NEW RECORDS OF MARINE CRUSTACEA FROM THE EAST AFRICAN REGION

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The following records are based on material collected by the Zoology Departments of the University of Cape Town (U.C.T.) and the University of the Witwatersrand (U.W.). I am indebted to Prof. J. H. Day (U.C.T.) and to Dr. W. Macnae and Mrs. M. Kalk (U.W.) for the privilege of examining their collections.

DECAPODA

Trigonoplax cimex Kemp

Trigonoplax cimex Kemp, 1915 : 216, text-figs. 4, 5, pl. 12 fig. 3; 1917 : 274.

An ovigerous female, length 5 mm, breadth 4.5 mm, pale cream, no markings, agrees morphologically with Kemp's description except that the dactylus on the fourth and fifth legs has recurved spines along the whole of the hind margin, though those on the distal half are closer together than those on the proximal half. On the second and third legs there are 7 to 8 spines on the distal third.

Nosi Bé, Madagascar (U.W.).

Originally described from Chilka Lake on the Orissa coast of Bengal.

The uniform coloration and the armature of the last two legs might be considered enough to justify a varietal name, but it is preferable to wait until more specimens from Madagascar, and from intermediate localities, are available.

Lupocyclus tugelae Barnard

Lupocyclus tugelae Barnard, 1950 : 148, figs. 29 e-h.
Lupocyclus granulatus Leene & Buitendijk, 1952 : 215, text-fig. 1a, pl. 16 fig. 1.

A male recently dredged off the coast of Natal corresponds with my description of the female. The sculpture of the carapace agrees with Leene & Buitendijk's detailed description of *Lupocyclus granulatus* Leene & Buitendijk. In my 1950 fig. 29e the two outer granulated tubercles of the four on the (proto)gastric region might have been accentuated a little more; in the actual specimens (male and female) they show as distinctly as in the photograph of *L. granulatus* on Leene & Buitendijk's pl. 16 fig. 1.

The chelipeds of *L. granulatus* were not described, but as far as can be seen

from the photograph the ornamentation agrees with that of the present male. The arm has five spines on the anterior margin, increasing in size distally. The wrist has two spines, one on the inner, one on the outer margin, each being the culminating point of a beaded ridge; these two ridges enclose two other longitudinal ridges, and two other shorter ridges diverge from the apical point of the wrist. The hand has a spine immediately above the junction with the wrist; there are two beaded ridges on the dorsal and the inner surface, each ending in a spine; a beaded ridge on the outer surface ends (without a spine) at the junction of the finger and thumb, both of which carry beaded ridges.

The abdomen of the male has a strong ridge across the second and third segments, but no others on the fused segment indicating the fourth and fifth segments, such as Gordon (1938: 175, fig. 1) illustrated for *L. rotundatus* Adams & White.

The first male pleopod is as figured by Leene & Buitendijk, it is strongly calcified.

The length of the specimen is 13 mm, the breadth 17 mm. Its colour is orange-red, the chelipeds being deeper in tint than the carapace; the arm and hand are faintly banded with red, the finger and thumb are red proximally, then white, the tips are brownish-red. The legs are pale.

The specimen was collected at 29°58′S 30°02′E, at a depth of 49 metres (U.C.T.).

The holotype of *L. tugelae* Barnard, a female, is in the South African Museum; the homoeotype, a male, in the Zoology Department of the University of Cape Town; the holotype of *L. granulatus* Leene & Buitendijk, a male, is in the British Museum (Nat. Hist.).

I feel sure that *L. granulatus* from N. W. Australia and the East Indies (depth: 18-94 m) is synonymous with the present species. *L. philippinensis* Nauck (see Leene, 1940 : 174) differs in having 7 spines on the anterior margin of the arm of the cheliped.

Paguropsis typica Henderson

Paguropsis typica Henderson, 1888 : 99, pl. 10 fig. 4; Alcock, 1905 : 28. pl. 2.

One specimen from 29°46′S 31°17′E, depth 60-70 fathoms (U.C.T.).

The species was previously recorded from the Philippines, Cape Comorin, and the Gulf of Martaban; it was taken at depths between 90 and 115 fathoms.

Salmoneus rostratus n. sp. (fig. 1)

The following description is based on two ovigerous females. The carapace is smooth. The rostrum extends to the middle of the second peduncular segment of the first antenna; it bears a denticle on the lower margin near the apex. A short supraorbital spine is present. The eyes are partially visible in dorsal view.

