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ON A NEW SPECIES OF *NEPHROPS* (DECAPODA, REPTANTIA) FROM THE SOUTH CHINA SEA

BY

A. J. BRUCE

Fisheries Research Station, Hong Kong

Reprinted from: CRUSTACEANA. Vol. 9 Part 3 1965

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E. J. BRILL

ON A NEW SPECIES OF *NEPHROPS* (DECAPODA, REPTANTIA) FROM THE SOUTH CHINA SEA [1])

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In 1916 De Man described a new species of *Nephrops* from the Arafura Sea. This species, *Nephrops arafurensis,* was separated from all known species by the possession of a spinulose carapace and a characteristically sculptured abdomen. The specimen was unfortunately incomplete and no further examples have since been obtained. *N. arafurensis* has since occupied an isolated taxonomic position in relation to the other Indo-Pacific species of the genus.

It is therefore of interest to record the discovery of a closely related species which was obtained by the Fisheries Research Vessel "Cape St. Mary" when trawling at over 400 fms in the South China Sea. Only two specimens were obtained, an almost intact female and a damaged male. The female has been selected as the holotype. The holotype has been deposited at the British Museum (Nat. Hist.) and the allotype at the Rijksmuseum van Natuurlijke Historie, Leiden.

Nephrops neptunus sp. nov. (pls. XIII-XV)

Holotype. — ♀, 179 mm in total length. Non-ovigerous, lacking dactyl of left fourth pereiopod. "Cape St. Mary", Cr. 1/64, Station 26, Trawl 131; 19° 25.5′ N 114° 07.5′ E to 19° 22.0′ N 114° 11.0′ E; 7 January 1964; Agassiz Trawl, depth 400-435 fms. British Museum Reg. no. 1964.9.28.1.

Description. — A rather robust lobster (pls. XIII, XIV) showing all the main features of other species of the genus but separated from those at present known, with the exception of *N. arafurensis*, by the heavily spinulose carapace. The abdomen and limbs are firm and well calcified but the carapace is comparatively poorly calcified and the branchiostegite is soft and pliable.

The rostrum is slightly less than half the length of the carapace. The dorso-lateral margins are carinate along the posterior third and near their anterior end bear a slender anterior spine, upward and outwardly directed. Half way between the anterior dorso-lateral spines and the tip of the rostrum a forwardly directed ventral spine is present. The proximal two-thirds of the rostrum is almost straight and slightly depressed. The anterior portion, strongly compressed laterally, as is the ventral spine, is directed obliquely upwards and anteriorly and is also almost straight, the angle between the two portions being well marked. In its proximal half the rostrum is triangular in section, with apex directed ventrally, and with

[1]) Contribution No. 1 from the Fisheries Research Station, Hong Kong.

the dorsal surface concave. A narrow ridge runs round the post-orbital margin and extends forwards along the outer border of the anterior dorso-lateral spine.

The dorso-lateral carinae of the rostrum diverge posteriorly over the dorsum of the carapace, extending posteriorly for three quarters of the distance between the post-orbital margin and the cervical groove. The extreme posterior end, however, curves slightly medially. Each carina bears three large, acute post-rostral teeth. The anterior is the largest and is directed slightly upwards and laterally. Its dorsal margin is concave. The base of the spine is situated anteriorly to the level of the post-orbital margin and the tip of the spine is at the level of the middle of the cornea. The second tooth is slightly smaller, directed slightly upwards and forwards. Its dorsal surface is sinuous, concave anteriorly and convex posteriorly. The posterior tooth is only a little smaller, directed slightly upwards and forwards. Its dorsal surface is straight. The region between the dorso-lateral carinae shows a slightly raised longitudinal region in its middle portion. This ridge is almost obscured by numerous forwardly directed spinules which become larger and more numerous posteriorly so that the region anterior to the cervical groove is completely covered with spinules.

