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DESCRIPTION OF THREE NEW SPECIES OF SHRIMPS  
(CRUSTACEA: DECAPODA: CARIDEA)  
FROM PACIFIC ISLANDS

L. B. Holthuis

*Abstract.*—Descriptions of *Discias musicus* from the Marianas Islands, *Periclimenes bayeri* from the Marshall Islands, and *Pontonia hurii* from the Marshall and Tuamotu islands are provided for what were previously *nomina nuda*.

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In 1952 and 1953 a study of Pacific Decapod Crustacea was carried out under the auspices of the Pacific Science Board of the National Research Council of the United States. I was stationed then at the United States National Museum (now National Museum of Natural History), where I enjoyed the hospitality of Dr. Fenner A. Chace, Jr. at the Department of Invertebrate Zoology. The study resulted in a preliminary list of the specimens examined (Holthuis, 1953), but a fuller account has not yet been published, although the manuscript for it was practically finished. Through some oversight, in the list that was published in 1953 four undescribed species were mentioned under a manuscript name (*Discias musicus*, on p. 52; *Rhynchocinetes hiatti*, on p. 54; *Periclimenes (Harpilius) bayeri*, on p. 56; and *Pontonia hurii*, on p. 57). In a few instances these names have been cited in later literature, but only one has been legalized through the publication of a description and figures, namely *Rhynchocinetes hiatti*, which has been extensively dealt with by Holthuis and Hayashi (1967). The other three names are still *nomina nuda*, an undesirable state of affairs which will be terminated by the publication of the present paper that contains their descriptions. The descriptions and discussions are taken from the original manuscript, but some effort has been made to bring the discussion up to date.

It is a pleasure to express, although belatedly, my thanks to the Pacific Science Board for financially enabling me to work at the U.S. National Museum, and to my colleagues at the Museum for their kind help and advice, and for all they did to make my stay such a thoroughly enjoyable one.

*Discias musicus*, new species

*Discias musicus* Holthuis, 1953:52 (*nomen nudum*).

*Discias* n. sp. Cloud, 1959:436.

*Material examined.*—Lagoon West of Saipan, Marianas Islands; immediately shoreward of barrier reef flat; Location C-7a; 10 April 1949; leg. Preston E. Cloud, Jr.—1 specimen, total length 9 mm.

*Description.*—The rostrum is short and fails to reach the end of the first segment of the antennular peduncle. In dorsal view it is rather broad. The apex is broadly rounded with a minute tooth at the tip. The lateral margins in their distal part are almost parallel, proximally they diverge and merge with the orbital margin. No spinules are observed on the rostrum. The lateral margins of the rostrum are somewhat upturned and there is a distinct median longitudinal carina over the dorsal surface. This carina is highest in the basal part of the rostrum. The carapace is smooth and bears a rather small antennal spine on the lower orbital margin.

The abdomen strongly resembles that of *Discias exul* Kemp, 1920, as figured in the original publication. The telson bears 2 pairs of dorsal spines, which are well developed. The anterior pair stands somewhat in advance of the middle of the telson. The posterior pair is placed slightly closer to the posterior margin of the telson than to the anterior spines. The posterior margin is rounded and bears 3 pairs of spines, the intermediate of which is longest.

The eyes are short and broad. The cornea is broadly rounded and has about the same length and breadth as the stalk.

The antennular peduncle has the stylocerite short and rather broad. It reaches somewhat beyond the middle of the basal segment, but largely fails to reach the end of this segment. The apex is rounded but ends in a minute sharp point. The second segment of the peduncle is shorter than the third. Both segments together are shorter than the first. The 2 flagella are simple, the outer has the basal part thickened.

The scaphocerite reaches somewhat beyond the antennular peduncle. It is almost 3 times as long as broad. The top is truncate, both lateral margins are convex. The outer is naked and does not end in a spine. The antennal peduncle reaches somewhat beyond the middle of the scaphocerite, but fails to reach the end of the antennular peduncle. No spines are present on the antennal peduncle.

The mandible lacks a palp. The incisor process ends in 2 small teeth. The molar process is longer and more slender than the incisor process. It ends in a sharp point and bears a row of spinules along the lower margin. The other oral parts show no appreciable differences from those described by Kemp (1920) for *Discias exul*. The first maxilliped has the exopod reduced, the caridean lobe is well developed but the exopod itself shows only as a short and blunt lobule. The last segment of the third maxilliped is not as strongly broadened as in *Discias exul* or *D. serratiostris* Lebour and has more the shape of that of *D. atlanticus* Gurney. The exopod reaches slightly beyond the end of the antepenultimate segment of the maxilliped. The branchial formula is as in *D. exul*.

