



FIG. 29. — Third pereiopods, distal propod and dactyl : **a**, *Urocaridella antonbruunii* (Bruce). — **b**, *Conchodytes philippinensis* sp. nov., holotype female. — **c**, *Mesopontonia verrucimanus* sp. nov., ovigerous female holotype. — **d**, *Periclimenaeus storchi* Bruce. — **e**, *Periclimenes albatrossae* Chace & Bruce; **f**, same, unguis. — **g**, *Pontonia ascidicola* Borradaile; **h**, same, unguis. — **i**, *Pontonia anachoreta* Kemp.

ETYMOLOGY. — From *crassus* (latin) thick, stout, and *manus* (latin), hand.

SYSTEMATIC POSITION. — *Typtonychus crassimanus* may be readily distinguished from the three other species now placed in this genus, *T. anomalus* (Bruce), *T. dimorphus* (Bruce), and *T. dentatus* (Fujino & Miyake) by (i) the relatively enormous chela of the major second pereiopod with its shovel-like fingers, both provided with very large broad bidentate tips, and (ii) the acutely produced pleura of the fourth and fifth abdominal segments. *Typtonychus crassimanus* is relatively isolated by these features from the other species of the genus.

The four species of *Typtonychus* may be distinguished by the following key :

1. Rostrum dorsally multidentate 2
— Rostrum with single dorsal tooth only *T. dimorphus* (Bruce)
2. Chela of major second pereiopod with fixed fingers deeply dentate distally 3
— Fixed finger of major second pereiopod distally simple ... *T. dentatus* (Fujino & Miyake)
3. Fourth and fifth pleura broadly rounded posteriorly *T. anomalus* (Bruce)
— Fourth and fifth pleura posteroventrally acute *T. crassimanus* sp. nov.

Family ANCHISTIOIDIDAE Borradaile, 1915

Genus *ANCHISTIOIDES* Paulson, 1875

Anchistioides willeyi (Borradaile, 1899)

Palaemonopsis willeyi Borradaile, 1899 : 410, pls 36, 37 fig. 7.

Amphipalaemon willeyi - BORRADAILE, 1917 : 407, pl. 59 fig. 13.

Anchistioides willeyi - GORDON, 1935 : 435, figs 23a, 24a. — BRUCE, 1991a : 269-272, figs 3g, 29, 30.

MATERIAL EXAMINED. — **New Caledonia.** Reef north of N'Do Islet, 37 m, SCUBA diving, 1 July 1986, coll. P. TIRARD, in sponge [R. 1060] : 1 ♂ (MNHN-Na 12919).

LAGON : stn DW 1068, 19°57.3'S, 163°52.8'E, 26 m, 23 October 1989, coll. B. RICHER DE FORGES : 1 ♀ (MNHN-Na 12918). — Stn 1069, 19°59.1'S, 163°52.5'E, 30 m, 23 October 1989, coll. B. RICHER DE FORGES : 1 ♀ (MNHN-Na 12917).

REMARKS. — The species has been previously recorded from New Caledonian waters (BRUCE, 1991a) and the specimens add nothing to the previously available information. All have the chelae of the second pereiopods of the long-fingered form. The male has a carapace length of 10.2 mm and a rostral dentition of 8/3, the females 9.5 and 5.8 mm and the smaller female a dentition of 8/4. In the larger female the rostrum and anterior carapace are missing. All specimens have the distomedial lamella of the scaphocerite distinctly angulate.

DISTRIBUTION. — Type locality : Ralun, New Britain. Also known from East Africa; Madagascar; Maldive Islands; Indonesia; Great Barrier Reef, Australia; Philippines, to 127 m.

Family HYMENOCERIDAE Ortmann, 1890

Genus *HYMENOCERA* Latreille 1819

Hymenocera picta Dana, 1852

Hymenocera picta Dana, 1852 : 593; 1855, pl. 39 fig. 3. — CATALA, 1964 : 89, pl. 22 fig. 1.

Hymenocera elegans Heller, 1861 : 25.

MATERIAL EXAMINED. — **New Caledonia**. Maitre Islet, SCUBA diving : 1 ovig. ♀ (MNHN-Na 12890).

REMARKS. — The single example has a carapace length of 7.6 mm, with a rostral dentition of 8/1 with the first two teeth situated on the carapace. No trace of colour pattern is preserved. The species has been previously recorded in New Caledonian only by Dr R. CATALA (1964).

The second maxilliped lacks a podobranch on the epipod and the third maxilliped somite bears a small arthrobranch attached dorsolaterally to the articular membrane dorsal to the lateral plate of the coxa. The thoracic sternites are mainly unarmed, the third with oblique, posteriorly convergent lateral ridges anteriorly, with a small median boss posteriorly; the fourth and fifth with low transverse lateral ridges posteriorly. The dactyls of the ambulatory pereopods are distinctly biunguiculate.

DEBELIUS (1984) drew attention to the differences in colour pattern between Indian Ocean and Pacific Ocean specimens of this taxon. CHACE and BRUCE (1993) treated these as representing colour phases of a single species but, in view of their apparently allopatric distributions, it may be preferable to consider them a subspecies. As they are particularly popular with marine aquarists, perhaps it should not be too difficult to establish if specimens of Indian and Pacific Ocean origins are reproductively isolated.

DISTRIBUTION. — Type locality : Raraka, Tuamotu Archipelago. Uncommon, but widespread throughout Indian and Pacific Oceans, from the Red Sea, to Hawaii and the Tuamotu Islands, as well as in the Eastern Pacific region, but not recorded from the Atlantic Ocean.

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FIG. 30. — *Brachycarpus biunguiculatus* (Lucas, 1846), New Caledonia, Lareignière Reef, 3-12 m.

FIG. 31. — *Urocaridella antonbruunii* (Bruce, 1967), Loyalty Islands, Ouvéa, Mouli, 11 m.

Photographs J.-L. MENU



