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SPONGIOCARIS, A NEW GENUS OF STENOPODIDEAN SHRIMP FROM NEW ZEALAND AND SOUTH AFRICAN WATERS, WITH A DESCRIPTION OF TWO NEW SPECIES (DECAPODA NATANTIA, STENOPODIDEA)

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In 1969, through the courtesy of Prof. L. B. Holthuis of the Rijksmuseum van Natuurlijke Historie, Leiden, one of the authors (KB) received for study an interesting stenopodidean shrimp collected off the northeast coast of North Island of New Zealand. The specimen originates from the New Zealand Marine Department Haul 12, 1962 and was first sorted out by Dr. J. C. Yaldwyn. On examination the specimen proved distinct from the known genus *Spongicoloides* Hansen, to which it is most closely related, in having a well-developed exopod on the second maxilliped. In the meantime the other author (AJB) found the same distinctive character worthy of the creation of a new genus in the case of some South African specimens received from Dr. A. E. F. Heydorn, Oceanographic Research Institute, Durban, South Africa. Comparison of these specimens showed that they fell within the same generic rank but were different from each other at the specific level. After consultation it was decided to publish a joint paper describing a new genus with two new species.

The type of the New Zealand species will be kept in the collection of the Dominion Museum, Wellington, New Zealand. The holotype of the South African species is retained in the collection of the Rijksmuseum van Natuurlijke Historie, Leiden, the paratypes in the Oceanographic Research Institute, Durban and the allotype will be sent to the Smithsonian Institution, Washington.

Spongiocaris gen. nov.

Definition. — Small commensal stenopodidean shrimps associated with sponges. Carapace neither compressed nor depressed, feebly spinose. Rostrum short, compressed, dorsally and ventrally dentate. Cervical groove distinct. Supraorbital

spines present, hepatic spine absent, small antennal spine present or absent. Abdominal segments feebly spinose. Telson broad with rounded posterior border without median process, and without terminal spines. Eyes well developed, with globular cornea. Antennule biramous, without statocyst. Antenna with well developed scaphocerite, with distinctly toothed lateral border. Mandible with fused molar and incisor processes and three-segmented palp. Maxillula with broad upper lacinia and with simple setose palp. Maxilla with slender palp and bilobed basal and coxal endites, scaphocerite well developed. First maxilliped with three-segmented palp, basal endite broad, coxal endite feebly developed; exopod well developed; epipod well developed, bilobed; single small arthrobranch present. Second maxilliped with all segments of endopod distinct; exopod well developed; epipod simple, with podobranch; one arthrobranch present. Third maxilliped with all segments of endopod distinct, slender; exopod absent; epipod small, elongated or absent, with pleurobranch and two small arthrobranchs. First three pairs of pereiopods slender, chelate. First pereiopods without "bristle organs". Third pereiopods larger than first and second, with slender chelae devoid of serrations along margins of palm. Fourth and fifth pereiopods slender; carpus and propodus not segmented, propodus spinulate ventrally; dactylus biunguiculate. Pleopods normal, without appendices, biramous except for first pair. Uropods normal, lateral border of exopod serrated, endopod with single dorsal carina.

Type species. — *Spongiocaris semiteres* sp. nov.

Remarks. — According to Holthuis (1946) seven genera and twenty-three species are known in the family Stenopodidae. He divided the family into two groups in his key to genera, one of which had the body depressed with the endopod of the uropod with one dorsal ridge and the third maxilliped without or with a rudimentary or with a well developed exopod. This group contains three genera, *Microprosthema* Stimpson, 1860, *Spongicola* de Haan, 1849 and *Spongicoloides* Hansen, 1908; it also includes the present new genus. *Microprosthema* is, however, distinguished from the others by having a rather well developed exopod of the third maxilliped and a bristle organ on the first pereiopod. In the body form and the chela of the third pereiopod the present genus is very similar to *Spongicoloides*, but a conservative character such as the presence of the normally developed exopod of the second maxilliped shows that the present genus is also closely related to *Spongicola*. The main differences among these genera are enumerated below:

	Spongicola	*Spongicoloides*	*Spongiocaris*
body form	depressed	depressed	not particularly depressed or compressed
telson	posterior margin with 3 or 5 teeth	posterior margin often without teeth	posterior margin without or with 3 minute spines
eye	well developed	cornea sometimes greatly reduced	well developed
antenna	laminate process present at inner margin	laminate process absent	laminate process absent

	Spongicola	*Spongicoloides*	*Spongiocaris*
	scaphocerite short, semi-circular	scaphocerite broad, quad-rangular	scaphocerite broad, quad-rangular
exopod of 2nd mxpd	present	absent	present
exopod of 3rd mxpd	rudimentary	absent	absent
P3	propodus with dorsal and ventral margins serrated	propodus entirely glabrous	propodus with dorsal and ventral margins smooth
P4, P5	dactylus bi- or triunguiculate	dactylus biunguiculate	dactylus bi-unguiculate, with a small accessory tooth at base of each main tooth or inner main tooth
uropod	exopod with two longitudinal dorsal ridges	exopod with one median dorsal ridge	exopod with two weak dorsal ridges

With regard to the shape of the chela of the third pereiopod *Spongicola japonica* Kubo, unlike the other known species of that genus, shows some resemblance to *Spongiocaris*, in having the palm with a nonserrated dorsal margin. The sub-quadrate form of the scaphocerite is similarly shared with by the above two genera. From a general aspect the present genus seems to be an intermediate form between *Spongicola* and *Spongicoloides*. It is also to be noted that these three related genera are known to be living within the cavities of hexactinellid sponges; for instance *Spongicola venusta* is reported commensal with *Euplectella aspergillum* Owen, *E. curvistellata* Ijima, *E. marshalli* Ijima, *E. oweni* Herklots & Marshall, *E. imperialis* Ijima and *Hyalonema sieboldi* Gray; *Spongicola japonica* is recorded from *Euplectella marshalli*, and *Spongicoloides koeleri* from *Regadrella phoenix* Schmidt (Holthuis, 1946; Utinomi, 1965). The New Zealand species of the present genus is obtained from within *Regadrella okinoseana* Ijima, and the South African species was also obtained from a hexactinellid sponge.

Spongiocaris semiteres sp. nov. (figs. 1-6)

Material examined. — 2 ♂, 2 ♀ (1 ovigerous). 13 miles S.E. of Durban, South Africa, coll. B. Taylor and D. Davies, December 12, 1969.