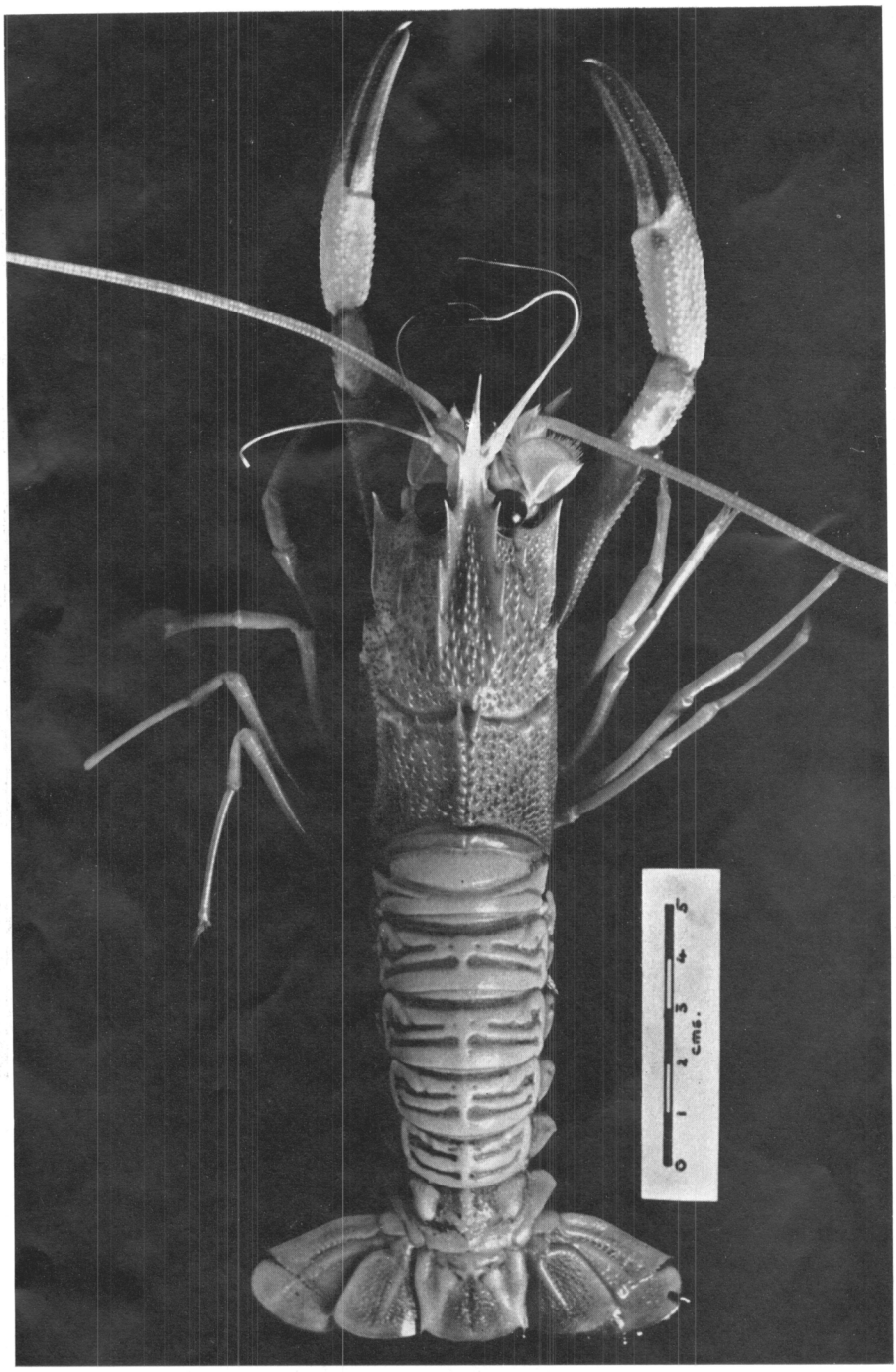
A well-marked median cardiac ridge is present. Posterior to the cervical groove a pair of well-developed sub-median spines, directed upwards and anteriorly, and overhanging the cervical groove, mark the anterior end of this ridge. These spines are smaller than the posterior post-rostral spines and are slightly divergent. Eight pairs of smaller spines extend along the rest of the ridge.

The antennal spine is laminar, curved obliquely upwards and forwards, except for the extreme tip which is curved slightly outwards. The lateral margins are almost straight and parallel. The anterior margin is convex laterally and concave medially. A small hepatic spine is present, directed anteriorly and slightly upwards, posterior to the hepatic groove, below and posterior to the posterior end of the carina of the antennal spine.