The first pereopod strongly resembles that of *D. exul* and other species of *Discias*. The shape of the fingers is highly specialized. The dactylus is

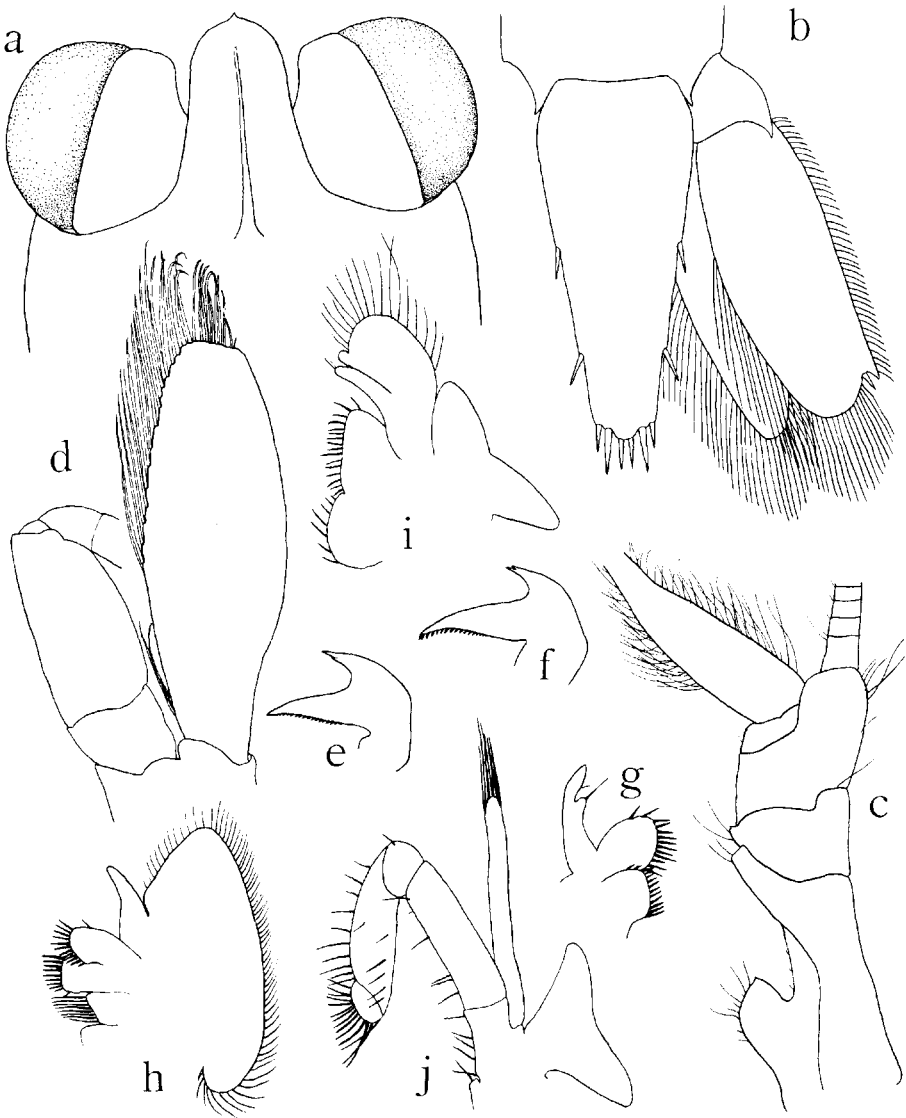


Fig. 1. *Discias musicus*, holotype: a, Rostrum and eyes, dorsal view; b, Telson and uropods; c, Antennula; d, Antenna; e, Left mandible; f, Right mandible; g, Maxillula; h, Maxilla; i, First maxilliped; j, Second maxilliped. a, c, d, g-j,  $\times 40$ ; b,  $\times 30$ ; e, f,  $\times 65$ .

about semicircular, thin and hollowed out on the inside, being saucer-shaped as described by Kemp for *D. exul*. Its lower margin is minutely crenulate and the teeth continue in narrow striae which run inward from the margin of the dactylus and are placed perpendicular to this margin. The fixed finger