Description. — Holotype (ovigerous female, RMNH reg. no. Crust. D. 27308). The general body form is slender, not particularly compressed or depressed.

The carapace is glabrous with distinct upper cervical and branchiostegal grooves. The posterior border of the cervical groove bears two or three small spines. One or two small spines are also present in the supraorbital region. A feeble hepatic groove is present but the hepatic spine is absent. The orbit is feebly developed and

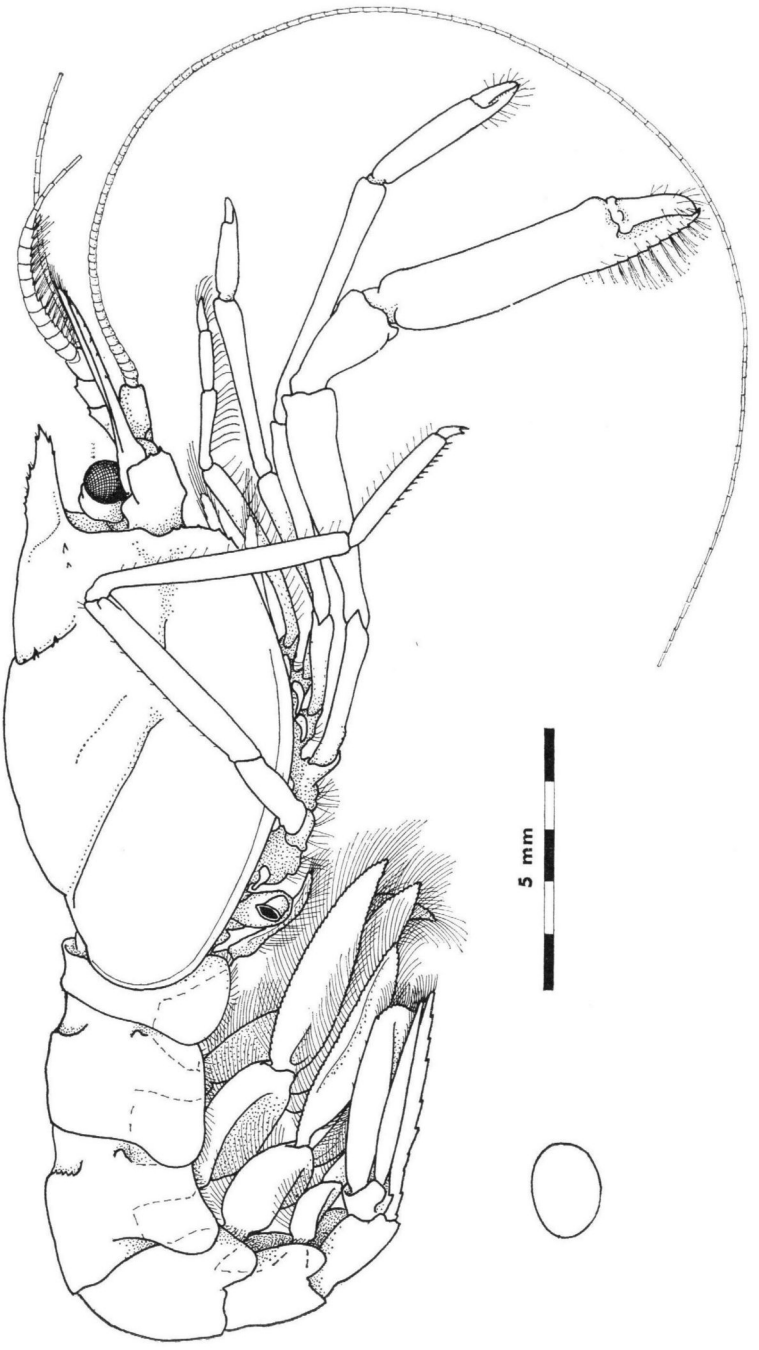

Fig. 1. *Spongiocaris semiteres* sp. nov., female, holotype, with ovum to scale.

the inferior orbital angle obsolescent. There is no antennal spine. The anterolateral angle of the carapace is rounded, not produced anteriorly, and bears five or six small irregular teeth. The posterior margin of the branchiostegite is broadly rounded.

The rostrum is short and compressed, not extending beyond the basal segment of the antennular peduncle. The rostral lamina tapers gradually to a slightly upturned acute tip. The dorsal border is feebly convex proximally and bears a group of four small acute teeth with two larger teeth more distally and a single preterminal tooth. All teeth are situated anteriorly to the posterior orbital margin. The ventral border is almost straight with two small acute teeth distally.

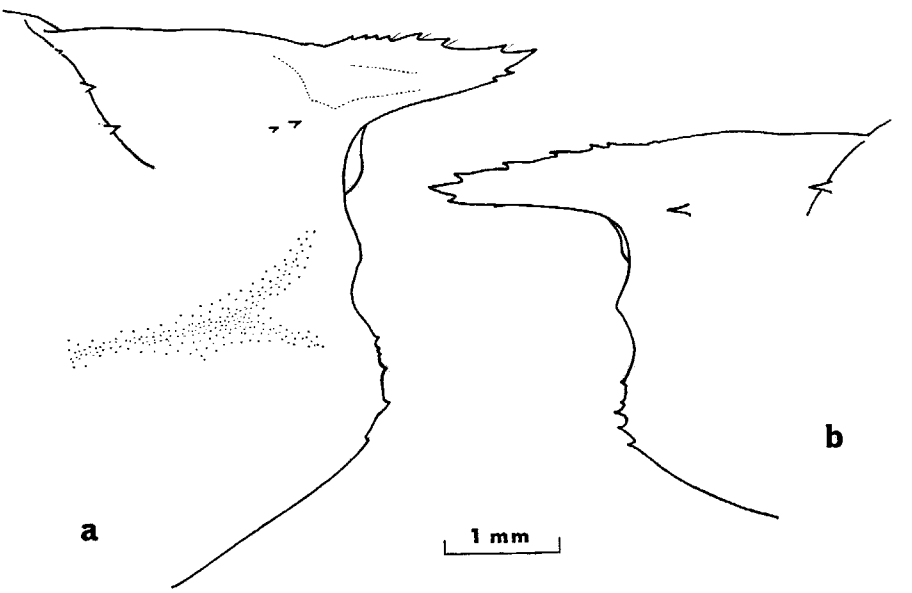

Fig. 2. *Spongiocaris semiteres* sp. nov., anterior carapace and rostrum. a, female, holotype; b, male, allotype.

