea*, *Zygometa microdiscus* and *elegans* and *Lamprometra palmata* and *gyges*. (The last two are treated here as subspecies.) An intensive study of variation, growth changes and ecology is needed to clarify the relationships of these.

The references in the text have been kept to a minimum since full details are given in A. H. Clark's crinoid monograph.

All the crinoids were collected in the vicinity of Gillett Cay; those from station 1 on the reef and sand flats, while stations 5 and 6 are in 27-37 and 64-73 metres respectively.