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Dicranodromia karubar Guinot, 1993, a deep-water crab new to the Australian fauna (Crustacea: Brachyura: Homolodromiidae)

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INTRODUCTION

Of the eight species of *Dicranodromia* A. Milne Edwards, 1880 occurring in the Indo-West Pacific ocean, only one is known from Australian waters (Davie & Short, 1989; Guinot, 1995). Because the two homolodromiid specimens (a male and an ovigerous female from Queensland, from depths of 590 m and 650 m, respectively) known from Australia are damaged (Guinot, 1995: 220), their identity is still unclear. Davie and Short (1989: 158–159) referred the male QM W10801 to *D. baffini* (Alcock and Anderson, 1899), whereas Guinot (1995) assigned it, as well as the ovigerous female QM W14372, to *Dicranodromia* aff. *foersteri* Guinot, 1993, "sous réserve".

Among the crab material in the collections of the Western Australian Museum, Perth, is an ovigerous female of *Dicranodromia karubar* Guinot, 1993. This species was previously known from Indonesia, and is here recorded for the first time from Australian waters.

The terminology follows Guinot (1995). Abbreviations used include: QM = Queensland Museum, Brisbane; WAM = Western Australian Museum, Perth; P1, cheliped; P2-P5, second, third, fourth and fifth pereiopod respectively; cl and cw correspond to carapace maximal length and width respectively expressed in millimiters (mm); m, meters.

Dicranodromia karubar Guinot, 1993

Figure 1A–E

Dicranodromia karubar Guinot, 1993: 1228, figure 4; 1995: 213, figure 15a–c, 16A–D, 25A–B

Material examined

Australia, Western Australia, west of Lacepede Archipelago, F. V. "Soela", 21.2.1984, 16°54.1'S – 119°56.6'E to 16°35.2'S – 119°53.1'E, 434 m: ovigerous female cl 29; cw 24 (WAM 166–93).

Geographic and bathymetric range.– Indonesia; Moluccas Archipelago (Kai and Tanimbar islands); and Western Australia (this report); from 356 to 468 m.

Remarks

The Western Australian specimen agrees well with the Indonesian specimens. In the Australian material the dactylus of P2 and P3 bears 6–8 sharp spines on the cutting edge (figure 1E), and although this was not described by Guinot (1995: 202 in the key; 215), it also occurs in the Indonesian specimens (Guinot, *in letteris*).

D. karubar can be distinguished from *D. foersteri* and *D. baffini* by the following characters: (1) in *D. karubar* the carapace is covered with short, thick, erect, yellowish tomentum, whereas *D. foersteri* has scattered setae; (2) the rostral median spine is absent or represented by a tubercle in *D. karubar*, but represented by a spine in *D. foersteri*; (3) the palm of the cheliped is adorned with few and scattered granules (figure 1B) in *D. karubar*, but regularly covered with granules in *D. foersteri*; (4) there is a distinct comma-like bulge located just above the opening of the spermatheca in *D. karubar*, but only a rounded tubercle in *D. foersteri*. Characters 3 and 4 also distinguish *D. karubar* from *D. baffini* (Guinot, 1995: 217, 220).

The Australian specimen of *D. karubar* carried about 80 reddish eggs of 1 mm diameter. Guinot (1995: 166) noticed that "...à taille sensiblement égale des individus, il existe selon les espèces des différences assez grandes dans le diamètre des oeufs, et donc dans leur nombre". Caustier (1895) mentioned eggs of 2 mm diameter in *D. ovata* A. Milne Edwards, 1880; Martin (1991) examined an ovigerous female of *D. felderi* Martin, 1990, carrying oval eggs of 2.4 x 1.9 mm; Guinot (1995) found relatively large and few eggs in the following species: *D. pequegnati* Guinot, 1995, about 30 eggs of 2 x 1.5 mm; *D. spinulata* Guinot, 1995: apparently no more than six eggs measuring about 1 mm; *D. doederleini* Ortmann, 1892: less than 50 large eggs; *D. foesteri*: 150–200 subspherical eggs ranging from 2 to 2.2 mm.