The abdominal segments are glabrous and without carinae. The anterior margin of the nonarticular portion of the tergum of the third segment bears a few inconspicuous spinules. The pleura are broadly rounded with setose ventral margins, and the second to fifth are posteriorly produced. The posterior ventral angle and the posterior lateral angle of the sixth segment are feebly produced and blunt. A distinct knob is present anterolaterally on the second and third segments.

The telson is broad, about twice as long as broad, with feebly convex lateral borders and broadly rounded posterior margin, lacking a median tooth. The lateral borders bear seven or eight small acute teeth and are setose along the distal half. The posterior margin is densely setose and without spines. The dorsal surface bears a pair of divergent ridges, each with seven small teeth.

The antennule is normally developed. The basal segment of the peduncle is

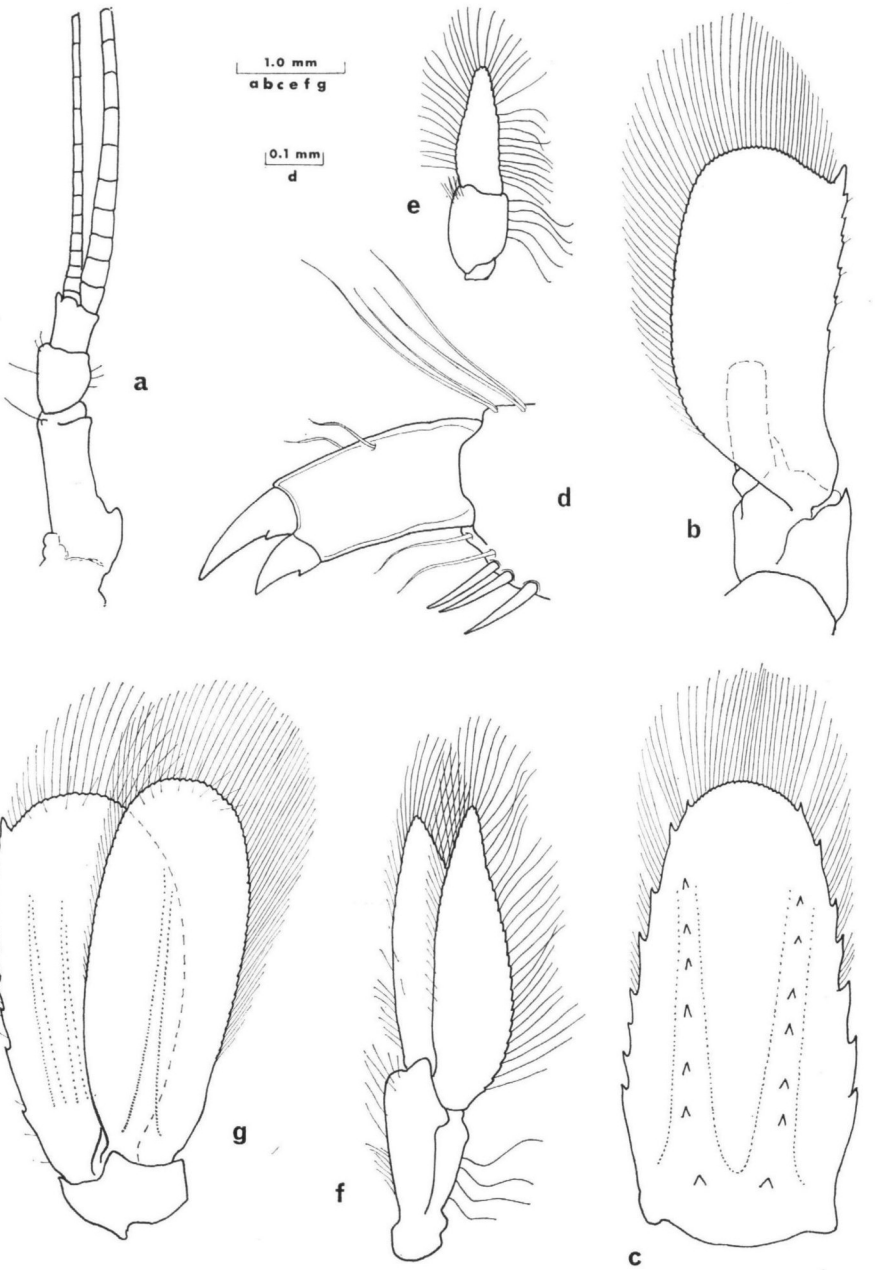

Fig. 3. *Spongiocaris semiteres* sp. nov., a, antennule; b, antenna; c, telson; d, dactylus of fifth pereiopod; e, first pleopod; f, second pleopod; g, uropod; a, b, d, female holotype; c, e, f, g, male allotype.

slender, without a statocyst, but bears a small bluntly rounded lobe laterally. The lateral border is feebly concave and unarmed distally. There is a ventral spine on

the medial border. The intermediate segment is more robust and slightly longer than the distal segment. The lower flagellum, which consists of fourteen segments or more, is stouter, uniramous, with about eighteen groups of aesthetascs on the nine basal segments.

The antenna has a robust basicerite, with one or two small spines on the anterior margin. The carpocerite is short and stout, not exceeding the intermediate segment of the antennular peduncle. The antennal flagellum is long and slender, extending

