

SWIMMING CRABS (CRUSTACEA, DECAPODA, PORTUNIDAE) FROM ONE TREE ISLAND, CAPRICORN GROUP, QUEENSLAND

By D. J. G. GRIFFIN

Australian Museum, Sydney

Plates 47-49. Figure 1.

Manuscript received, 16th April, 1968

Two species of portunid swimming crab, *Charybdis* (*Goniosupradens*) *obtusifrons* Leene and *Thalamitoides quadridens* A. Milne Edwards, are recorded from Australia for the first time and a species of *Portunus* considered to belong to *P. longispinosus* (Dana) is recorded from Australia for the second time; the status of Australian specimens of this species is discussed. The ecological distribution on One Tree Island of these three species and eight other portunids collected in 1966 and 1967 by Australian Museum expeditions is briefly discussed.

INTRODUCTION

One Tree Island forms part of the Capricorn Group straddling the Tropic of Capricorn at the outer edge of the southern part of the Great Barrier Reef (see Gillett and McNeill, 1967: pls 16, 17). During October–November, 1966, and September–October, 1967, parties from the Australian Museum led by Dr F. H. Talbot spent about 10 weeks on the island (see Talbot, 1967). The main purpose of these expeditions was to investigate several aspects of the ecology of the coral reef fishes. The opportunity was taken on both occasions to collect decapod Crustacea from the lagoon with the aid of a small triangle dredge and from various parts of the reef crest by hand; they were also taken from coral samples both inside and outside the reef and, by SCUBA diving, they were collected, along with fishes within the lagoon and from the outer face of the reef. Eleven species of portunid swimming crabs were collected by these two expeditions; three species are dealt with in detail in this report. Notes are given on the ecological distribution of the eleven species on One Tree Island.

The references for each species include the first description and the most recent accounts. The measurement given is of carapace width (c.w.) unless otherwise indicated and was taken with dial calipers; carapace length is abbreviated as c.l. Drawings were completed with the aid of a camera lucida. All specimens have been placed in the collections of the Australian Museum (A.M.).

I wish to thank Mr and Mrs D. W. Kinsey, who accompanied the 1967 expedition, for collecting several of the specimens dealt with here. I am indebted to Professor W. Stephenson (University of Queensland, Brisbane) for his advice and comments and for making available unpublished manuscripts. I am grateful to Dr J. C. Yaldwyn (Australian Museum) for reading the manuscript, and to Charles Turner (Australian Museum) and Anthony Healy for their care in taking a series of photographs of these crabs.