

Description of the male of *Pseudomysis dactylops* TATTERSALL, 1951 (Crustacea, Mysidacea)

By

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Abstract The male of *Pseudomysis dactylops* TATTERSALL, 1951, which is unknown so far, is described based on specimens collected from Suruga Bay, slightly westward of the type locality, on the Pacific coast of central Japan.

Introduction

The genus *Pseudomysis* was established by G. O. SARS (1879) for a species, *P. abyssi*, from the Arctic Ocean off Finmark, Norway, based on two very mutilated females. The genus is characterized by the following: (1) the rudimentary character of the eye; (2) the thoracopods with the endopod small and feeble and its carpopropodus multisegmented, the exopod remarkably elongated; (3) the telson exceedingly short, lamelliform and incised posteriorly; (4) the small statocyst on the endopod of uropod (SARS, 1885). It was not until 1951 when another species, *P. dactylops* by TATTERSALL, was described for two damaged females from Sagami Bay, the Pacific coast of central Japan.

The male of *P. dactylops* was collected first with ORI-100 net, by an oblique tow from 1200 m deep to the surface in Suruga Bay.

The material is deposited in the National Science Museum, Tokyo (NSMT).

Pseudomysis dactylops TATTERSALL, 1951. Male

Material. 1 adult male (NSMT-Cr11757), November 3, 1968, Suruga Bay (34°55.1'N, 138°39.1'E), 1200 m, ORI-100 plankton net (160 cm diameter, 1 mm mesh aperture). 2 adult males (NSMT-Cr11758) (data unknown).

Body length. 20.2–24.1 mm.

Description. Body robust. Anterior margin of carapace produced in front into triangular rostral plate with very acutely pointed apex which extends forward as far as second segment of antennular peduncle, outreaching eye (Fig. 1A). In dorsal view, posterior margin of carapace leaving eighth thoracic somite exposed.

Eye pyriform, with visual elements imperfectly developed, finger-like process on inner upper margin long, extending beyond apex of eye (Fig. 1A).