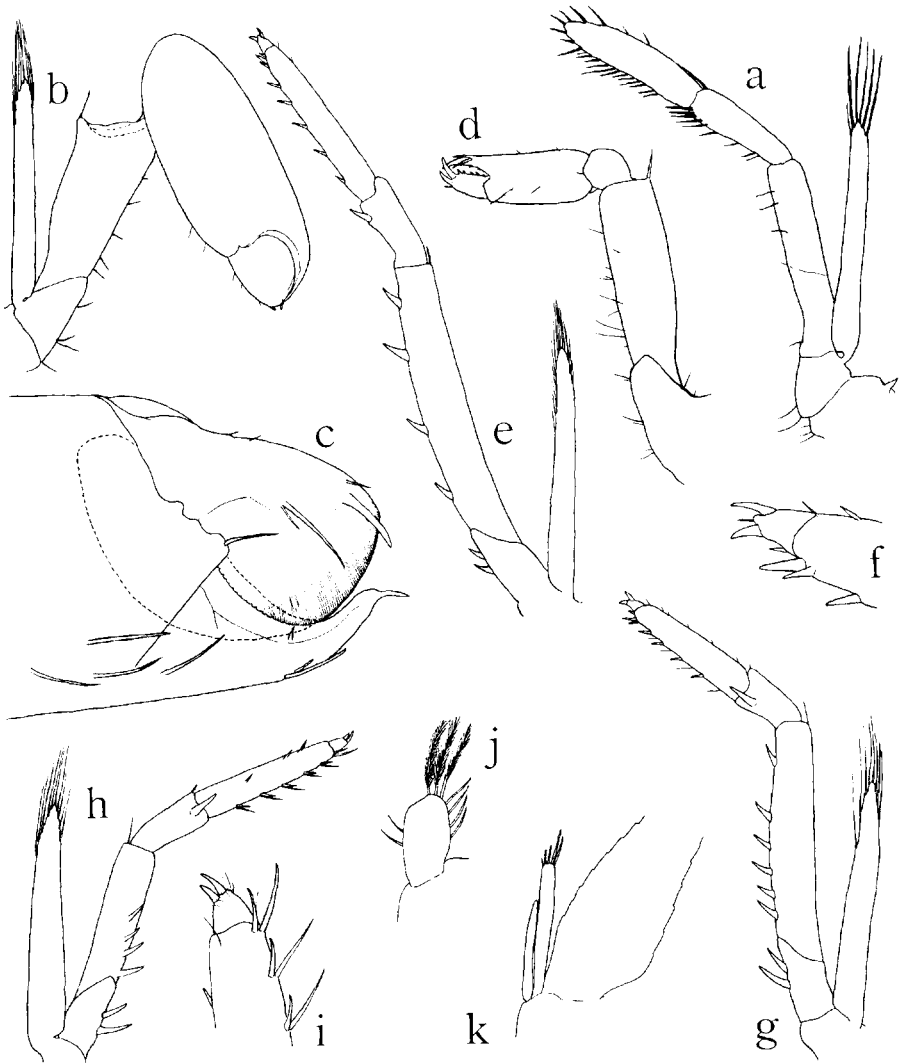


Fig. 2. *Discias musicus*, holotype: a, Third maxilliped; b, First pereiopod; c, Fingers of first pereiopod; d, Second pereiopod; e, Third pereiopod; f, Dactylus of third pereiopod; g, Fourth pereiopod; h, Fifth pereiopod; i, Dactylus of fifth pereiopod; j, First pleopod, endopod; k, Second pleopod, base of endopod. a, b, d, e, g, h,  $\times 30$ ; c, f, i,  $\times 100$ ; j, k,  $\times 50$ .

is boat-shaped: being deeply channelled for the reception of the dactylus. The inner margin of the fixed finger bears denticles which are placed at rather regular intervals. When examining the chela under a microscope it shows that the lower margin of the dactylus and the inner margin of the fixed finger lie in the same plane, as they come into focus at the same time.

Therefore it seems that with the opening and closing of the chela the lower margin of the dactylus rubs against the inner margin of the fixed finger; as the margin of the dactylus is ribbed and that of the fixed finger is denticulate, the chela probably acts as a kind of stridulating organ, which might explain the function of this peculiarly shaped chela. The outer margin of the fixed finger is not denticulate, but straight. The second pereopod resembles that of *D. exul*. The dactylus is about half as long as the palm, it ends in 2 heavy claws and has the cutting edge provided with a row of spinules. On the fixed finger some strong spines are present. The carpus is short and almost spherical, it is about  $\frac{1}{3}$  as long as the chela. The merus is somewhat longer than the chela and carpus combined. It bears a strong spine at the anterodorsal angle. Of the following pereopods the third pair is longest. The dactylus is short and ends in 2 strong claws. The propodus is about 8 times as long as the dactylus and bears a row of well developed spines on its posterior margin. The carpus is about half as long as the propodus and bears a very strong spine in the distal part of its posterior margin. The merus is as long as the distal 3 segments combined. Its posterior margin bears four very strong spines. The ischium bears 2 posterior spines. The fourth pereopod has a shape similar to that of the third leg, though it is shorter and more robust. The fifth leg differs from the previous two in having the claws of the dactylus curved anteriorly. The propodus bears, apart from the usual posterior spines, some spines on the rest of the surface. The carpus, merus, and ischium are armed as in the previous 2 legs.

The first pleopod of the holotype, a male, has the endopod small and quadrangular in outline. The inner margin bears 2, the outer 4 non-plumose setae. On the top of this endopod there are 3 plumose setae. The second pleopod has the endopod provided with both an appendix interna and an appendix masculina; the latter is longer than the former and bears some spine-like hairs on the top. The third to fifth pleopods have the endopod provided with an appendix interna. The uropods are elongate. The exopod has the outer margin straight, this margin bears a row of short hairs over its entire length, there are no serrations. The margin ends in a tooth at the inner side of which there is a movable spine.

