

10.5–14.5 mm; 1 female, 10.5 mm; 1 juvenile, 8.0 mm). These records appear to be new for New Zealand waters. The type material came from New South Wales, Australia (Hale, 1925).

Cirolana australiense n.sp.

C. cranchii Leach var. *australiense* Hale, 1925.

Five specimens (all male) in the collection all agree closely with the description of this form given by Hale (1925). Hale erected the var. *australiense* on the grounds that in *Cirolana cranchii* described by Hansen (1905) the distal halves of the lateral margins of the telson are slightly concave (not slightly convex, as they are in the Australian material), and the apical part of the telson is much narrower than in Australian specimens of similar size. The present material differs in the same way from the description of adult *C. cranchii* given by Hansen (1890, 1905). In addition, the setae on the posterior borders of the uropods and telson are much less dense than in adult *C. cranchii*.

On the other hand *C. cranchii* var. *australiense* agrees closely with the description of juvenile *C. cranchii* given by Hansen (1890, 1905) when discussing differences according to age. In Hansen's description of the juvenile, the telson does not have concave sides and the tip of the telson is fairly broad. Moreover, the setae on the posterior borders of the uropods and telson of juveniles are less numerous than they are in large specimens.

It is rather unsatisfactory to retain the Australasian form as a variety of *C. cranchii* since specimens appear never to exhibit the typical adult appearance of the posterior part of the body shown by *C. cranchii*. Hale (1925) saw a good range of material, none of which resembled typical *C. cranchii* and in which the lengths of adult males and females measured 13 mm and 12 mm respectively. Present material includes adult males up to 14 mm in length, and like the Australian material is quite different from typical adult *C. cranchii*. Two European specimens obtained on loan from the British Museum are of about the same size as the Australasian adult material (12 and 13 mm respectively) and both specimens show typical *C. cranchii* characters in the form of the posterior part of the body.

At the moment, therefore, it seems most convenient to designate the Australasian material as a separate species under Hale's original varietal name, so the name *Cirolana australiense* is proposed. Apart from the differences in the appearance of the posterior part of the body the species closely resembles adult *C. cranchii*, particularly in the shape of the frontal lamina (see below), which is often a diagnostic character in different species of *Cirolana*.

DESCRIPTION. Body $2\frac{1}{2}$ –3 times as long as the greatest width (Fig. 5a). *Antennule* hardly extending beyond the peduncle of the antenna (Fig. 5e); reaching halfway along the 1st thoracic segment (Fig. 5a, e). *Antenna* reaching the 4th or 5th thoracic segment. *Eyes* moderately large; situated laterally. Ventral surface of head with *frontal lamina* pentagonal and only slightly longer than greatest width (Fig. 5e). *Maxilliped* moderately stout. *1st peraeon segment* embracing base of head to a considerable extent, with anterolateral corner acute (Fig. 5b). *Peraeopods* fairly slender; last four pairs armed with spines but not setae (Fig. 5d). *Abdomen* with 1st segment concealed beneath last thoracic segment; only segments 2–5 and telson visible. Medial length of 5th thoracic segment long, owing to the recurvature forwards of the posterior border of the 4th segment (Fig. 5a). *Telson* smooth, with lateral borders almost straight, converging to a fairly narrowly rounded apex (appearing rather short in Fig. 4 owing to the flexure of the body when the preserved specimen was drawn). *Uropods* extending beyond the posterior border of the telson. Basal segment with inner angle produced, reaching halfway along the endopod. Endopod and exopod each somewhat pointed and slightly bifid at the tip (Fig. 5g). Telson and uropods armed with setae and spines. *Appendix masculina* slender, narrowing at the tip, and extending for about $\frac{1}{4}$ of its length beyond the inner ramus of pleopod 2.

MATERIAL. Five males (body length 6.0–14.0 mm) in the Schauinsland collection all come from the Chatham Islands. This record appears to be new for New Zealand waters.