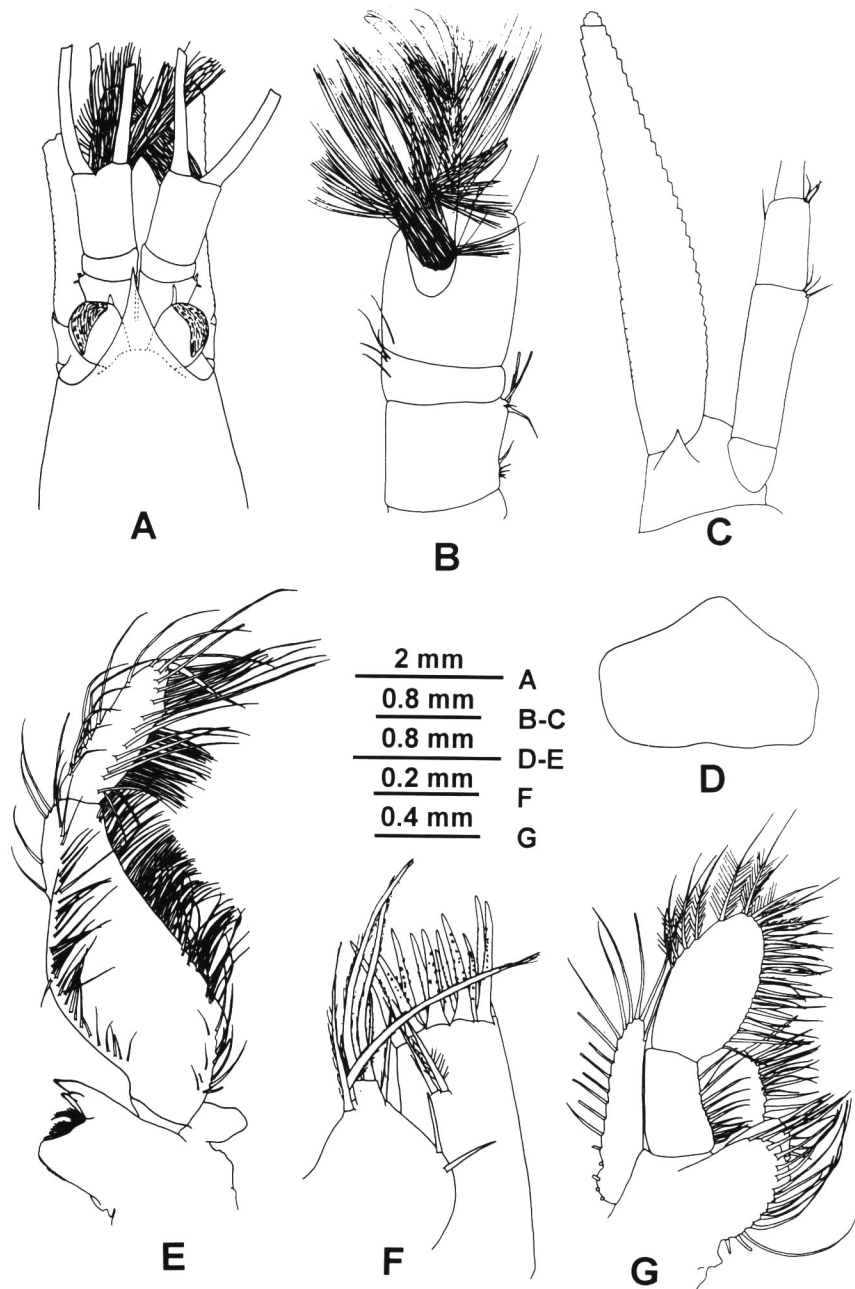


Fig. 1. *Pseudomysis dactylops* TATTERSALL, male. A (NSMT-Cr11757), B-G (NSMT-Cr11758). A, anterior part in dorsal view. B, antennular peduncle. C, antenna. D, labrum. E, palp of mandible. F, maxillule. G, maxilla.

Antennular peduncle with first segment shorter than third, second segment about 0.38 length of first. Male appendage well developed and very hirsute (Fig. 1B).

Antennal scale reaching level of tight setae of male appendage, about 5.5 times as long as broad, extending for 0.4 of its length beyond antennular peduncle, lanceolate, external margin nearly straight or very slightly concave, widest at proximal third and then becoming gradually narrower distally, setose all round, small terminal joint marked off by distinct suture at about distal 0.04 of scale. One prominent spine present on outer distal corner of sympod (Fig. 1C).

Labrum symmetrical, broader than long, without frontal spiniform process (Fig. 1D). Palp of mandible with 3 segments, first segment shortest, third segment about 0.5 length of second (Fig. 1E). Maxillule with outer lobe with 11 strong spines on distal end, each spine with short and thick spinules on lateral margins, internal surface with 2 plumose setae; inner lobe with 3 large and 3 short plumose setae at apex (Fig. 1F). Maxilla with endopod 2-segmented, proximal segment with 11 setae on inner margin, distal segment longer than broad, with setae but not spines; exopod long and narrow, with 18 marginal setae, one of which is present on inner margin (Fig. 1G).

Endopod of first thoracopod with nail, dactylus shortest, preischium, merus and carpopropodus about same in length (Fig. 2A); exopod with flagellum 9-segmented (Fig. 2B). Endopod of second thoracopod with preischium shortest, dactylus very slightly longer than preischium, ischium and merus about same in length and longest; exopod with flagellum 10-segmented (Fig. 2C). Endopod of third to eighth thoracopods long and slender. Third thoracopod with merus and carpopropodus about same in length, carpopropodus divided into 7 subsegments, dactylus shortest with long and slender nail (Fig. 2D); exopod with flagellum 10-segmented (Fig. 2E). Eighth thoracic endopod similar to that of third but ischium and merus becoming shorter and longer than third, respectively (Fig. 2E). All exopods of thoracopods with outer distal corner of basal plates pointed.

Sixth abdominal somite about 1.8 times as long as fifth.

Pleopods well developed, biramous, exopods longer than endopods. Exopod of first pleopod 14-segmented; endopod undivided, reaching distal end of fourth segment of exopod; basal plate with 12 plumose setae arranged longitudinally (Fig. 3A). Second (Fig. 3B) and third pleopods (Fig. 3C) with exopod 16-segmented; endopod 14-segmented in second pleopod and 15-segmented in third pleopod. Fourth pleopod with exopod 17-segmented with distal segment shortest (Fig. 3D), distal part of antepenultimate segment with single short spinose seta extending beyond penultimate segment, penultimate segment with single, very large, stout and spinose seta at distal end, which is equal to combined length of twelfth to sixteenth segments, ultimate segment with 2 short, equal setae (Fig. 3E); endopod 14-segmented. Fifth pleopod with exopod 13-segmented; endopod