*Remarks.*—Of the genus *Discias* until now 5 species were known: *Discias serrifer* Rathbun, 1904, the type of the genus, from the Galapagos Islands (from coral reef) and Juan Fernandez (from calcareous algae, 30–40 m deep); *Discias exul* Kemp, 1920, from the Andaman Islands, and Heron Island of the Great Barrier Reef of Australia (in both localities with sponges in shallow water); *Discias atlanticus* Gurney, 1939, from Bermuda (shallow water), east coast of Florida (33 m), Guadeloupe (15–20 m), West Africa (40 and 50 m), the Red Sea (depth unknown), and Kenya (200 m); *Discias serratiostris* Lebour, 1949, from Bermuda (30 m), and the east coast of Florida (27 m); and *Discias mvitae* Bruce, 1976, from Kenya (1 m deep). The present new

species differs from the above 5 species (1) by having the rostrum without serrate margins, (2) by lacking the mandibular palp, (3) by the very short dactyli of the last 3 pereopods, which end into 2 claws.

In the shape of the rostrum *Discias musicus* shows most resemblance to *Discias serrifer* and *D. atlanticus*. In *D. serratiostris*, *D. exul*, and *D. mvitae* it is triangularly pointed. *Discias serrifer* differs from the new species in having the outer margin of the uropodal exopods serrate. In *D. atlanticus* the telson has the posterior margin ending in a sharp point. *Discias mvitae* is at once distinguished by the presence of a posteromedian tooth on the second abdominal somite. *Discias exul*, the only other Indo-West Pacific species of the genus, is closely related to *D. musicus*. Apart from the difference in the shape of the rostrum, and the other differences mentioned in the description, *D. exul* seems to have no spine on the carpus of the last 3 pereopods, at least such spines are neither mentioned nor figured by Kemp (1920); furthermore the number of spines on the propodi of the last 3 legs is greater in *D. musicus* than in *D. exul*. The stridulating organ, from which the specific name for the present species is derived, probably also is present in the other species of this genus.

Apart from the listing of the species in my 1953 enumeration, the species, as *Discias* n. sp., has also been mentioned by Preston E. Cloud in his account of the shoal-water ecology of Saipan. Cloud's record is based on the type of *D. musicus* of which he was the collector.

*Periclimenes bayeri*, new species

*Periclimenes (Harpilius) bayeri* Holthuis, 1953:56 (*nomen nudum*).

*Periclimenes bayeri* Bruce, 1972:403 (*nomen nudum*).

*Material examined*.—Polim reef flat next to Tipongowakaram Pass in Ship Pass, Kapingamarangi Atoll, 1°2'0"N, 154°45'14"E; 12 August 1954; George Vanderbilt Foundation Expedition, no. 137.—14 specimens, total length 13–19 mm (including 1 ovigerous female, 19 mm).

Latoback Island, Rongerik Atoll, Marshall Islands; lagoon reef; 20 and 21 August 1947; F. M. Bayer no. 257, 273.—2 ovigerous females total length 19 and 20 mm.

Ine village, Arno Atoll, Marshall Islands; sea reef; June–September 1950; R. W. Hiatt no. E.1-207.—1 specimen total length 14 mm.

Ine village, Arno Atoll, Marshall Islands; outer edge of sea reef; from head of *Pocillopora* spec.; June–September 1950; R. W. Hiatt no. E.1-634.—1 specimen total length 14 mm.

*Description*.—The rostrum is long and reaches to or somewhat beyond the scaphocerite. The proximal part of the rostrum is deep, the ultimate half is slender and directed upwards. The upper margin bears 7 or 8 teeth, the first of which is smaller than the rest and is placed behind the orbit. The

second tooth stands over or just behind the orbit. The teeth are regularly distributed over the rostrum. The lower margin of the rostrum bears 3 to 5, usually 4 teeth. The ultimate part of the lower margin is devoid of teeth. The midrib of the rostrum merges with the posterior orbital margin and there is no postorbital ridge. The lower orbital angle is somewhat produced and has the tip rounded. The antennal spine is placed some distance below this angle and somewhat behind the anterior margin of the carapace. The hepatic spine is slightly larger than the antennal, it is placed behind and below the antennal spine. The anterolateral angle of the carapace is rectangularly rounded.

The pleura of the abdominal segments are rounded, those of the first 3 are more broadly rounded than those of the fourth and fifth segment. The pleura of the sixth segment end in an acute angle, the posterolateral angle is produced into a sharp point. The telson is about as long as the fifth and sixth abdominal segments combined. The anterior of the 2 dorsal pairs of spines lies in the middle of the telson, the posterior pair is placed about midway between the anterior pair and the posterior margin of the telson. This posterior margin is broad and rounded. Of the 6 pairs of posterior spines, the intermediate are longest, the submedian are slightly shorter and more slender, while the outer spines are slightly less than half as long as the intermediate.

The eyes have the cornea rounded and distinctly shorter than the eyestalk.

