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# EURYSQUILLA PACIFICA, A NEW STOMATOPOD CRUSTACEAN FROM NEW BRITAIN

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Among the unidentified stomatopods examined in the collection of the Zoological Museum, Berlin, in 1971, was a small gonodactylid which proved to be the first species of *Eurysquilla* to be identified in the central Pacific and only the second species to be found in the Indo-West Pacific region. This species is described below.

Studies of Indo-West Pacific stomatopods have been supported by the Smithsonian Institution through its Research Awards Program. I thank Dr. G. Hartwich of the Zoological Museum, Berlin, for providing working space there in 1971 and for the loan of this specimen. The illustrations were prepared by my wife Lilly.

### Eurysquilla pacifica, new species Figure 1

Holotype: 19, total length 17 mm; Ralum, New Britain; F. Dahl, col., 1896; ZMB 18097.

*Description*: Cornea broadened, faintly bilobed, set obliquely on stalk. Eyes extending beyond end of second segment of antennular peduncle. Ocular scales low, appearing fused in midline, produced laterally. Anterior margin of ophthalmic somite unarmed.

Antennular peduncle shorter than carapace. Antennular processes produced into slender spines directed anterolaterally.

Antennal scale short, less than half as long as carapace. Antennal protopod with 1 ventral papilla.

Rostral plate cordiform, broader than long, rounded anterolateral margins converging on obtusely pointed apex.

Carapace smooth, strongly narrowed anteriorly, anterior parts of lateral plates projecting slightly beyond base of rostral plate.

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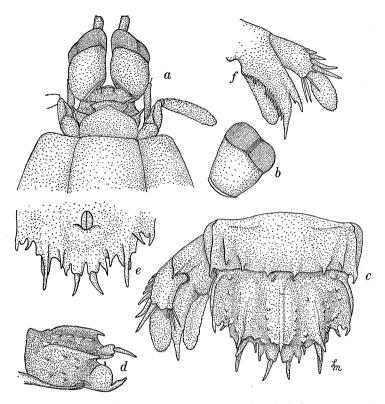


FIG. 1. Eurysquilla pacifica, new species, female holotype, TL 17 mm: a, Anterior part of body; b, Eye; c, Sixth abdominal somite, telson, and uropod, dorsal view; d, Telson, lateral view; e, Telson, ventral view; f, Uropod, ventral view. Setae omitted in all figures.

Raptorial claws missing.

Mandibular palp and 5 epipods present, third to fifth very small.

Exposed thoracic somites lacking carinae or spines. Fifth thoracic somite lacking distinct lateral process or ventrolateral spine. Lateral processes of sixth and seventh thoracic somites rounded anteriorly and posteriorly, that of sixth somite smaller, more truncate laterally. Eighth thoracic somite lacking distinct median ventral tubercle. Endopods of walking legs slender, two-segmented. Basal segments of walking legs unarmed.

Anterior 4 abdominal somites smooth, lacking carinae or spines. Fifth somite with low, unarmed longitudinal carina above lateral margin. Sixth somite with 4 pairs of spines: submedians on margin, lacking sharp dorsal carina; intermediates submarginal, with short dorsal carina; accessory spine on longer carina present between intermediates and laterals, latter on normal sharp lateral carina. Sixth somite with obtuse lobe ventrally in front of articulation of each uropod.

Telson broader than long, with entire median and dorsal submedian carinae, each terminating in long spine. Accessory median carinae each a row of 4–5 tubercles converging under apical spine of median carina. Tubercles present on each side of submedian carina, in a line mesially, in a patch laterally. Three pairs of marginal spines present: submedians, with bases appressed and long, movable apices; intermediates, each with large, rounded, dorsally-projecting dorsal lobe and low lobe on outer margin; and marginals, with smaller, rounded lobe on inner margin. Submedian denticles absent; 2 intermediate denticles present, inner with apical spinule, outer triangular, with submarginal spinule; lateral denticle with submarginal spinule.

Uropod with 7 movable spines on outer margin of proximal segment of exopod, distalmost extending beyond midlength of distal segment; inner distal angle of proximal segment with 3 stiff setae. Basal prolongation of uropod broad, terminating in 2 spines, inner much the longer, with 20–22 sharp spinules on inner margin; outer spine of basal prolongation with slender spinule on inner margin.

Color pattern completely faded.

*Measurements*: Female only known, total length 17 mm. Other measurements, in mm: carapace length 2.8; cornea width 1.1; rostral plate length, width 0.7, 1.1; antennal scale length 1.2; antennular peduncle length 1.7; fifth abdominal somite width 3.4; telson length, width 1.6, 2.8.

Discussion: Eurysquilla pacifica, only the second species of the genus to be found in the Indo-West Pacific region, differs from E. sewelli (Chopra, 1939) from the Gulf of Aden as well as from 3 American species, E. plumata (Bigelow, 1901), E. veleronis (Schmitt, 1940), and E. delsolari Manning, 1970, in having a broad rather than a very long slender basal prolongation of the uropod; in those 4 species the basal prolongation is Y-shaped and has at most 1 additional spine or lobe on its inner margin. E. pacifica resembles 3 western Atlantic species, E. maiaguesensis (Bigelow, 1901), E. chacei Manning, 1969, and E. holthuisi Manning, 1969, in having a broad basal prolongation with 5 or more spinules on the inner margin. The new species differs from E. maiaguesensis in having a mandibular palp, 8 rather than 6 posterior spines on the sixth abdominal somite, more dorsal tubercles on the telson, and a spinule rather than an obtuse lobe between the spines of the basal prolongation of the uropod. E. pacifica differs from E. chacei in having armed carinae on the fifth abdominal somite; only 1 pair of marginal spines on the sixth abdominal somite; fewer tubercles in the accessory median row on the telson, and, on the basal prolongation of the uropod, 20-22 rather than 10 slender spinules on the inner margin

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and a spinule rather than a rounded lobe between the apical spines. *E. pacifica* and *E. chacei* are the only species in this section of the genus in which the sixth abdominal somite is armed posteriorly with 8 spines; in *E. chacei* the accessory spine is between the submedian and the intermediate on each side, whereas in *E. pacifica* it is between the intermediate and lateral spines. The new species differs from *E. holthuisi* in having rounded posterolateral angles on the lateral processes of the sixth abdominal somite, more dorsal tubercles on the telson (*E. holthuisi* lacks the accessory median row), and, on the basal prolongation of the uropod 20-22 rather than 10-12 inner spines, and a spinule rather than a rounded lobe between the apical spines.

All 3 of the similar western Atlantic species have a sharp apical spine on the rostral plate. The unique specimen of E. pacifica is young, and older specimens may well have an apical spine on the rostral plate.

The specific name alludes to the occurrence of the species in the central Pacific ocean.

#### LITERATURE CITED

BIGELOW, R. P. 1901. The Stomatopoda of Puerto Rico. Bull. U.S. Fish Comm. 20(2):149–160, figs. 1–13.

CHOPRA, B. 1939. Stomatopoda. The John Murray Expedition, Sci. Reps. 6(3):137-181, figs. 1-13.

MANNING, RAYMOND B. 1969. Stomatopod Crustacea of the western Atlantic. Stud. trop. Oceanogr. Miami 8: viii + 380, figs. 1-91.

——. 1970. Nine new American stomatopod crustaceans. Proc. Biol. Soc. Washington 83(8):99–144, figs. 1–9.

SCHMITT, WALDO L. 1940. The stomatopods of the west coast of America based on collections made by the Allan Hancock Expeditions, 1933–1938. Allan Hancock Found. Pacif. Exped. 5(4):129–225, figs. 1–33.