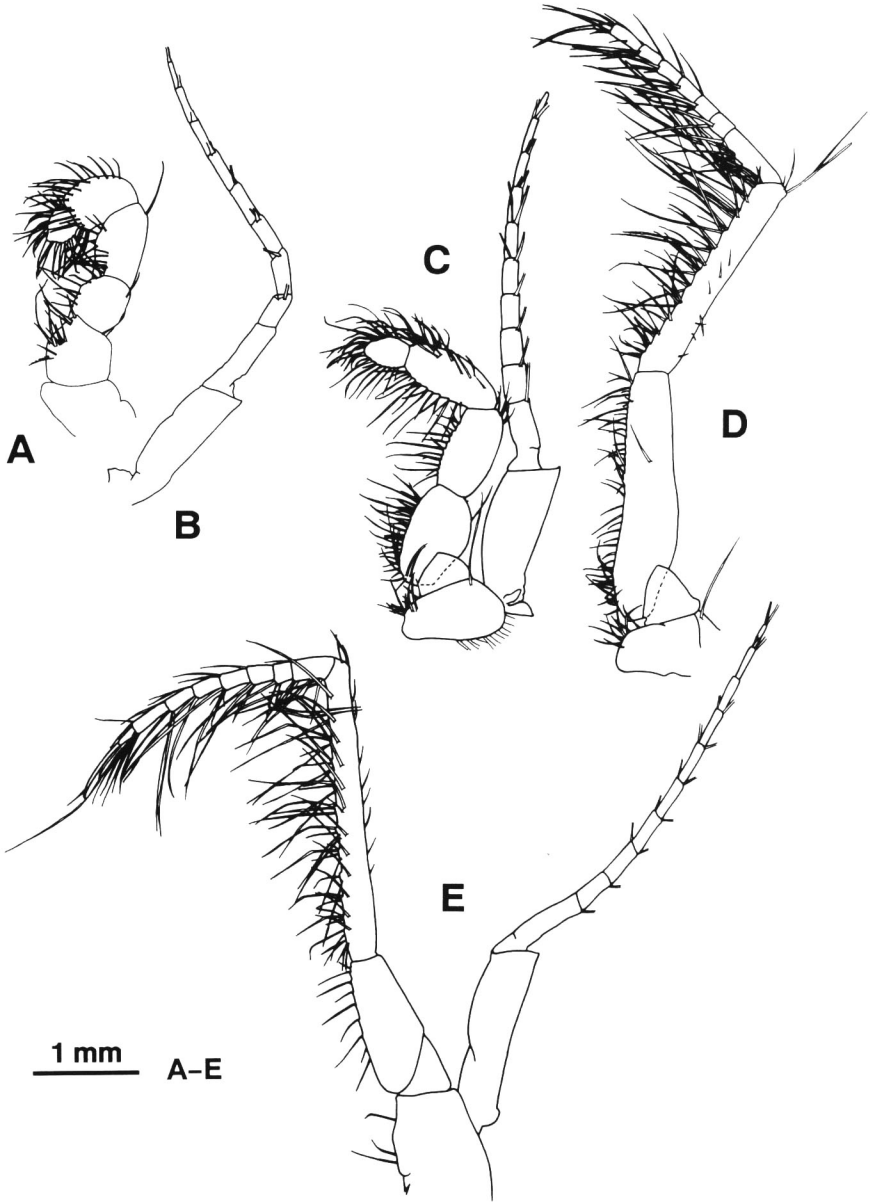


Fig. 2. *Pseudomysis dactylops* TATTERSALL, male (NSMT-Cr11758). A, endopod of first thoracopod. B, exopod of first thoracopod. C, second thoracopod. D, endopod of third thoracopod. E, eighth thoracopod.