The stylocerite is slender and pointed, it reaches beyond the middle of the basal segment of the antennular peduncle. The anterolateral spine of this segment is strong and overreaches the second segment. The second peduncular segment is about as long as and broader than the third. The fused part of the upper antennular flagellum consists of 14 to 19 articles. The free part of the shorter ramus is very short and has 2 or 3 articles.

The scaphocerite reaches with somewhat less than half its length beyond the antennular peduncle. The outer margin is slightly concave and ends in a strong final tooth, which far overreaches the lamella. The lamella is broadest in the proximal part and gradually narrows towards the truncate top. A distinct spine is placed in the outer part of the antennal peduncle near the base of the scaphocerite. The antennal peduncle fails by far to reach the middle of the scaphocerite.

The mouthparts are of the usual shape. The incisor process of the mandible ends in 3 teeth, the outer of which are broad and blunt. The maxillula has both upper and lower lacinia slender and the palp is bilobed. The endite of the maxilla is simple. The first maxilliped has the endites of coxa and basis separated by a deep notch, the palp is not large but distinct, the caridean lobe is small and the epipod is hardly bilobed. The second maxilliped is normal in shape, it bears an epipod, but no podobranch could be found. The third maxilliped is slender, it reaches about to the end of the

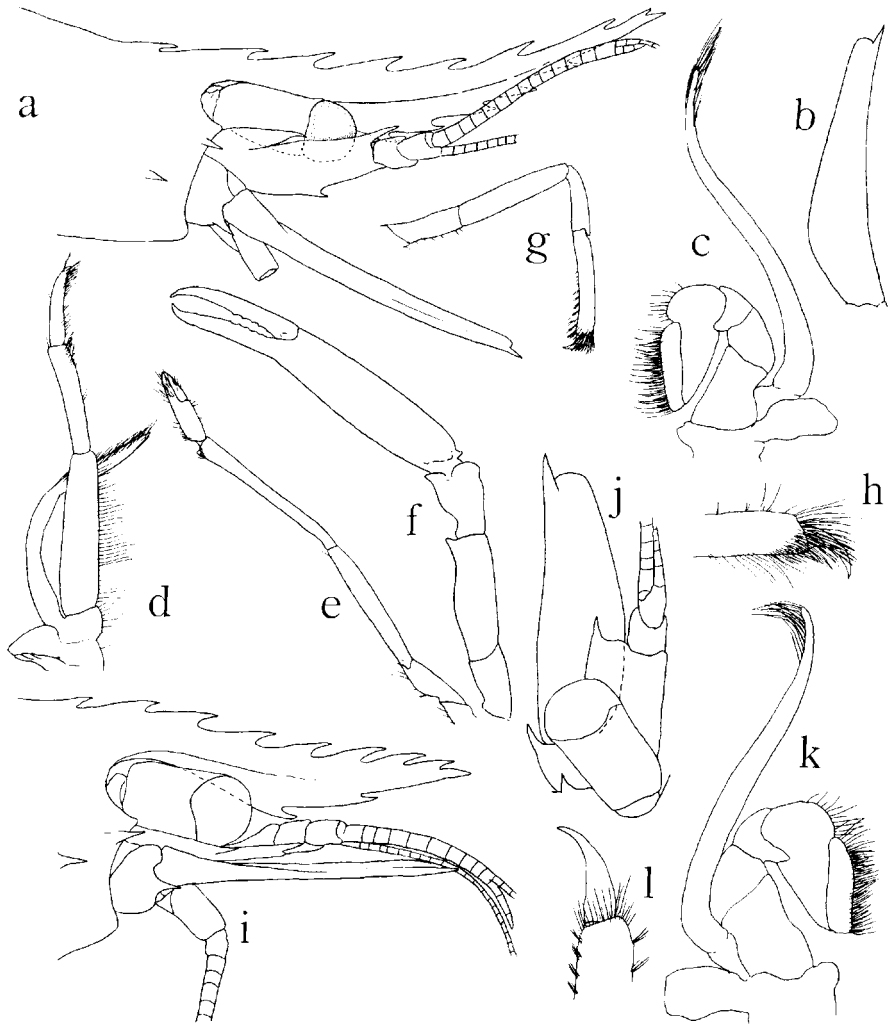


Fig. 3. a-h, *Periclimenes bayeri*: a, Anterior part of body in lateral view; b, Scaphocerite; c, Second maxilliped; d, Third maxilliped; e, First pereiopod; f, Second pereiopod; g, Fifth pereiopod; h, Dactylus of third pereiopod. a, b, d-g, Holotype from Arno Atoll (Hiatt, no. E 1-634); c, h, Paratype from Kapingamarangi. i-l, *Periclimenes consobrinus*, syntype from Ternate: i, Anterior part of body in lateral view; j, Eye, antennula and antenna in dorsal view; k, Second maxilliped; l, Dactylus of fifth pereiopod. a, d,  $\times 15$ ; b, e,  $\times 10$ ; c, h, k, l,  $\times 25$ ; f,  $\times 6$ ; g,  $\times 7$ ; i, j,  $\times 12$ .

antennal peduncle. The last segment is slightly more than  $\frac{2}{3}$  the length of the penultimate and it is half as long as the antepenultimate segment. The exopod reaches far beyond the antepenultimate segment. An arthrobranch is present.