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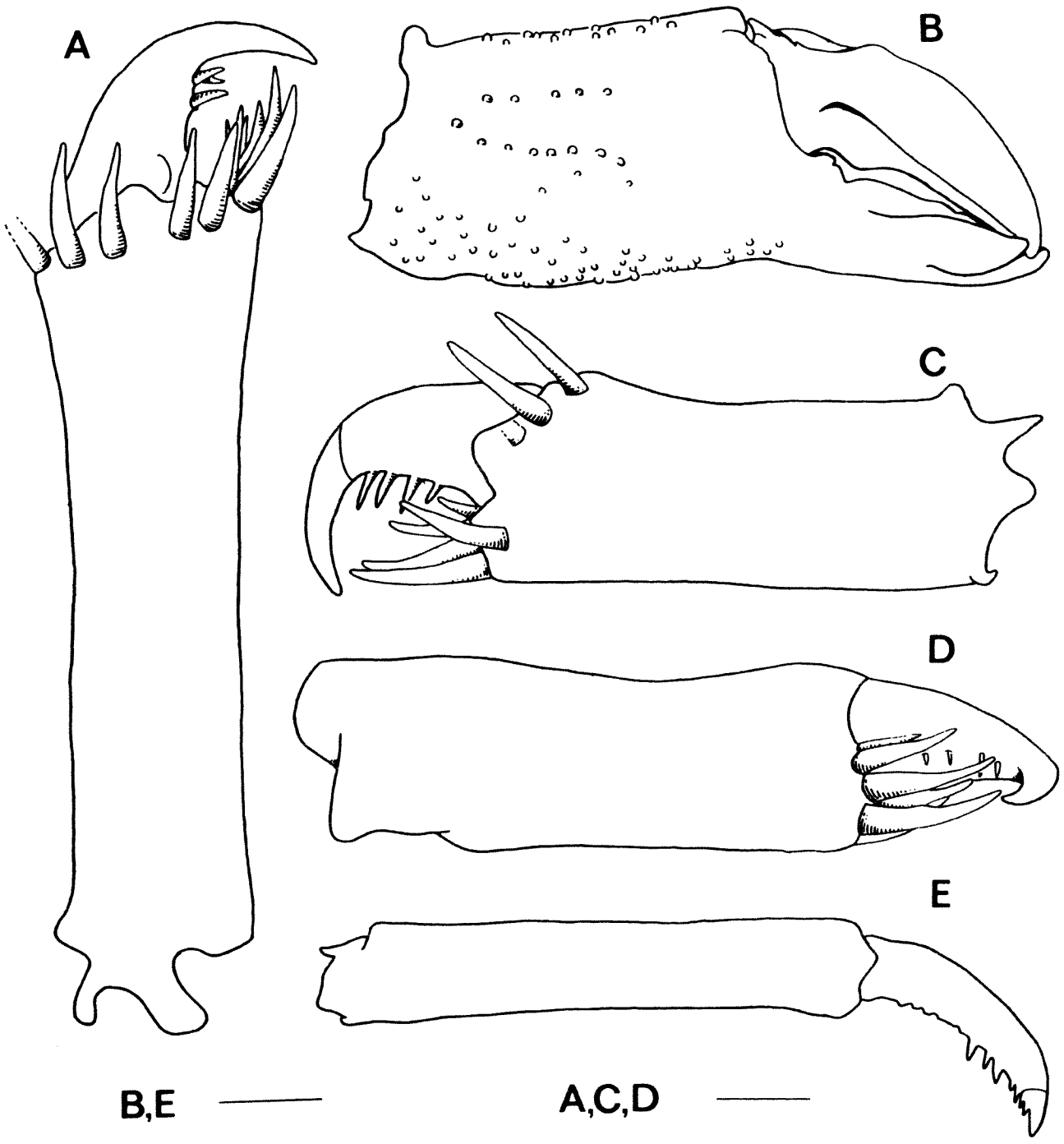

Figure 1 Dactylus and propodus of left cheliped and left pereiopods 2, 4, 5 in *Dicranodromia karubar* Guinot, 1993, western Australia, 434 m: ovigerous female cl 29; cw 24 (WAM 166–93). **A**, external view of fifth pereiopod (P5). **B**, palm and movable finger of cheliped. **C**, external view of fourth pereiopod (P4). **D**, ventral view of fourth pereiopod. **E**, internal view of second pereiopod. Notice that propodus is much longer in P5 than in P4. Scales: B, E = 5 mm; A, C, D = 2 mm.

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