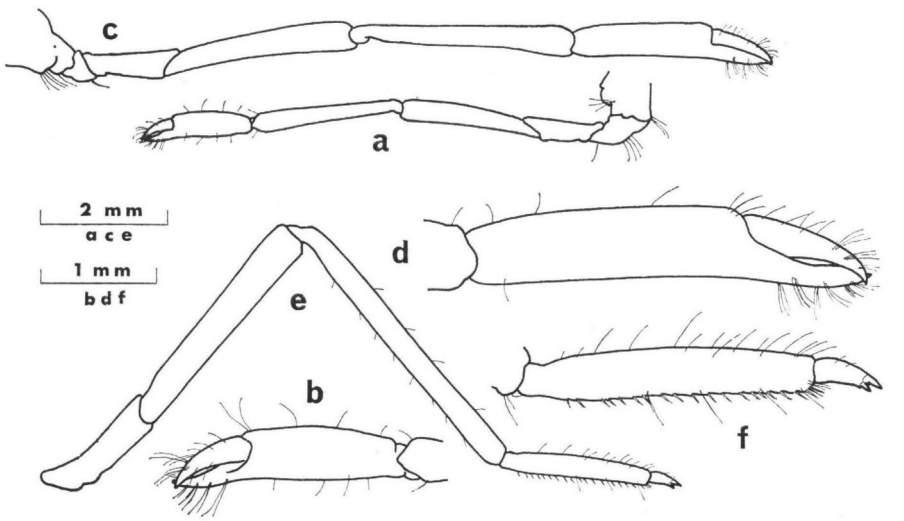

Fig. 4. *Spongiocaris semiteres* sp. nov., thoracic appendages. a, first pereiopod; b, chela of first pereiopod; c, second pereiopod; d, chela of second pereiopod; e, fifth pereiopod; f, dactylus and propodus of fifth pereiopod; a-d, holotype female; e-f, allotype male.

approximately to the tip of the telson. The scaphocerite is broad and 2.2 times longer than wide. The lateral border is feebly concave with seven small teeth along the distal half and a stout distal tooth. The anterior margin of the lamella exceeds the tip of the disto-lateral tooth and is broadly rounded.

The eyes are well developed but small, with a short stalk. The cornea is globular and well pigmented.

The mouthparts of the holotype have not been removed. The endopod of the third maxilliped exceeds the carpocerite by the length of the dactylus and half the length of the carpus. A small elongated epipod is also present.

The first three pairs of pereiopods are chelate and the fourth and fifth pairs are normal ambulatory pereiopods. All except the fifth are provided with small rudiments of epipods and all lack exopods. The first pereiopods are similar and slender and exceed the carpocerite by half the length of the carpus and the chela. The carpo-propodal "bristle organ" is absent. The second pereiopods are also similar but are longer and more robust than the first. They exceed the first pereiopod by the length of the chela. The fingers of the chelae of both first and second pereiopods are slender and with entire cutting edges. The third pereiopods

are the most robust and the longest. They are similar, subequal and generally glabrous. The chela is smooth, subcylindrical, feebly compressed and devoid of serrations along the dorsal and ventral margins of the palm. The fingers are slightly less than half the length of the palm. The dactylus bears a single small sub-acute tooth on the proximal third and the rest of the cutting edge is entire and with a fossa proximally for the tooth of the dactylus, with a separate stout tooth laterally to the fossa. The ventral margin of the fixed finger bears three or four small serrations. The carpus, merus and ischium are unarmed.

The ambulatory pereiopods are slender and each pair is similar. The dactylus is stout and distinctly biunguiculate, with a small accessory tooth at the base of each main tooth. The ventral border of the propodus bears about twenty small mobile spines. The carpus is elongated and devoid of spines and the merus is similarly unarmed.

The propodus and carpus show no signs of segmentation.

The branchial formula is: —

	Maxillipeds			Pereiopods				
	I	II	III	I	II	III	IV	V
Pleurobranch	0	0	1	1	1	1	1	1
Arthrobranch	1	1	2	2	2	2	2	0
Podobranch	0	1	0	0	0	0	0	0
Epipod	1	1	1	r	r	r	r	0
Exopod	1	1	0	0	0	0	0	0

The pleopods are well developed. The first pair is small with a single ramus. The second and subsequent pairs are biramous. The third pair is the largest, with a very broad, flattened basipodite and very well developed rami. The fourth and fifth pleopods are progressively smaller. All pleopods are without an appendix interna.

The uropods are well developed and are slightly exceeded posteriorly by the telson. The protopod is robust with a small acute posterolateral tooth. The exopod is broader than the endopod with gently convex lateral border bearing about twelve small acute denticles and a few setae, and a stouter posterior lateral tooth. The dorsal surface bears a feeble pair of very inconspicuous dorsal carinae. The endopod is slightly longer than the exopod and bears a single median dorsal ridge.

The ova are few in number, eight only being still retained.

Allotype (male). Generally similar to the holotype but distinctly smaller. The carapace bears a single, more robust supraorbital spine and a single stouter cervical spine. The hepatic and branchiostegal sulci are less well marked but the teeth along the anterolateral angle of the carapace are more conspicuous. The rostrum is directed horizontally and with five dorsal teeth, which are more evenly spaced than in the female.

The mouthparts have been removed from the right side. The mandible bears a well developed three-segmented palp. The terminal segment bears numerous fine