There is no movable scale at the postero-lateral corner of the sixth pleon seg-

ment. The telson has two pairs of spinules in the distal half; the apex is truncate, with a median notch with two plumose setae flanked by two unequal spines.

The scaphocerite is moderately broad, its spine extends to the level of the distal margin of the lamina. Epipods are present on the third maxilliped and on the first to fourth peraeopods.

The large first cheliped (the left in both specimens) is elongate, 11 mm long, porrect (as preserved), and inverted. The fourth segment is slender, gently curved, and not quite reaching the end of the peduncle of the first antenna. The fifth segment is cup-like, the lower apex is acute. The hand is elongate, 6 mm long,

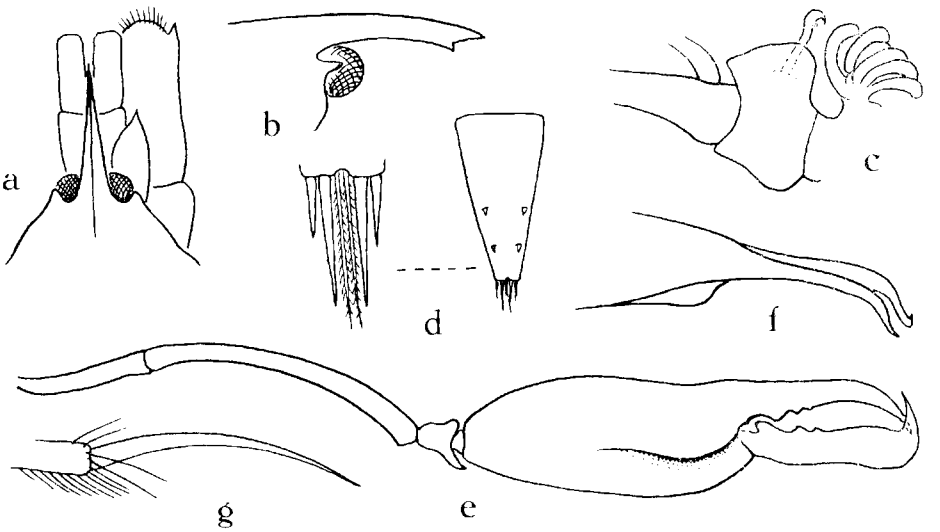

Fig. 1. *Salmoneus rostratus* n. sp. a, dorsal view of anterior part of carapace; b, lateral view of rostrum; c, base of third maxilliped; d, telson with apex further enlarged; e, inner view of left first peraeopod; f, dorsal view of finger (above) and thumb (below) of first peraeopod; g, dactylus of third to fifth peraeopods.

long-oval, plump, with on the distal inner surface a ridge from the articulation of the finger extending proximally for about half the length of the palm; between this ridge and the ventral margin there is a shallow groove in which the fourth segment would lie if the chela were folded. The thumb is apically acute, and bears three graduated teeth proximally on the cutting edge. The finger widens distally with an acute upturned apex; the cutting edge bears three graduated teeth proximally. The apices of the finger and thumb curve inwards.

In the small first cheliped the fifth segment is longer than the fourth; the hand measures two-thirds of the length of the fifth segment, while the finger and thumb are equal to the palm.

In the second peraeopod the first jointlet of the fifth segment is longer than the second to fifth together; the hand is equal to the third to fifth jointlets together.

In the third to fifth peracopods the dactylus is slender, measuring half the length of the sixth segment.

The total length is 20 mm. The major diameter of the ova is 0.75 mm. In preserved state the colour is uniform cream.

The two specimens were taken at Nosi Bé (U.W.).

These specimens appear to differ from other species of the genus (formerly *Jousseaumea* Coutière), *S. serratidigitus* (Coutière), *S.cristatus* (Coutière), *S. sibogae* (De Man), *S. hilarulus* (De Man), in the shape of the rostrum, the large chela and the paucidentate cutting edges of the finger and thumb; also the dactylus of the third to fifth peracopods appears to be relatively longer.

The elongate large chela and its inverted position, has a strong resemblance to that of *Alpheopsis sibogae* De Man, but the absence of a movable scale on the sixth pleon segment puts the species into *Salmoneus* Holthuis (cf. key in Holthuis, 1955 : 83).

