

A NEW RECORD OF *SALMONEUS ROSTRATUS* BARNARD, 1962
(DECAPODA, ALPHEIDAE) FROM HANSA BAY,
PAPUA NEW GUINEA ¹⁾

BY

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Salmoneus rostratus has so far been collected only from the type locality, Nosy Bé, N.W. Madagascar. The discovery of the species in Papua New Guinea waters represents an extension of the known geographical range of this species, whilst also affording the opportunity to describe the previously unrecorded colour pattern and discuss the ecology of the species.

***Salmoneus rostratus* Barnard, 1962 (fig. 1)**

Salmoneus rostratus Barnard, 1962: 240-242, fig. 1; Banner & Banner, 1981: 52 (table), 53 (key); Banner & Banner, 1983: 88; Felder & Manning, 1986: 507; Carvacho, 1989: 255; Manning & Chace, 1990: 19, 22.

Material examined. — 1 ovigerous female (CL 6.0 mm), 1 non-ovigerous female (CL 2.6 mm). Sandy substrate around Davir wreck, Hansa Bay, Madang Province, Papua New Guinea; 11 m depth; collected by diver-operated suction sampler; 6 October 1992; coll. H. K. A. Wilkins, field no. S92/131.

Remarks. — In view of the large distance between the type locality and the present site of collection, a comparison was made with the type series (SAM catalogue number A11086). The present specimens agree very closely to both the type series and Barnard's (1962) description, although some minor differences were noted. The rostrum falls just short of the middle of the second segment of the antenna in the larger specimen (fig. 1a, b), whilst only reaching to the end of the first antennal segment in the smaller specimen, whereas in both type specimens the rostrum reaches to the middle of the second antennal segment. Both movable and fixed fingers of the large first chela bear five graduated teeth (fig. 1e), but the type specimens only harbour three. A faint postrostral carina is present, which terminates in a distinct postrostral tubercle (fig. 1a). Three strong spines are present on the posteroventral margin of the ischium of the third and

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fourth pereopod (fig. 1c). The latter two features were not noted in Barnard's (1962) type description, but are present in the type specimens.

Barnard's description was based on two ovigerous female specimens, no holotype was selected at the time. The partially dissected specimen (CL 5.0 mm), on which the drawings (Barnard, 1962) were clearly based, is now selected as the lectotype (lectotype SAM A11086, paralectotype SAM A43118).

Both of the present female specimens, as well as the female lectotype and female paralectotype, have an appendix masculina and appendix interna on the second pleopod (fig. 1d), supporting the hypothesis of Carvacho (1989) that the presence of an appendix masculina in females is characteristic of the genus. Based on sexual differences in the closely related *S. cavicolus* as discussed by Felder & Manning (1986), it is assumed that both the present specimens are female.

The present specimens have been deposited in the collections of the Koninklijk Belgisch Instituut voor Natuurwetenschappen, Brussels, Belgium, catalogue number I.G. 27.951/NAT9.

Very few specimens of *S. rostratus* have been recorded in the literature, as is common to all species within the genus (Banner & Banner, 1981). The type description was based on two females (Barnard, 1962), an additional specimen (no sex specified) being recorded by Banner & Banner (1983). Carvacho (1989) discussed a specimen from the Paris Museum, and although no details are given it can be presumed that this was the specimen reported upon by Banner & Banner (1983). All three previously reported specimens (Barnard, 1962; Banner & Banner, 1983) were from the type locality (Nosy Bé, Madagascar).

The live colour of both of the present specimens was: carapace, abdomen, telson and uropods maroon-red; antennae and antennules brilliant white; pereopods translucent with red tinge. Barnard (1962) only mentioned that preserved specimens were of a uniform cream colour.

No information is given on the depth and substrate from which the type specimens were obtained (Barnard, 1962). The present specimens were obtained from a sandy substrate at 11 m depth from the burrow of the goby *Mahidolia mystacina* (Valenciennes, 1837) and the sediment immediately surrounding it. The sample also yielded one juvenile *Alpheus* sp., a genus which is known to associate with *M. mystacina* in Japan (Karplus, 1987; Yanagisawa, 1978).

