

THE AUSTRALIAN FRESHWATER CRABS (POTAMONIDAE).

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(Figures 1-7.)

Freshwater crabs of this family are common in the inland and northern portions of Australia, but are unknown from the south-east and south-west coastal areas. Most of the recorded species were described from specimens collected in Cape York. Only one species, *Paratelphusa leichardti* (Miers), is widespread in inland areas. It causes some damage to bore-drains as the burrows of the specimens increase seepage from the drains and so cut down the flow.

Family POTAMONIDAE.

The family is generally subdivided on the structure of the mandibular palp, though some authors recognize more than two subfamilies.

- 1. Terminal segment of the mandibular palp deeply cleft into two lobes, one dorsal and one ventralsubfamily GECARCINUCINAE
- Terminal segment of the mandibular palp not deeply cleft into two lobessubfamily POTAMONINAE

Subfamily POTAMONINAE.

There is no authentic record of a species of this subfamily from the Australian mainland although the generic name *Geotelphusa* was applied to some Australian species by one early author.

Subfamily GECARCINUCINAE.

Mandibular palp divided into two lobes, a dorsal and a ventral. The dorsal lobe is falciform and lies behind the incisor process of the mandible; the ventral lobe, which is a broad oval plate, more or less covers the exposed surface of the incisor process. Very commonly the abdomen of the adult male is broad at the base and suddenly narrowed at the fifth and sixth segments, but whether this is so or not, the length of the sixth segment is hardly ever less than (often exceeds) its minimum breadth, and the seventh segment (telson) is elongate triangular or tongue-shaped, not broadly triangular.

Key to Genera and Subgenera of the Subfamily GECARCINUCINAE.

- 1. Front in adult less than one and one-half times as wide as orbit 2
- Front in adult usually much wider than, never less than one and two-thirds as wide as orbit 3
- 2. Lower, outer corner of orbit produced into a sort of gutter *Gecarcinucus* (India)
- Orbits normal *Cylindrotelphusa* (India and New Guinea)
- 3. Upper border of merus of chelipeds with a subterminal spine*
- Upper border without subterminal spine 5
- 4. Post-orbital crests prominent Subgenus *Paratelphusa** (Asia, Africa, Malaya)
- Post-orbital crests faint or obsolete *Peritelphusa* (Malaya)
- 5. Post-orbital crests prominent 6
- Post-orbital crests low, indistinct 8
- 6. Epigastric and post-orbital portions of crest either continuous or almost in line *Barytelphusa** (Asia, Malaya)
- Epigastric portion in advance of and slightly overlapping post-orbital portion of crest 7
- 7. Exopodite of external maxillipeds strongly flagellate *Qziotelphusa** (Asia)
- Flagellum of exopodite of external maxillipeds vestigial or absent *Phricotelphusa** (Asia)
- 8. Exopodite of external maxillipeds flagellate *Liotelphusa** (Asia, Malaya, Australia)
- Exopodite of external maxillipeds non-flagellate *Globitelphusa** (Asia)

* Subgenera of *Paratelphusa*.