Philarius lophos n. sp. (fig. 2)

The carapace is nearly as deep as its dorsal length; its dorsal profile is angularly

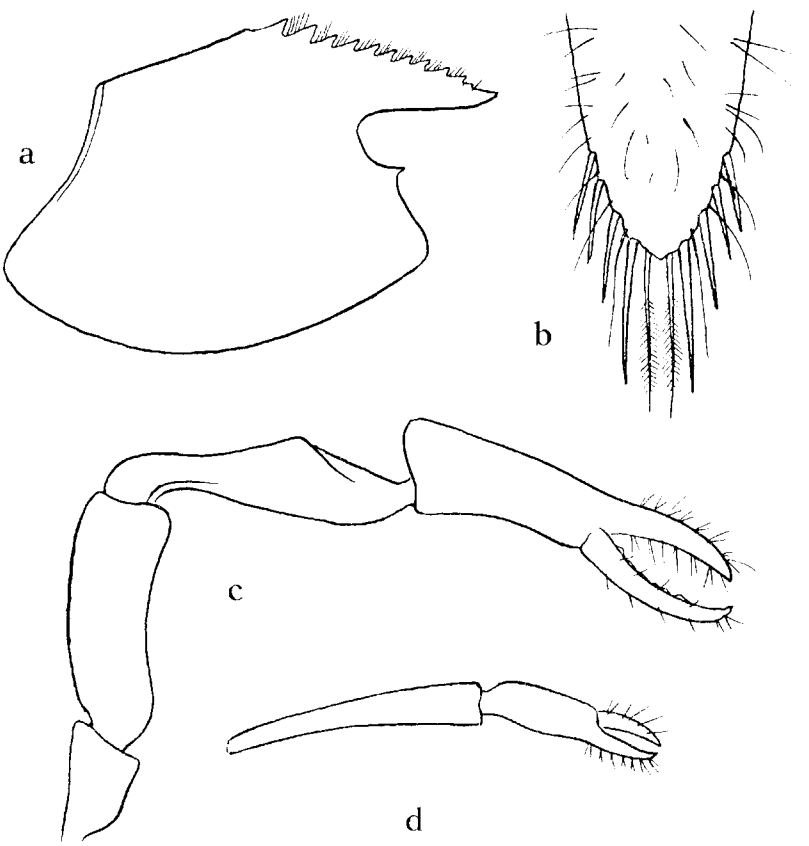

Fig. 2. *Philarius lophos* n. sp. a, lateral view of carapace; b, apex of telson; c, second peracopod of male; d, wrist and hand of first peracopod.

arched. The rostrum is straight, with 10 (in the male) or 11 (in the female) teeth, 5 or 6 of which are postorbital; there are no ventral teeth. Supraorbital, branchiostegal, and hepatic spines are absent.

The telson has 5 pairs of spines around the ovate apex; the median pair is very slender and plumose, there are one or two setae between the spines. The dorsal surface of the telson has scattered setae, but no spines.

The scaphocerite is narrow, the spine projects beyond the lamina. The mandible has no palp. The maxillipeds are provided with exopods.

The third to seventh segments of the first pereiopod if extended measure approximately 4 mm in length; the third segment has half (or a little more than half) the length of the fourth, the fourth and fifth are subequal, while the hand measures two thirds of the length of the fifth segment.

The third to seventh segments of the second peraeopod if extended measure approximately 9.25 mm in length; the third segment has about half the length of the fourth, the fifth is a little longer than the fourth and 3/4 of the length of the hand (inclusive of the chela). The fifth segment is distally bevelled so that the hand can be reflexed dorsally at a right angle to the wrist. The hand at its base is twice as wide as the junction with the fifth segment; it is rather squarely truncate. The inner margin of the thumb is entire, that of the fingers shows three feeble teeth or undulations. The chela is sparsely setose.

The third to fifth peraeopods are sparsely setose except at the apex of the sixth segment, where the setae are more numerous.

The female is approximately 11.5 mm long (carapace 3.5 mm, abdomen 8 mm). The male is slightly smaller. The colour is creamy-white.

One male and one ovigerous female were found on a madrepore coral of the genus *Galaxea* at Inhaca Island, Delagoa Bay (U.W.).

The species is distinguished from *Philarius gerlachei* (Nobili) and *P. imperialis* (Kubo) by the multiserrate crest-like dorsal profile of the carapace, and by the wide flat base of the hand of the second peracopod.

