

Figure 7.—Male pleopod 1 of *K. pelsartensis*, WAM 265-70 of cl:13.3, cb: 15.6.

Observations.—The paratype (smaller female) has the pre-distal tooth developed on the cutting edge of the fixed finger of the two chelipeds. Such a difference could be related to the different size as well as to the sex of the specimen. On the small female (WAM38-71) the discrepancies in regard to the holotype is more accentuated; the difference between the major and the minor chelipeds is stronger, the major having comparatively a palm higher and the fingers shorter; the tooth on the cutting edge of the fixed finger is particularly large. The minor cheliped is more elongate, with dactylus more deeply carinate and granular on superior border. The extension of the brown colour of the fixed finger on the palm is already marked.

By the shape of its carapace and chelipeds, *wilsoni* is closer to *quadriceps* than to any other species, but it clearly differs by several characters of the front, the chelipeds, the dactyli of the pereopods 2-5 and the male pleopod 1. The fronto-orbital breadth is clearly more than half the largest breadth of the carapace, instead of being clearly less on *quadriceps*.

The species is dedicated to Dr. B. R. Wilson from the Western Australian Museum, who collected the Type material, as well as an important part of the other material used for the present paper.

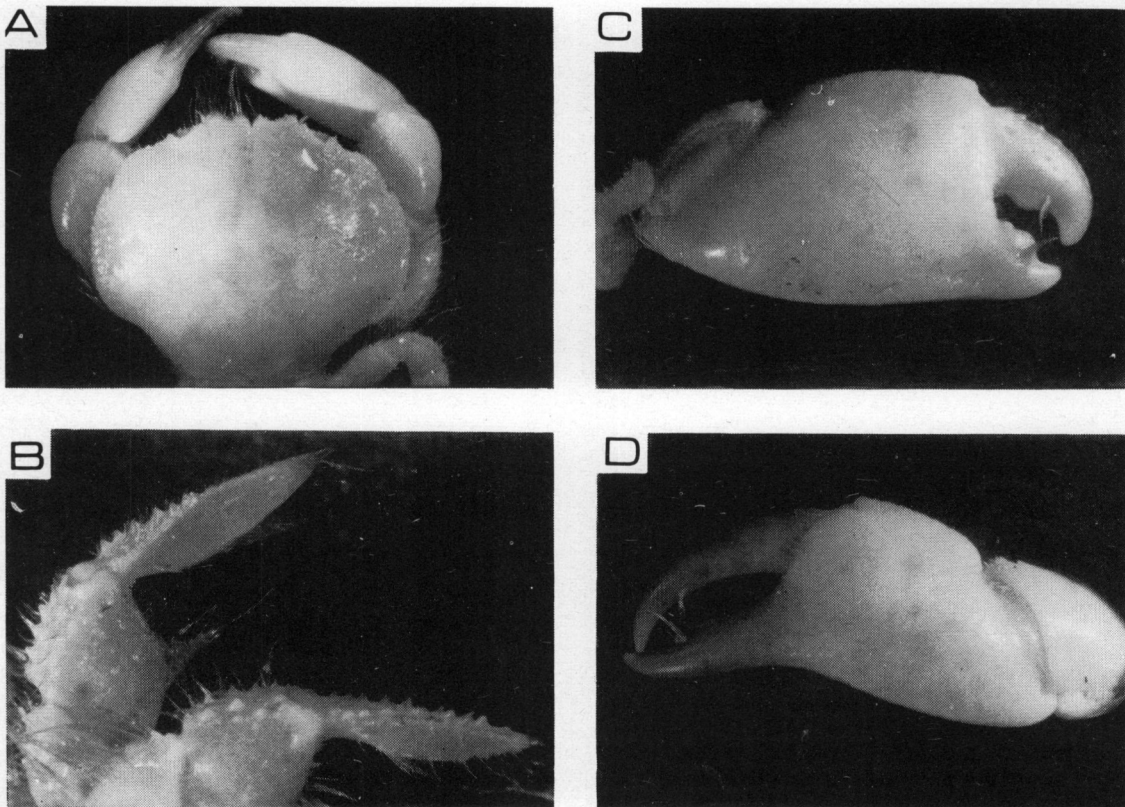


Figure 8.—*Kraussia pelsartensis*, WAM 265-70, male of cl:14.6, cb:18.0. A, dorsal view.—B, pereopods 4, 5 (of WAM 270).—C, major cheliped.—D, minor cheliped.

***Kraussia pelsartensis* nov. sp.**

(Figs. 7, 8, 23D)

Type specimen: Western Australian Museum, Perth.

Type locality: off Hummock Island, Pelsart group, Abrolhos.