The first pereiopod reaches with the chela beyond the scaphocerite. The fingers are slightly shorter than the palm. The carpus is fully twice as long as the chela and is distinctly longer than the merus. The second pereiopods reach with the larger part of the chela beyond the scaphocerite. The fingers are about  $\frac{2}{3}$  of the length of the palm. Their cutting edges bear about 5 to 7 small teeth in the proximal half; the ultimate half is entire. The palm is cylindrical and slightly swollen. The carpus is short and conical, it is less than half as long as the palm. The merus is slightly longer to 1.5 times as long as the carpus, and is swollen in the middle. The anterior margin bears a spine on the lower outer and a rounded tooth on the lower inner side. No spines are present on the short ischium. The last 3 legs are very similar. The third reaches about to the end of the scaphocerite. The dactylus is simple, short and strongly curved. It is largely concealed by long hairs that are implanted on the distal margin of the propodus. The propodus is about 4 times as long as the dactylus and about 1.5 times as long as the carpus. The posterior margin bears hairs. The merus is longer than the propodus.

The pleopods of the females are normal. The uropods are ovate. The outer margin of the exopod ends in a tooth, which at its inner side is provided with a distinct movable spine.

The eggs are numerous and rather small, being 0.5 to 0.6 mm in diameter.

*Remarks.*—The species is most closely related to *Periclimenes lutescens* (Dana) and to *P. consobrinus* (De Man), resembling both in the general shape of the legs and body. Both *P. bayeri* and *P. consobrinus* can be distinguished from *P. lutescens* (1) by the shape of the second maxilliped, the medial border of the last and penultimate segments of which do not form a single line as in *P. lutescens*, in which also the last segment is far more elongate (see Bruce, 1972:411, fig. 1), and (2) by the total absence of a postorbital ridge; this ridge is very distinct in *P. lutescens* (see, e.g. Kemp, 1922:235, fig. 72) and not shown in the 2 other species (see Figs. 3a and 3i of the present paper).

In *P. consobrinus* the new species finds its closest ally. The differences between the two are in the following points:

1. In *P. consobrinus* the rostrum is less slender distally and more straight; its lower margin bears 1 or 2 (seldom 3) teeth (cf. Figs. 3a and 3i).

2. In *P. consobrinus* the scaphocerite is wider, with the outer margin less concave (cf. Figs. 3b and 3j).

3. The dactyli of the last 3 pereiopods in *P. consobrinus* are less strongly curved; they are more clearly visible as the hairs in the distal part of the propodus are shorter (reaching at most to the middle of the dactylus) and much less dense (cf. Figs. 3h and 3l).

For comparison with the new species the following material of *P. consobrinus* has been consulted:

1. A syntype from Ternate, coll. W. Kükenthal, in the "De Man collection" of the Zoological Museum, Amsterdam.

2. An ovigerous female from Amboina, 4 specimens from Beo, Talaud Islands, and an ovigerous female from Ternate, all collected by the Snellius Expedition and at present preserved in the collection of the Rijksmuseum van Natuurlijke Historie, Leiden. These specimens have been incorrectly identified by myself as *Periclimenes lutescens* in 1952 (Holthuis, 1952:89). The Snellius specimens from Kera near Timor and from Ake Selaka, Halmahera also mentioned by me in 1952 as *Periclimenes lutescens* proved to be correctly identified.

It was Bruce (1972:412, fig.1; 1975a:26, 27, figs.15, 16; 1976:10; 1978:118, 132) who first pointed out that *P. consobrinus* (De Man, 1902) is a good species, distinct from *P. lutescens* (Dana, 1852), after I had synonymized the two (Holthuis, 1952:88). Examination of the above mentioned syntype specimen of *Harpilius consobrinus* De Man in the Amsterdam Zoological Museum fully confirmed Bruce's views. Unfortunately the only morphological difference between the 2 species mentioned by Bruce is the shape of the second maxilliped, a feature which is very similar in *P. consobrinus* and *P. bayeri*. Therefore it seemed useful to mention here other characters in which *P. consobrinus* differs from *P. lutescens* and *P. bayeri*. As nothing is known about the color of living specimens of *P. bayeri* it is impossible to say whether in that respect it has more resemblance to *P. lutescens* or *P. consobrinus* (see the colored figures of these two species in Bruce, 1975a).

*Host*.—One of the type-specimens of *P. bayeri* from Arno Atoll is reported from *Pocillopora* sp., a madrepor genus that is also host to *P. consobrinus*.

*Etymology*.—It is a great pleasure to name this new species for Dr. Frederick M. Bayer of the Smithsonian Institution, who collected part of the type material, and also in other respects added considerably to the knowledge of Pacific and other Crustacea.