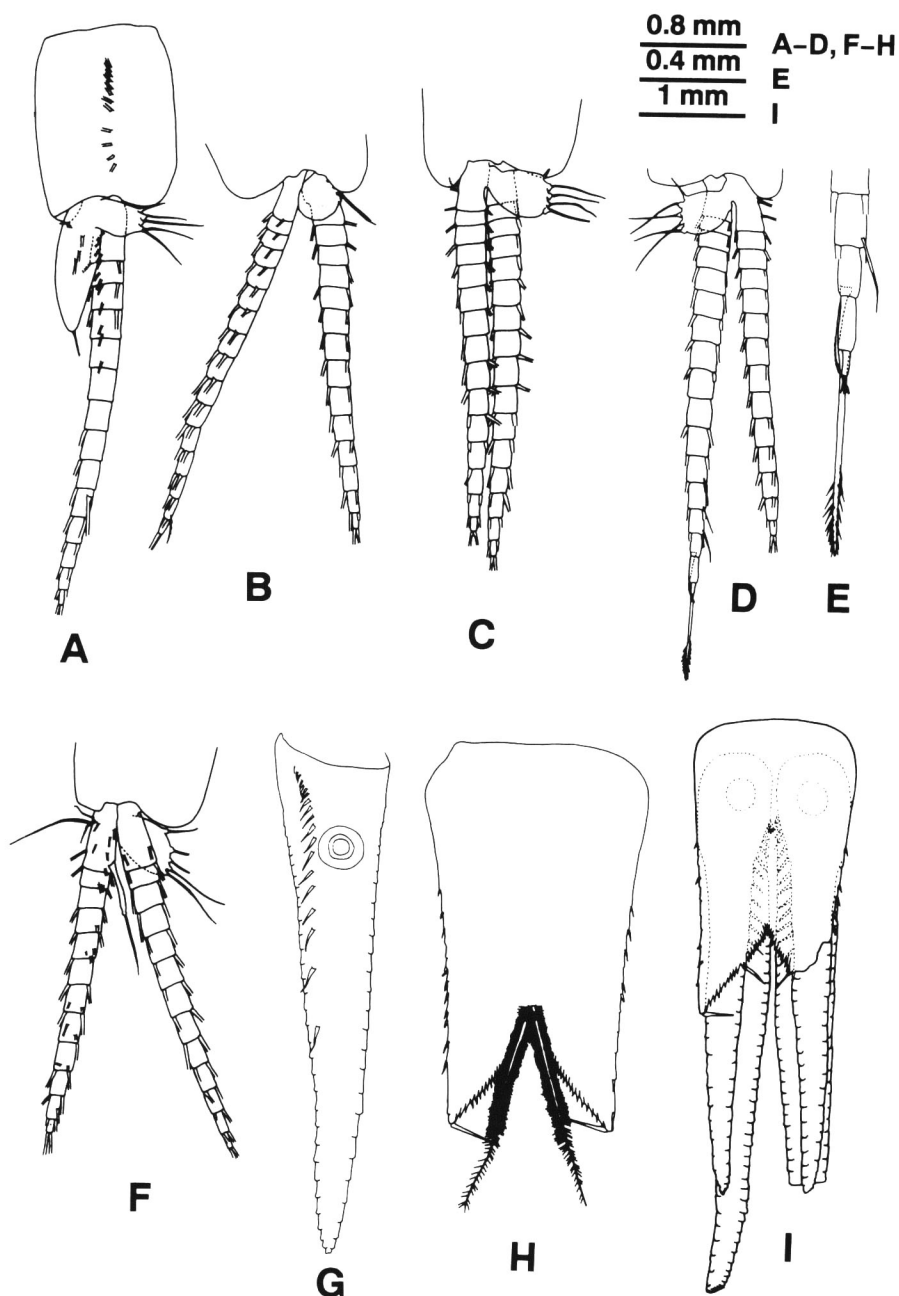


Fig. 3. *Pseudomysis dactylops* TATTERSALL, male. A, F-I (NSMT-Cr11758), B-E (NSMT-Cr11757). A, first pleopod. B, second pleopod. C, third pleopod. D, fourth pleopod. E, distal part of exopod of fourth pleopod. F, fifth pleopod. G, endopod of uropod. H, telson. I, telson and uropod in dorsal view.

12-segmented, with finger-like process tipped with seta on first segment (Fig. 3F).

Endopod of uropod long and narrow, about 1.5 times longer than telson; row of about 19 spines present along proximal half of inner margin (Fig. 3G). Exopod of uropod very long and narrow, twice length of telson, with blunt end (Fig. 3I).

Telson shorter than sixth pleonite, wide, less than twice as long as broad at base; distal cleft triangular, 0.33 as deep as telson length, each margin of cleft convex, with 22–26 saw-like teeth; each apical lobe with single, long and stout spine at apex; lateral margin with about 11–13 small regularly arranged spines along distal 0.67; 2 long and plumose setae at base of cleft (Fig. 3H).

Remarks. The present male specimens well resemble female of *P. dactylops*, so the material herein is those of *P. dactylops* TATTERSALL, 1951 without doubt. There are found some minute differences between the present male specimens and the holotype as follows: (1) the number of spines on the cleft margin of the telson less than in the holotype; (2) the number of spines on the lateral margin of the telson somewhat greater than in the holotype, and (3) the row of spines on the inner margin of the endopod of uropod shorter than in the holotype.

Distribution. Nowadays, *P. dactylops* is known only from the coasts of Japan.

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References

- SARS, G. O., 1885. Crustacea, I. In *Den Norske Nordhavs-Expedition, 1876–1878. Christiania, 14, Zoology*: 1–280.
- TATTERSALL, W. M., 1951. A review of the Mysidacea of the United States National Museum. *Bull. U.S. natn. Mus. Smiths. Inst.* (201): 1–292.