Material.—Holotype, WAM.265-70, male of cl:14.6, cb:18, lacking pereopods 2-5 on left side, and pereopod 4 on right side, Loc: 3 miles, west Hummock Island, Pelsart Group, Abrolhos, 20 faths., Source: R. W. George on "Davena", 2.6.1960; Paratypes, WAM.268-70, 2 males, one of cl:14.5, cb:18, another of cl:12, cb:14.5, Loc-Cape Vlaming, Rottneest Island, Source: B. R. Wilson, Date coll: 1/3/1962; WAM.270-70, male of cl:13, cb:16, Loc. S.W. of Point Cloates, 113° 39' 30"E, 22° 43' 30"S, Source: Ningaloo Exp.d., 7/9/1968; WAM. 274-70, 2 males, the largest of cl:19.5, cb:11, Loc: N.W. Rat Island, Abrolhos Group, Honolulu Dredge, 25 faths., coralline bank, Source: R. W. George on "Davena", Date coll: 12/5/1960.

Diagnosis.—Holotype. Carapace nearly smooth with some small flattened granules on the area close to the front and lateral border. Front quadrilobate with a deep open medium incision, little salient beyond the orbits. Inner supra orbital angle (preorbital spine) marked and

well separated from the front by the antennal sulcus but not acute. A small concavity is present behind extraorbital angle on antero-lateral margin of carapace, followed posteriorly by a convexity and a notch. Both chelipeds smooth, differently shaped but with palm of same length. Major cheliped with a swollen palm, as high as half its total length; both fingers short;

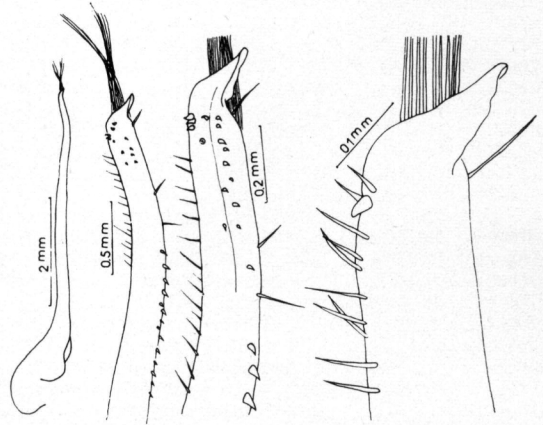


Figure 9.—Male pleopod of *K. roycei*, WAM 269-70 of cl:13.2, cb:14.

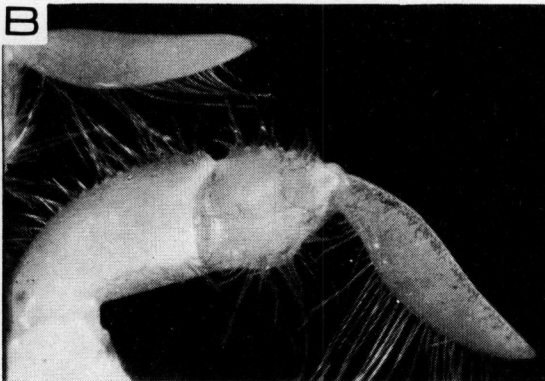
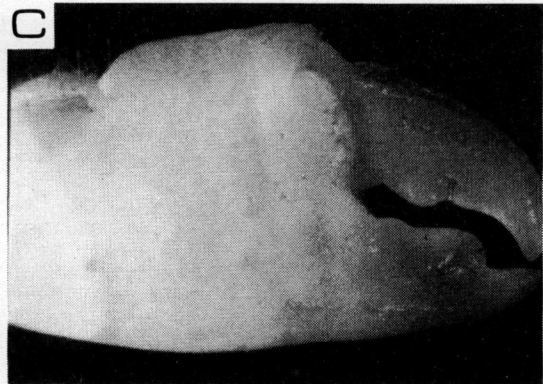
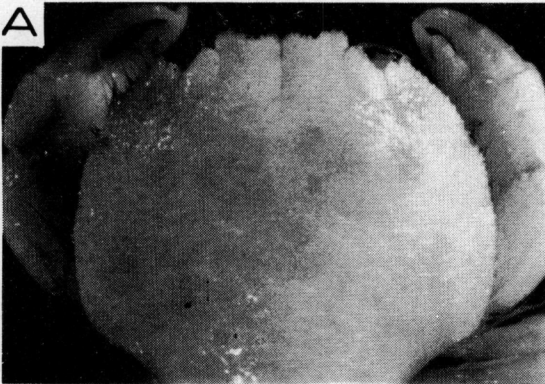


Figure 10.—*Kraussia roycei*, WAM 269-70, male of cl:13.2 cb:14. A, dorsal view.—B, pereopods 4, 5.—C, major cheliped.—D, minor cheliped.

fixed finger a little longer than one-third of height of palm. Dactylus with some granules on the proximal third of its superior border and one large rounded tooth on its cutting edge; fixed finger with two molariform teeth on its cutting edge, proximal tooth much smaller. Minor cheliped with palm somewhat elongate, clearly less high than half its length; both fingers, elongate, somewhat slim, tapering distally with tips crossing and a gap between them. Fixed finger nearly as long as height of palm; dactylus much longer; fixed finger bent downward, a concavity marking lower border of palm. Dactyli of pereopods 2-5 have anterior border nearly straight (feebly sinuous), posterior borders convex; all anterior border of pereopods 2 and 5 denticulate; only its proximal half denticulate on pereopod 3. Denticles stronger on pereopod 5; pereopods 4 missing on both sides of holotype. On paratype (WAM.270-70) anterior border of dactyli of pereopod 4 like on pereopod 3 of holotype but with denticle extending a little over its proximal half. Male pleopod with apex straight and ornamented on outer side by a subdistal row of 10 large but relatively short acicular setae; outer side of stem with a series of strong short spines on distal fifth part of its length, inner side only ornamented by some fine acicular spinules.