#### *Pontonia hurii*, new species

*Pontonia hurii* Holthuis, 1953:57; Wiens, 1962:275; Bruce, 1975:162 (*nomen nudum*).

*Material examined*.—Arno Atoll, Marshall Islands; from mantle cavity of rock clam, *Spondylus* spec.; June-September 1950; R. W. Hiatt no. E.2-389.—1 ovigerous female total length 22 mm.

Tepatahiti Island, Raroia Atoll, Tuamotu Islands; off patch reef in lagoon opposite island, 25–30 feet of water; from *Spondylus* spec.; 27 August 1952; J. P. E. Morrison no. 2227.—8 specimens, total length 17–27 mm (including 3 ovigerous females, 24–27 mm).

*Description*.—The rostrum almost reaches the end of the basal segment of the antennular peduncle. It is narrowly triangular in dorsal view, being

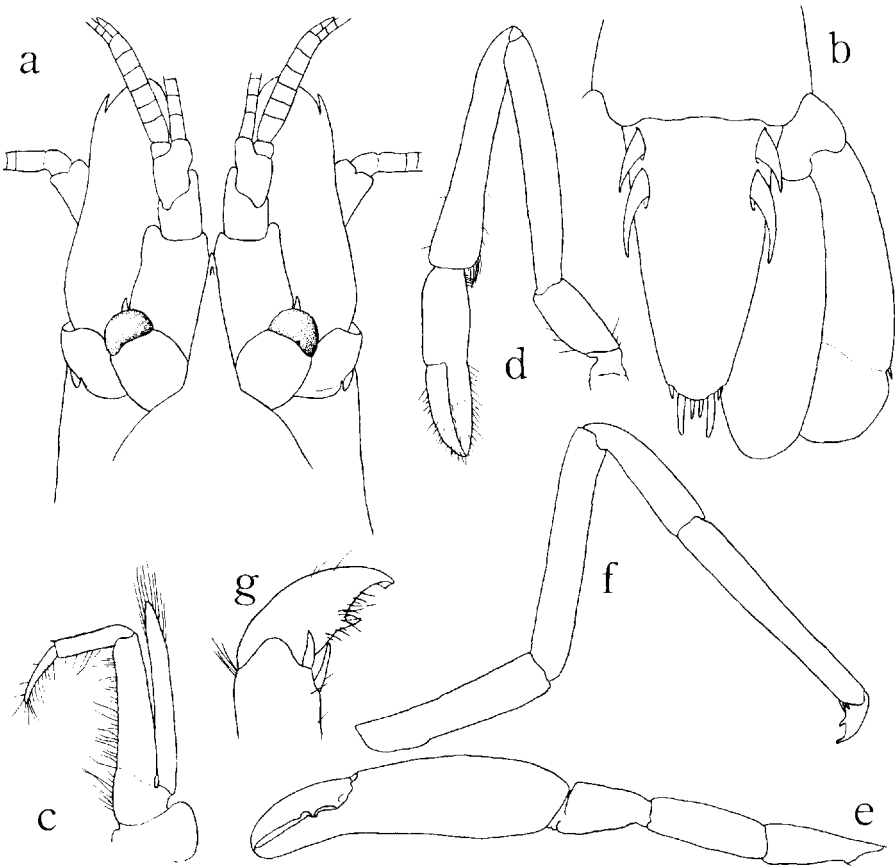


Fig. 4. *Pontonia hurii*: a, Anterior part of body in dorsal view; b, Telson and uropod; c, Third maxilliped; d, First pereopod; e, Second pereopod; f, Third pereopod; g, Dactylus of third pereopod. a-d, f, g, holotype; e, paratype from Raroia Atoll. a-d, f,  $\times 12.5$ ; e,  $\times 5$ ; g,  $\times 40$ .

depressed at the base and compressed near the top. Just before the apex the dorsal margin of the rostrum bears a small but distinct tooth, which sometimes reaches almost as far as the top. No other teeth are present on the rostrum. The carapace bears a small but distinct antennal spine on the anterior margin.

The abdomen has all pleura rounded, also the posterolateral angle of the sixth abdominal segment is rounded. The sixth segment is slightly longer than the fifth. The telson is about as long as the fifth and sixth segments combined. The 2 pairs of dorsal spines are very strong and placed close together in the anterior third of the telson. The anterior spines reach beyond the base of the posterior, which reach about to the middle of the telson. The

posterior margin of the telson bears the usual 3 pairs of spines. The intermediate of these are broad and truncate at the top, the inner spines are slender and much shorter, while the outer pair is again somewhat shorter than the inner.

The eyes have the cornea globular, and shorter and narrower than the stalk. A very small ocellus is present.

The basal segment of the antennular peduncle has the stylocerite short and blunt; it reaches to or slightly beyond the middle of the basal segment. The anterolateral angle of the basal segment is rounded and produced somewhat beyond the base of the second segment. The second and third segments are of about equal length and breadth, being narrower and shorter than the first segment. The outer flagellum of the antennula has the 2 rami fused for 5 to 7 segments, 2 or 3 segments of the shorter ramus are free.