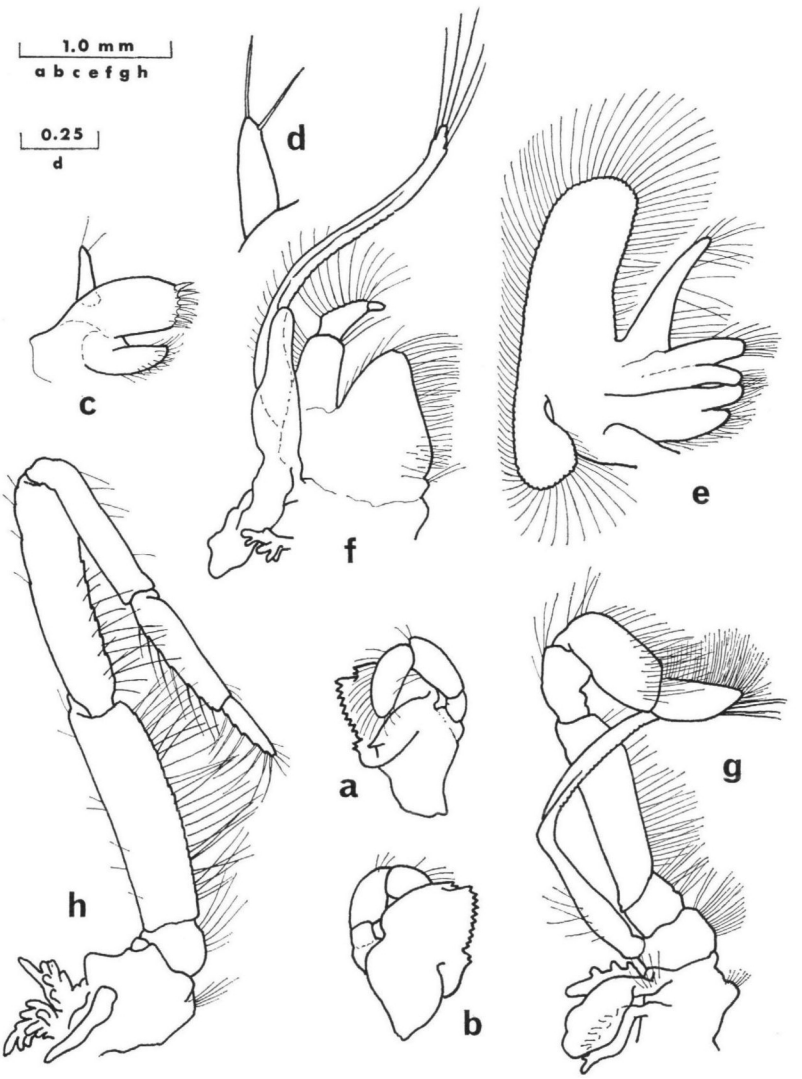

Fig. 5. *Spongiocaris semiteres* sp. nov., mouthparts of male allotype. a, mandible, ventral; b, mandible, dorsal; c, maxillula; d, palp of maxillula; e, maxilla; f, first maxilliped; g, second maxilliped; h, third maxilliped.

setae and is curved medially beneath the incisor process. The incisor and molar processes are fused. The cutting edge of the incisor process bears about nine small denticles with two further denticles on the anterior aspect. The masticatory surface of the molar process is feebly developed and bears a few small acute teeth dorsally and ventrally.

The maxillula has a moderately broad upper lacinia with six stout simple teeth and a few setae distally. The lower lacinia is narrow and rather short with

numerous simple setae distally. The palp is slender and simple, with single terminal and subterminal setae.

The maxilla has a long, slender, tapering palp, with numerous simple setae along its medial border. The basal and coxal endites are both deeply bilobed and provided with numerous long simple setae. The scaphognathite is well developed with a large broad anterior lobe and a small posterior lobe, with particularly long plumose setae around the antero-medial margins.

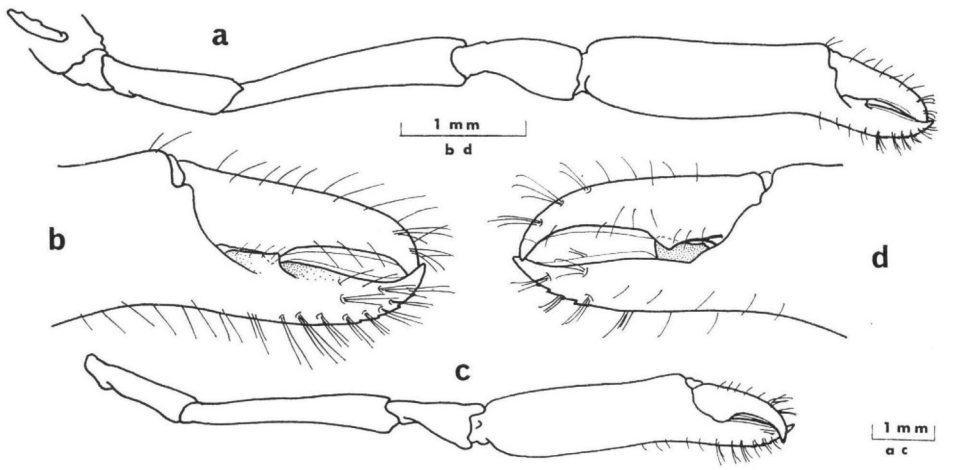

Fig. 6. *Spongiocaris semiteres* sp. nov., third pereiopods. a, female holotype; b, fingers; c, male allotype; d, fingers.

The first maxilliped has a stout, three-segmented palp. The basal segment is about twice as long as wide; the intermediate segment is similar but smaller and tapering and the terminal segment is small, about one quarter of the length of the intermediate segment. Both basal and intermediate segments are provided with numerous plumose setae along the lateral margins. The basal endite is broad and produced anteriorly, with a dense fringe of simple slender setae along its medial border. A small notch separates a small proximal lobe. The coxal endite is represented by a rounded lobe without setae. A well developed simple exopod, without a caridean lobe, is present, and a narrow bilobed epipod. A small arthrobranch is also present.

The second maxilliped has a slender five-segmented endopod. The dactylus is jointed terminally to the propodus and is twice as long as broad, with a straight densely setose medial border. The propodus is stouter than the dactylus but of similar proportions and more feebly setose. The carpus is shorter than the propodus and narrowed proximally. The merus is about four times longer than wide, and distinctly separated from the ischium, which is as wide as long. The basis is broader than the ischium and is, like the merus and ischium, setose along its medial border. A well developed exopod is present. The coxa bears a small median setose lobe, with a simple epipod bearing a small podobranch laterally. A small arthro-

branch is also present. The third maxilliped is slender, all segments tapering gradually distally, and setose along the borders. The lengths of the segments, from dactylus to basis are in the proportions 10:18:22:34:35:7. The basis is without an exopod and is sparsely setose medially. The coxa bears a small elongated epipod but lacks any median lobe. Two small arthrobranchs are present.

The first and second pairs of pereiopods are similar to those of the holotype. The third pereiopods are also similar but slightly more robust. The dentition of the fingers of the chela is also similar and the ventral border of the fixed finger also bears four small acute teeth.

Measurements. — Postorbital carapace length, holotype 6.5 mm, allotype 5.5 mm. Total carapace length, holotype 8.2 mm, allotype 7.2 mm. Major diameter of undeveloped ovum 1.7 mm. The length of pereiopod segments is as follows.

	dactylus	propodus	carpus	merus	ischium
			Holotype		
P1	0.7	2.0	3.3	2.4	1.5
P2	0.9	3.2	4.5	3.7	2.0
P3	2.0	6.3	2.0	4.6	2.8
P4	0.55	2.3	4.7	4.1	2.1
P5	—	2.3	5.0	3.8	2.0
			Allotype		
P1	0.7	1.8	2.5	2.2	1.3
P2	1.1	3.2	3.5	3.2	1.5
P3	2.0	5.6	1.7	3.9	2.1
P4	0.45	2.0	3.6	3.4	1.9
P5	0.40	2.0	3.8	3.3	1.7

Paratypes. — The paratype pair is generally closely similar to the holotype and allotype but is distinctly smaller (post-orbital carapace lengths, ♂ 4.0, ♀ 5.0 mm respectively) and is probably immature. They are in relatively poor condition, with all pereiopods detached, although most have been preserved.