Platycaris latirostris Holthuis

Platycaris latirostris Holthuis, 1952 : 173, figs. 85, 86; 1955 : 56 (key), figs. 38c, d.

An ovigerous female of 7.5 mm; the breadth of the carapace is 3.5 mm, that of the expanded pleon segments 4.5 mm. The eggs are numerous, their major diameter is 0.5 mm.

A single specimen taken at Nosi Bé, Madagascar (U.W.), agrees with Holthuis' description of a male from the East Indies, but, like the type, is lacking the second peracopods. The pleura of the first to third pleon segments are deep, and laterally expanded by the eggs.

STOMATOPODA

Lysiosquilla acanthocarpus Miers

Lysiosquilla acanthocarpus Kemp, 1913 : 120 (here references).

One male of 50 mm and one female of 53 mm from Inhaca Island, Delagoa Bay (U.W.), agree in all respects with Kemp's most excellent description.

Squilla woodmasoni Kemp

Squilla woodmasoni Kemp, 1911 : 99; 1913 : 74, pl. 5 figs. 63-65.

Inhaca Island, Delagoa Bay (U.W.).

ISOPODA

Janira falcifera n. sp. (fig. 3)

The margins of the head, the peraeon, and the telson are entire. The anterior margin of the head is convex, and not produced. The ocelli number 35 to 40, they are not pigmented. The first to fourth side-plates are bilobed, the fifth to seventh are posteriorly notched. A few setae are implanted on the lateral margins of the peraeon. The telson is oval; it is a little longer than the greatest width.

The flagellum of the first antenna is 5- to 6-segmented. In the female the second antenna is as long as the animal, in the male it is slightly longer. The third peduncular segment is without scale; the flagellum is multi-jointed. The fourth segment of the maxilliped is broad, the fifth is proximally as wide as the fourth but is rapidly bevelled distally to the width of the sixth (cf. *Janira capensis* Barnard, 1914).

The first peraeopod of the male is very long, being nearly 2 mm in length (fingers closed). The third segment is shorter than the second. The fourth is

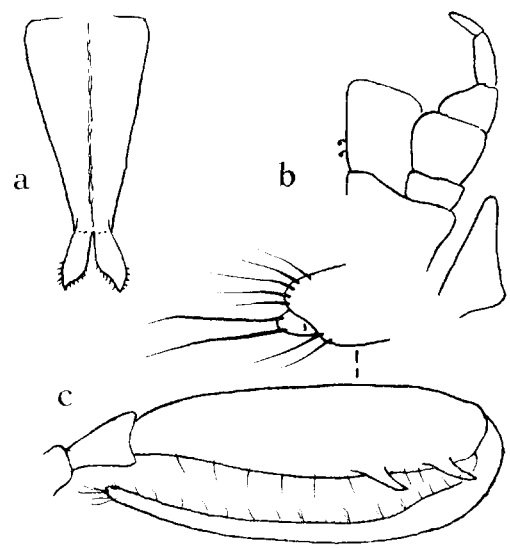

Fig. 3. *Janira falcifera* n. sp. a, first pleopods of male; b, maxilliped (setae omitted); c, hand of first peraeopod of male, with tip of finger further enlarged.

shorter than the third. The fifth is subequal to the second plus the third, it is elongate-oval, and bears one strong spine on the inner margin a little beyond the middle, and another near the finger-hinge. The finger is very long, it is subequal to the fifth plus fourth segments, and is narrow. The seventh segment is minute, tipped with two long setae, but without an unguis. In the female the first peraeopod resembles the succeeding peraeopods.

The second to seventh peraeopods of the male (the first to seventh in the female) are biunguiculate.

The first pleopod of the male has the peduncles fused, the rami lanceolate and slightly divergent, but not very clearly articulated with the peduncles.

The uropod is slender. The outer ramus is a little longer than the peduncle, the inner ramus is 1.5 times as long as the peduncle.

The male is 2.3 mm long, the female 2 mm. The colour is creamy-white; the eyes are pale.

The specimens were taken at Inhaca Island, Delagoa Bay (U.W.).

ZUSAMMENFASSUNG

Sechs Arten von Decapoden Crustaceen, zwei Stomatopoden und eine Isopoden-Art werden von der Küste von Natal, Delagoa Bay, und von Nosi Bé (Madagascar) gemeldet. Von den Gattungen *Salmoneus, Philarius* und *Janira* wird je eine neue Art beschrieben.

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