Observations.—On the largest male of the paratypes (WAM. 268-70), the two chelipeds are nearly similar with one another as size and shape; the two chelipeds have the palm and fingers elongate and are nearly like the minor cheliped of the holotype. The other paratype has only one cheliped which is like the minor cheliped of the holotype.

A somewhat smaller specimen (WAM.274-70) has the fingers of the major cheliped comparatively less shortened than on the holotype. The other specimen (WAM.274-70) is much smaller (probably juvenile) and has the two chelipeds clearly unequal and dissimilar, but the palm of the major cheliped is less swollen, the fingers are a little longer than in the holotype; the palm and fingers of the minor cheliped are a little shorter than in the holotype. The concavity behind the extraorbital angle is well marked. The dactyli of the pereopods 2-5 are identical with those of the paratype.

The conditions of the chelipeds of the largest paratype could mislead in the use of my key for its identification as *pelsartensis*. However, the species is well characterized by: (1) its broad carapace.—(2) the shape of the chelipeds.—(3) the small concavity behind the extraorbital border.—(4) the dactyli of the pereopods 2-5 with acute granules on anterior border more developed on the pereopods 2 and 5.—(5) the male pleopod. The name of the species refers to the Pelsart Group of the Abrolhos Islands, where the type material was collected.

***Kraussia roycei* nov. sp.**

(Figs. 9, 10, 23E)

Type specimen: Western Australian Museum.

Type locality: Dampier Archipelago, Australia.

Material.—Holotype, WAM.269-70, male of cl:13.2, cb:14, Loc: Flying from Passage,

Dampier Arch., Source: R.D. Royce on "Davena", Date coll: 30/5/1960.

Diagnosis.—Carapace with finely granular ripples all over. Front quadrilobate salient beyond the orbits and with nearly closed median incision. Inner supra orbital angle (pre-orbital spine) marked and antennal sulcus deep. Sinus on outer part of upper orbital border strongly marked and continued on carapace by a clear groove. Antero-lateral margin of carapace with only a feeble notch. Both chelipeds smooth with palm of same height and same length but differently shaped; major cheliped with upper border of palm longer and two fingers shorter than on minor cheliped. Two fingers a little shorter than height of palm on major cheliped, much longer than height of palm on minor cheliped. Cutting edge of fixed finger of major cheliped with two low molariform teeth, the proximal feeble; that of minor cheliped with a strong subdistal tooth. Dactyli of pereopods 3,4,5 with anterior border slightly concave without denticle; that of pereopod 2 more straight with 2-3 small denticles on proximal half. Male pleopod with apex like a short beak bent at 45°, a subdistal bunch of long setae on ventral side, a pre-apical series of acute short thick spines on dorsal side and some similar spines at some distance on outer side of the stem.

Observations.—The species is close to *pelsartensis* and on first examination was considered only as a variety. The discrepancies of the male pleopod in particular supported the view of separate species. The holotype of *roycei* was compared with all the available material of *pelsartensis*, but particularly with the male of 13x16 (WAM.270-70) which has a carapace length nearly equal to that of *roycei*.

K. roycei differs from *pelsartensis* by the following characters: (1) The breadth of the carapace is 1.07 times its length, instead of being 1.22; the fronto orbital breadth is 1.86 instead of being 2.06 in *pelsartensis*.—(2) the front is comparatively more salient beyond the inner supra-orbital angle; the sinus of the upper orbital border more marked; the postfrontal region is more densely covered with long hairs than on *pelsartensis*, in which the hairs are limited around the frontal margin.—(3) There is no trace of the feeble but always clear concavity which marks the antero-lateral border of the carapace immediately behind the extraorbital border on *pelsartensis*.—(4) The carapace is more granular, the granules being arranged in fine transverse ripples.—(5) The merus of the cheliped does not have on the distal margin of the upper border, the distal spinule which exists on *pelsartensis*. The major cheliped differs less from the minor cheliped than on *pelsartensis*. The fingers of the major cheliped are longer and those of the minor shorter than on *pelsartensis*.—(6) The dactyli of pereopods 3-5 have the anterior border slightly concave without denticles instead of nearly straight with denticles on *pelsartensis*.—(7) the male pleopod with the apex like a short beak bent at 45° instead of straight on *pelsartensis*.

To support the discrepancy of the breadth of the carapace, the measurements of the specimens of *pelsartensis* (indicated by their regis-