Colouration. — No data.

Host. — The specimens were obtained together in the cavity of a hexactinellid sponge.

Bathymetric range. — Collected by trawl from 230 fathoms.

Spongiocaris yaldwyni sp. nov. (figs. 7-10)

Material examined. — 1 specimen (holotype, DM reg. no. Z. Cr. 1888), 15 miles N, 50°E of Plate Island in the Bay of Plenty, northeast of North Island, New Zealand, 320-340 fathoms, September 29, 1962 (N.Z. Marine Department Haul 12).

Description of holotype. — The body is slender and glabrous, with distinct cervical and branchiostegal grooves on the carapace. The posterior border of the

cervical groove has four (left) or five (right) small spines. The antennal spine is small but distinct. Two spines of moderate size are present at the pterygostomian angle, behind which are three minute spines on the left side and one larger spine on the right. Near the anterior end of the branchiostegal groove are one (right) or two (left) minute spines. The hepatic groove is absent. The supraorbital spine is well developed. The orbit is not deep but feebly developed, its inferior angle is obsolescent.

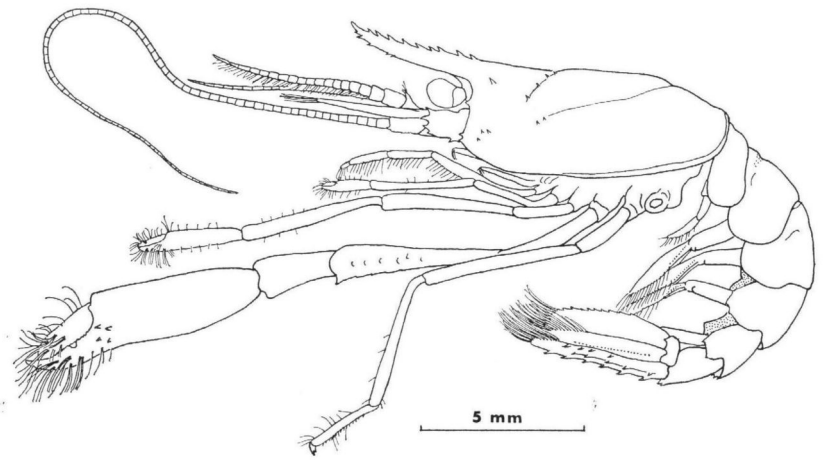

Fig. 7. *Spongiocaris yaldwyni* sp. nov., holotype, lateral view.

The rostrum is slender, about half the length of the carapace, directed slightly upwards with eight acute dorsal teeth. The hindmost tooth is located at the level of the postorbital margin. The distal fifth portion is compressed and has three teeth ventrally. The remaining portion gradually becomes triangular in cross section proximally, the left ventral ridge having three minute teeth and the right two.

The abdominal segments are glabrous and lack carinae. The posterior borders of the fifth and sixth segments bear four and three minute spines, respectively. The pleura are rounded and without setae ventrally. The fourth pleuron bears ventrally a very minute serration on the left side but is completely rounded on the right. The fifth similarly has three or four weak serrations on either side. Antero-laterally a distinct knob is present on the second and third segments.

The telson is broad, roughly quadrate, slightly constricted at the base and posteriorly setose. Dorsally it bears two parallel longitudinal ridges, the left ridge having six spines and the right five. The lateral margin has six acute teeth on the left and seven on the right, of which the anterior second and the third are minute, situated at the narrowest portion. The posterior margin is broadly rounded with three small spines.

The antennule is normally developed. The basal segment of the peduncle is elongated, not containing a statocyst. Its internal margin is straight, having a few

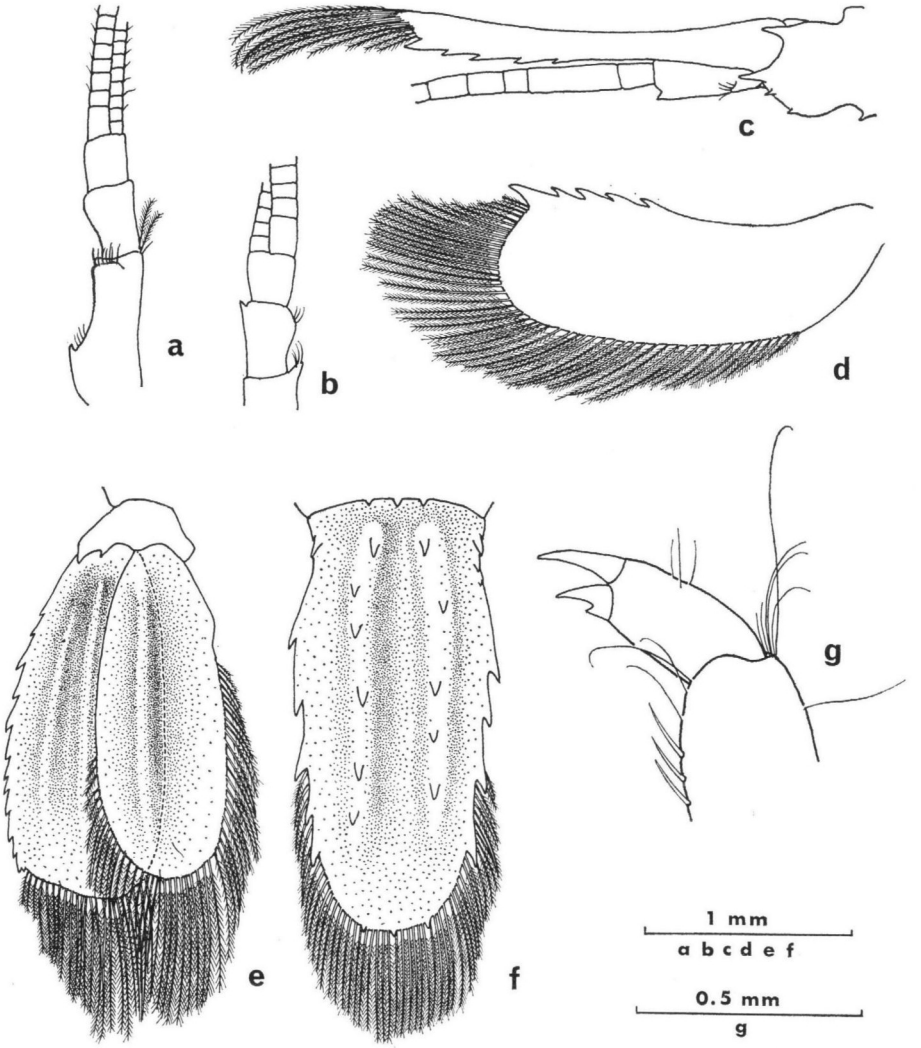

Fig. 8. *Spongiocaris yaldwyni* sp. nov., holotype. a, antennal peduncle, dorsal view; b, distal segments of antennular peduncle, lateral view; c, antenna, lateral view; d, scaphocerite; e, uropod; f, telson; g, dactylus of fourth pereiopod.