Whether *S. rostratus* lives in association with *M. mystacina* cannot be ascertained due to sampling deficiencies. Similar problems have occurred elsewhere, e.g., the reported association of several species of *Salmoneus* with the annelid polychaete *Eurythoe* sp., an association which could not be proven by Banner & Banner (1968), due to sampling induced burrow disruption of the various

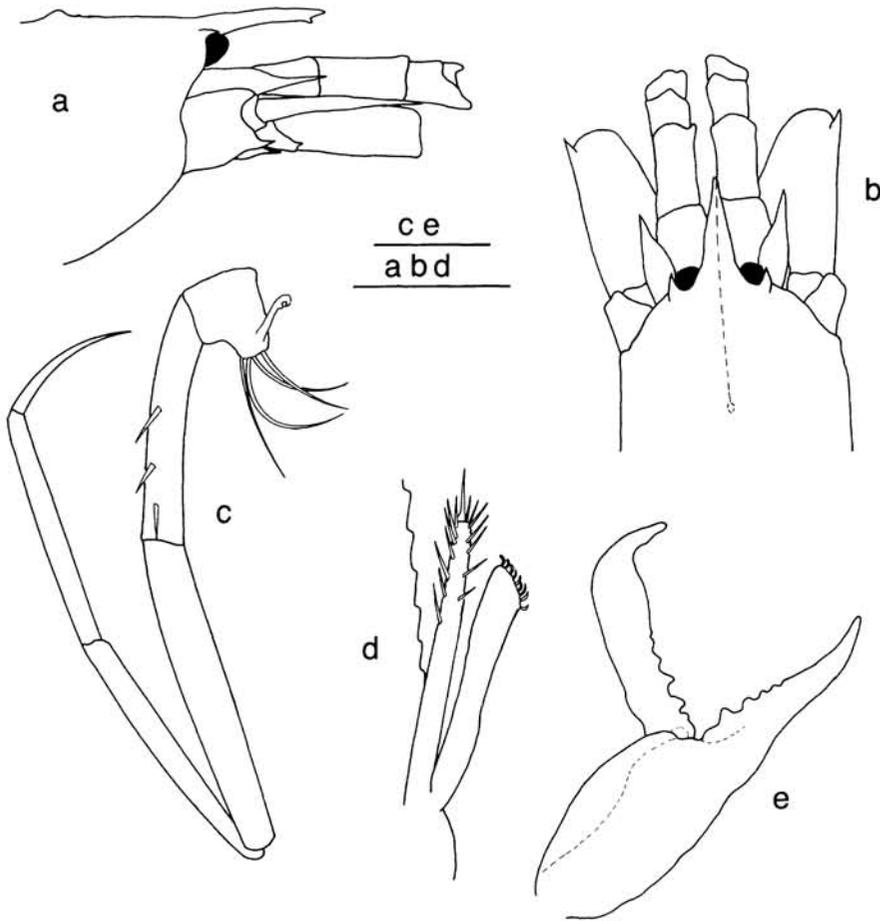


Fig. 1. *Salmoneus rostratus* Barnard, 1962, ovigerous female (CL 6.0 mm) from Hansa Bay, Papua New Guinea. a, frontal region in lateral aspect; b, the same, in dorsal aspect; c, right third pereopod; d, appendix masculina and appendix interna of right second pleopod; e, right chela. Scale bars indicate 2 mm (a, b, e), 1 mm (c), and 0.4 mm (d).

species involved. Based on “yabby pump” collections, Felder & Manning (1986) reported *S. cavicolus* from intertidal burrows, but its host or burrow associates remained unknown.

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INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

The following application dealing with Crustacea was published on 30 September 1996 in vol. 53 part 3 of the *Bulletin of Zoological Nomenclature*. Comment or advice is invited for publication in the *Bulletin*, and should be sent to the Executive Secretary I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K.

Case 2992. *Parapronoe crustulum* Claus, 1879 (Crustacea, Amphipoda): proposed conservation of the specific name. By Wolfgang Zeidler, South Australian Museum, North Terrace, Adelaide, South Australia 5000, Australia. Abstract: The purpose of this application is to conserve the specific name of *Parapronoe crustulum* Claus, 1879, for a pelagic amphipod (family Pronoidae) which is widely distributed in tropical and temperate oceans. The name is in universal use but is threatened by a senior subjective synonym which has been incorrectly used for an entirely different species. The earlier name, *Typhis rapax* H. Milne Edwards, 1830 has been regarded as a synonym of *Hemityphis tenuimanus* Claus, 1879 (family Platyscelidae) since Stephensen (1925). A recent examination of syntypes of *T. rapax* in the Muséum National d'Histoire Naturelle, Paris, has demonstrated that they are conspecific with *P. crustulum*.

The following opinions dealing with Crustacea were published in the same part of the *Bulletin*. Copies of these Opinions can be obtained free of charge from the Executive Secretary at the above address:

Opinion 1848. *Cubaris murina* Brandt, 1833 (Crustacea, Isopoda): generic and specific names conserved.