The scaphocerite distinctly overreaches the antennular peduncle. It is about twice as long as broad. The outer margin is straight, slightly concave or slightly convex. The final tooth is rather small and is far overreached by the lamella. The antennal peduncle is slender and reaches as far forwards as the antennular peduncle. There are no spines on the antennal peduncle near the base of the scaphocerite.

The mandible is quite typical; the incisor process ends in 3 teeth. The maxillula has the lower lacinia slender, like that of the female of *Pontonia katoi* Kubo figured in my Siboga report (Holthuis, 1952:161, fig. 75c); the lower of the 2 lobes of the palp ends in a short upturned tooth-like point. The maxilla, the first and second maxilliped are as in *Pontonia pinnophylax* (Otto), except that the epipod of the first maxilliped is bilobed. The third maxilliped fails to reach the end of the basal segment of the antennular peduncle; it is slender. The penultimate segment is somewhat longer than the ultimate. The antepenultimate segment is rather narrow and is about as long as the 2 others combined. The exopod is large and reaches beyond the end of the antepenultimate segment.

The first pereopod reaches with about half the carpus beyond the scaphocerite. The fingers are about as long as the palm. The carpus is somewhat less than half as long again as the chela and is about as long as the merus. The second legs are heavy and equal. They reach with the chela or part of the carpus beyond the scaphocerite. The fingers are more than half as long as the palm. They bear each 2 teeth in the proximal half of the cutting edge; those of the dactylus are placed slightly before those of the fixed finger. The teeth of the dactylus are rather sharp, the proximal is distinctly larger than the distal. The proximal tooth of the fixed finger is broad and crenulate, the distal tooth small and pointed. The palm is slightly swollen. The carpus is about  $\frac{2}{5}$  of the length of the palm, it narrows proximally. The merus is about 1.5 times or less as long as the carpus and about as long as the ischium. The third leg reaches with about half the propodus

beyond the scaphocerite. The dactylus is biunguiculate. The apex of the dactylus is transversely flattened and abruptly truncate, becoming thereby chisel-shaped. The second tooth of the dactylus is placed in the middle of the posterior margin. The propodus is more than 4 times as long as the dactylus; its posterior margin is unarmed except for 1 or 2 spines in the extreme distal part. The carpus is somewhat more than half as long as the propodus. The merus is about as long as the propodus and slightly longer than the ischium. The fourth and fifth legs are similar to the third. The fifth leg reaches just beyond the scaphocerite.

The endopod of the first pleopod of the male is of the usual shape, being elongate ovate with the inner margin somewhat concave slightly above the middle. The proximal  $\frac{3}{4}$  of the inner margin bears only a few hairs, while the rest is thickly fringed with setae. In the second pleopod of the male the appendix masculina is somewhat shorter than the appendix interna. Appendices internae are present on the second to fifth pleopods in both sexes. The protopod of the uropod ends dorsally in a lobe. Both exo- and endopod are rather broad. The outer margin of the exopod ends in a short movable spine.

The eggs are numerous and small, 0.6 to 0.8 mm in diameter. The males are smaller than the females.

*Remarks.*—The present species differs from all known species of the genus in the possession of chisel-tipped dactyli of the last 3 pairs of pereopods, while the arrangement of the spines on the dorsal surface of the telson also immediately distinguishes *P. huri* from other *Pontonia* species; in the latter respect it comes closest to *P. medipacifica* Edmondson, a species which, however, can immediately be distinguished by its short rostrum.

*Types.*—The holotype is the specimen from Arno, the other specimens are paratypes. The holotype, which lacks both second legs, at first was the only specimen of this species available to me. I hesitated to describe a new species from this incomplete material and wanted additional material badly. It so happened that at that time Dr. J. P. E. Morrison was at the Tuamotu Islands with the 1952 Pacific Science Board Expedition. Through the kindness of Dr. Fenner A. Chace, Jr., Dr. Morrison was informed about my need for material of commensal shrimps from *Spondylus*. Dr. Morrison's efforts to secure material of *Spondylus* met with success when he received several specimens of this mollusk from Mr. Huri Estell of Raroia, Tuamotu Islands. These mollusks indeed contained commensal shrimps, which on examination in Washington proved to belong to the desired species. This probably is the first time that type-material was collected at request.

*Etymology.*—On Dr. Morrison's request the new species is named for Mr. Huri Estell in recognition of the invaluable help Mr. Estell has rendered the 1952 Tuamotu Expedition of the Pacific Science Board.

*Host.*—So far no species of *Pontonia* had been reported from *Spondylus*, most Indo-West Pacific species of the genus are commensals of Ascidians.

The only Indo-West Pacific Pontoniinae reported from *Spondylus* are *Paranchistus nobilii* Holthuis, 1952 (from *Spondylus gaederopus* L.) and *P. spondylis* Suzuki, 1971 (from *S. barbatus* Reeve).

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