plumose setae of moderate length distally. The outer margin possesses a slight expansion, with a minute stylocerite. Dorsally the distal margin is elevated transversely, furnished with short setae. The intermediate segment is longer than the distal segment, and it has a minute spine on the ventral terminal margin.

The antenna has a robust basicerite, with two stout spines on the anterior outer margin and one or two minute spines on the ventral margin. The laminate process is absent. The carpocerite terminates in the middle of the intermediate segment of the antennular peduncle. The antennal flagellum is long and slender, failing to reach the tip of the telson. The scaphocerite is broad, about three times as long

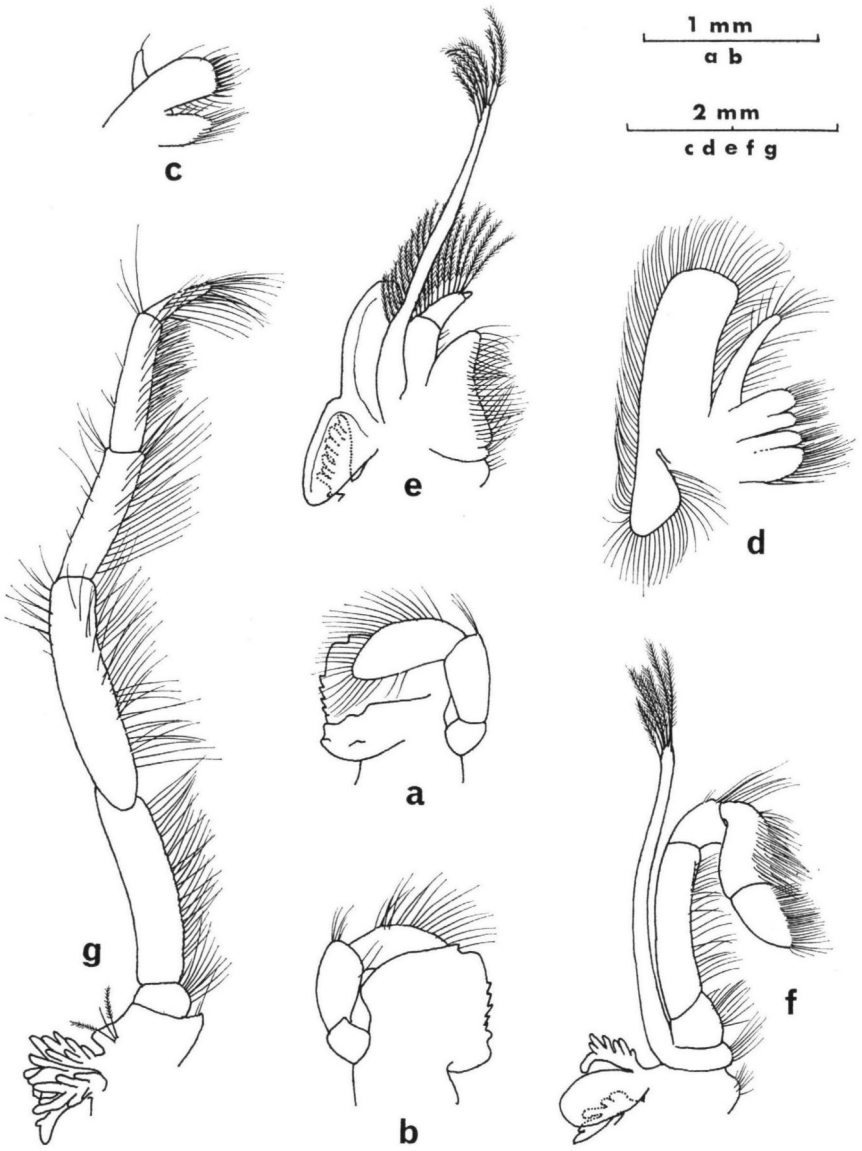

Fig. 9. *Spongiocaris yaldwyni* sp. nov., holotype. a, mandible, ventral; b, mandible, dorsal; c, maxillula; d, maxilla; e, first maxilliped; f, second maxilliped; g, third maxilliped.

as wide. The outer margin is slightly concave with four acute teeth along the distal two-fifths and a stout distal tooth. The anterior margin is broadly rounded and furnished with long plumose setae which also cover the inner margin.

The eyes are well developed, with short stalks, the corneal region moderately swollen.

The mouthparts have been removed from the right side. The mandible has a well-developed, three-segmented palp. The terminal segment is the longest, furnished with numerous setae marginally, and it is placed beneath the incisor process. The molar and incisor processes are fused. The cutting edge of the incisor process has five small denticles and one moderately developed tooth anteriorly. The masticatory surface of the molar process is slightly developed, having four subacute teeth dorsally and ventrally.

The maxillula bears a moderately broad distal endite with many fine setae and stout bristles distally. The proximal endite is narrow and has numerous fine setae distally. The palp is simple with a terminal short seta.

The maxilla has a long palp, fringed with long setae internally. The coxal and basal endites are deeply bilobed, provided with numerous setae. The setae are distinctly plumose particularly on the basal lobe of the coxal endite. The scaphognathite is well developed, the anterior lobe being broad and the posterior small, marginally fringed with plumose setae.

