

trasted immediately with the naked and iridescent carapace of the first form. The shape of the male abdomen and the male pleopods were very different and there could be no doubt that two distinct species were represented. A later examination of Jacquinet's colour plate of *Nectocarcinus antarcticus* showed clearly that the second, hirsute species was the true *antarcticus*, leaving the iridescent and naked species unnamed. This fine subantarctic swimming crab must now be known as *Nectocarcinus bennetti* Takeda and Miyake, 1969 (see note p. 68).

Drawings of both these species (prepared by D.J.G.G.) are presented with a formal description of each and a discussion of their generic position. New Zealand and subantarctic material of this genus has been examined in detail and the distribution and historical zoogeography of both species is discussed. Type material of *Nectocarcinus bullatus* Balss, from Juan Fernandez and material recently collected by the *Anton Bruun*, was obtained on loan from the Naturhistoriska Museet, Goteborg, Sweden, and the Allan Hancock Foundation, Los Angeles, respectively and additional data on this diminutive species is given here.

While working on the decapod collections made by the National Museum of Victoria during the Port Phillip Survey 1957-63 (Griffin and Yaldwyn, in press), difficulty was experienced in adequately distinguishing juvenile and small-sized adults of the two common southern Australian species of *Nectocarcinus*, *N. integrifrons* (Latreille) and *N. tuberosus* A. Milne Edwards. Additional features were recognised as being diagnostic in smaller specimens and these are discussed and listed here.

A key to all six species in the genus, the five mentioned above and *N. spinifrons* Stephenson from western and southern Australia, is given as a final contribution to the present review of this temperate Australasian and eastern Pacific portunid genus.

The terminology employed in this paper for the raised aggregations of granules (structures) of the carapace follows that used by Garth and Stephenson (1966: 6-7), while other terms used mainly follow Stephenson and Campbell (1959: 86) and Rathbun (1930: 2-3). The standard measurement used in the "Material examined" sections is the maximum carapace width including the lateral "teeth".

## Family PORTUNIDAE

### Subfamily CARCININAE Alcock

*Carcininae* Alcock, 1899: 12. Stephenson and Campbell, 1960: 76, 80.

Portunids with carapace relatively narrow and with four or five anterolateral teeth. Eyestalks not elongated. Basal antennal article fixed *or free*, not broader than long, lying in longitudinal axis of carapace. Walking legs long and stout, at least one pair as long as chelipeds; 5th leg either similar to other walking legs *or modified as swimming paddle*, dactyl either lanceolate and distally acute, *or ovate, lamellate and distally mucronate*. (Additional *or modified* sub-familial features in italics.)

Three Indopacific genera are placed in this subfamily: *Carcinus* Leach, *Xaiva* Macleay and *Nectocarcinus* A. Milne Edwards. A key to their separation is given by Stephenson and Campbell (1960: 80, *Portumnus* used for *Xaiva*). The 5th legs are not modified as swimming paddles in *Carcinus* and only weakly modified in the three Australian species of *Nectocarcinus*. In *Xaiva* and in the two New Zealand and one eastern Pacific species of *Nectocarcinus*, they are typical swimming paddles with a broadened propodus and a lamellate dactyl. The dactyl is always distally acute, or at least mucronate, in this subfamily.

### GENUS NECTOCARCINUS A. Milne Edwards, 1860

*Nectocarcinus* A. Milne Edwards, 1860: 219-220, 228; 1861: 404. Stephenson and Campbell, 1960: 82.

Carcinines with carapace somewhat wider than long and with regions well defined. Anterolateral borders and front form a regular curve of short radius; front protruding, either entire or subdivided into lobes. Four *more or less subequal* anterolateral teeth. Basal antennal article fixed *or free*, not broader than long. Third maxilliped elongate, ischium hollowed on