The first maxilliped has a rather broad three-segmented palp, with long plumose setae marginally. The distal segment is very small and vestigial. The tapering intermediate segment is smaller than the basal segment. The basal endite is broad and stout, produced forwards, and is thickly furnished with simple long setae. A small notch, placed near the base, divides the endite into distal large and small proximal lobes. The coxal endite is small, with several simple setae distally. The exopod is well developed, having about eight plumose setae distally. A bilobed and well-developed exopod, and rather well developed arthrobranch are present. The second maxilliped bears a well-developed exopod with about seven plumose setae distally. A subelliptical epipod is present. One podobranch and a single arthrobranch are distinct. The third maxilliped is slender and fails to reach the tip of the scaphocerite, when extended. The endopod tapers gradually distally, and is thickly setose internally. From the dactylus to ischium the lengths of the segments are in the proportions 10:20:20:35:30. The exopod is absent from the basis. The coxa has no epipod but a few long setae arising from the ordinary site of the epipod. Two arthrobranchs are present.

The first three pairs of pereiopods are chelate and the fourth is ambulatory; the fifth pereiopods are missing. All are completely devoid of epipods and exopods. The first pair is slender, reaching to the anterior margin of the scaphocerite. The bristle organ is absent. The second pair is longer and larger than the first, exceeding the first by half the length of the carpus and the chela. The chelae of the first and second pairs of pereiopods are distally setose, and all the fingers have entire cutting edges. The third pereiopods are robust and the longest, exceeding the second pair by one-third of the carpus and the chela. They are similar and generally glabrous. The chela is smooth, subcylindrical, slightly compressed, and without serrations or cristae along the dorsal and ventral margins of the palm. The palm has four small spines on the distal portion of the outer surface. The fingers are about half the length of the palm, and thickly furnished with long setae. The

movable finger is terminally directed inwards, with a straight cutting edge on the distal half and a stout tooth on the proximal third. The immovable finger is also directed inwards terminally; the cutting edge is almost straight and minutely tuberculate, with a distinct notch at the middle. At the proximal third is a fossa for the tooth of the dactylus. The carpus is unarmed. The merus is slightly strigose and its ventral terminal margin is toothed.

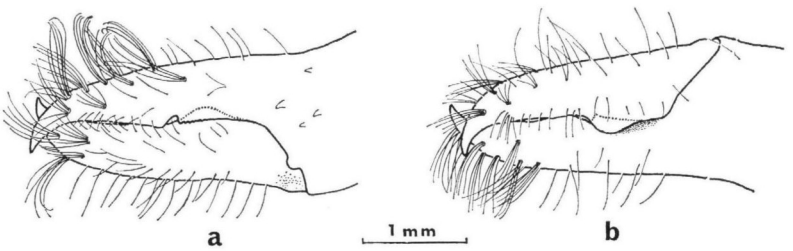

Fig. 10. *Spongiocaris yaldwyni* sp. nov., holotype. a, fingers of third pereiopod, outer aspect; b, fingers of third pereiopod, inner aspect.

The fourth pereiopod on the left side alone remains in this specimen. It is slender; the dactylus is short, biunguiculate, with a small accessory tooth at the base of the inner main tooth. The propodus is five times as long as the dactylus, and has the ventral margin with twenty-one small mobile spines. The carpus is about 2.4 times the length of the propodus, with the surface smooth and ventral margin unarmed. The merus is similarly unarmed.

The branchial formula is: —

	Maxillipeds			Pereiopods				
	I	II	III	I	II	III	IV	V
Pleurobranch	0	0	1	1	1	1	1	1
Arthrobranch	1	1	2	2	2	2	2	0
Podobranch	0	1	0	0	0	0	0	0
Epipod	1	1	0	0	0	0	0	0
Exopod	1	1	0	0	0	0	0	0

The pleopods are well developed. The first pair is smaller than the subsequent pleopods, not biramous but simple. The second to fifth pairs are biramous; the second and third are of subequal size and the followings are progressively smaller.

The uropods are well developed, and terminate almost at the level of the posterior margin of the telson. The protopod has two posterolateral teeth. The exopod is broader than the endopod. The outer margin is convex, with ten (right) to twelve (left) small teeth. The posterior margin is also slightly convex with long plumose setae. Two weak ridges run longitudinally on the dorsal surface of outer side rather than the mid-dorsal. The endopod bears a single longitudinal ridge dorsally and plumose setae marginally.

Measurements. — Total carapace length, 11.8 mm. Postorbital carapace length, 7.6 mm. The length of pereiopod segments is as follows:

	dactylus	propodus	carpus	merus	ischium
P1	0.5	1.3	3.4	2.5	1.0
P2	0.9	2.4	4.5	3.9	1.8
P3	2.5	5.5	2.3	5.2	2.3
P4	0.5	2.4	5.7	4.5	1.8
P5	—	—	—	—	—

Colour. — Not retained.

Host. — The specimen was taken from within the hexactinellid sponge, *Regadrella okinoseana* Ijima (Euplectellidae) previously recorded only from the Japanese waters. According to the information from Dr. J. C. Yaldwyn the sponge was identified by Dr. Patricia Bergquist, of the University of Auckland, New Zealand.

Relationships. — The present new species is readily distinguished from the former species, *Spongiocaris semiteres*, by the more slender carapace and the relatively much longer rostrum with more teeth on the ventral border. In other respects, the weak but distinct antennal spine, a few spines scattered on the anterior branchial region of the carapace, and the rather stout spines on the distal portion of the outer surface of the palm of third pereiopod, are found only in *Spongiocaris yaldwyni*. In the gill formula the only difference lies in the presence or absence of epipods: In *Spongiocaris semiteres* the three pairs of maxillipeds have normal epipods, and the following four pairs of pereiopods bear rudimentary epipods, whereas in *S. yaldwyni* normal epipods are present only on the first two pairs of maxillipeds and absent from the subsequent thoracic appendages.

This species is named in honour of Dr. J. C. Yaldwyn by whom the specimen was first isolated and the ecological data concerning the shrimp were made available.

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RÉSUMÉ

Des crevettes de la famille des Stenopodidae obtenues récemment dans les eaux profondes, près des côtes de l'Afrique du Sud et de la Nouvelle Zélande, représentent deux espèces d'un genre non-décrit. Une définition du nouveau genre, *Spongiocaris*, est donnée, et ses rapports avec les genres proches, *Spongicola* de Haan et *Spongicoloides* Hansen, sont discutés. Les descriptions des deux nouvelles espèces, *S. semiteres* et *S. yaldwyni*, sont fournies, avec des illustrations. Les deux espèces ont été toutes deux trouvées en association avec des éponges hexactinellides, entre 512 et 622 mètres de profondeur.

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