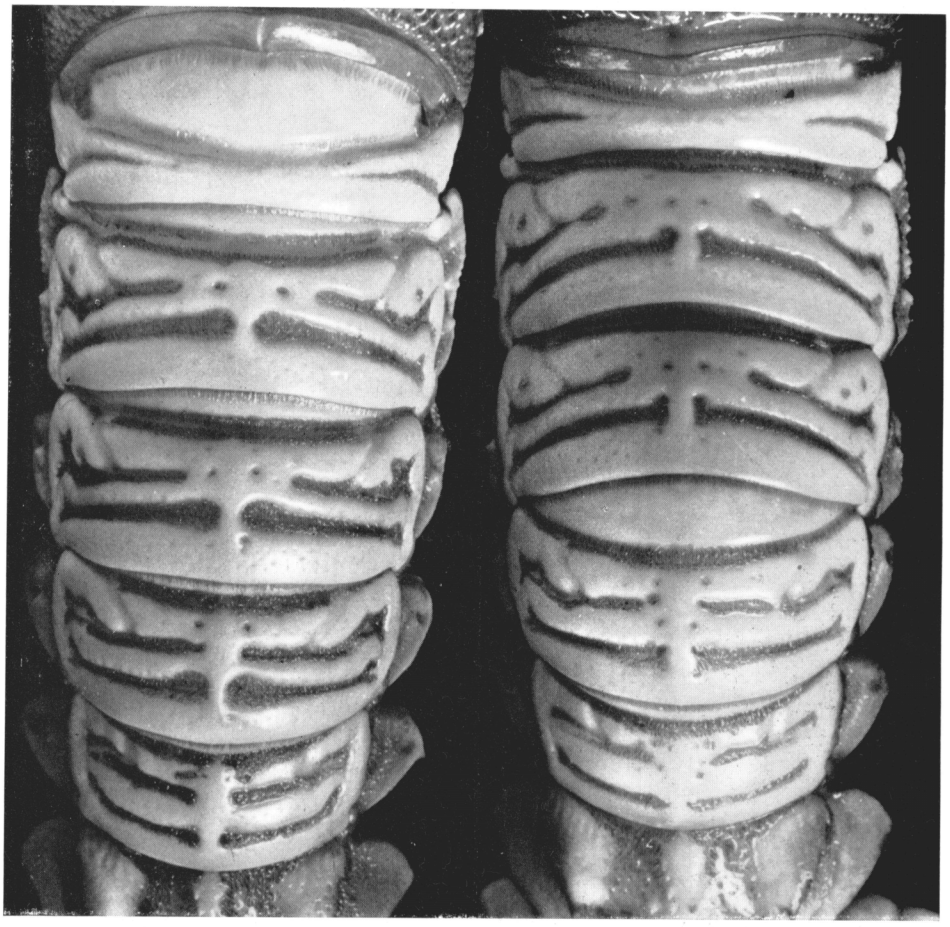
The cervical groove extends completely across the dorsum of the carapace at the junction of the anterior three-fifths and the posterior two-fifths of the post-orbital carapace length. The dorsal portion of the groove is transverse and the lateral portion is directed ventrally and anteriorly to the level of the hepatic spine. The hepatic groove is also well-marked and consists of a vertical portion above the level of the posterior end of the carina of the antennal spine, a ventral portion curving ventrally and anteriorly below to the posterior end of the antennal carina until directed anteriorly, and another curving ventrally and posteriorly below the hepatic spine to blend with the inferior end of the cervical groove.

Three other spines are noticeable on the upper anterior part of the carapace. The smallest is situated just posteriorly and dorsally to the upper end of the hepatic groove. The largest is situated more dorsally, wholly anteriorly to the hepatic groove. The third, intermediate in size, just above the level of the inferior orbital angle and about one third of the distance between the orbital margin and the largest of the three spines.

Nephrops neptunus sp. nov., lateral view of female holotype.



Nephrops neptunus sp. nov., dorsal view of female holotype.



Nephrops neptunus sp. nov., dorsal view of abdomen of female holotype (left) and male allotype (right).

There is no submedian posterior carina but the lateral carina marks the upper border of the branchiostegite and is a low ridge, curved slightly dorsally, extending from the postero-lateral angle of the carapace forwards to the level of the cervical groove. A similar ventro-lateral ridge, curved ventrally, extends also from the postero-lateral angle of the branchiostegite to the base of the hepatic spine. Both these ridges are covered with low, blunt spinules.

The margins of the carapace, posteriorly and ventrally, are strongly thickened and separated from the rest of the carapace by a well-marked sulcus. In its dorsal portion the marginal carina overhangs this sulcus anteriorly and in the midline it is notched anteriorly and grooved dorsally. The posterior border is setose. Dorsally both carina and sulcus are smooth and highly polished. Below the posterior lateral angle the sulcus is slightly hirsute and the carina finely granulated. Ventrally, both carina and sulcus are less well-marked but extend forwards to just below the level of the antennal peduncle. The border is slightly emarginate over the bases of the four anterior pereiopods.

The greater part of the surface of the carapace is covered with forwardly directed spinules. Those adjacent to the midline have already been described. Over the antero-lateral part of the carapace the spines are large, robust and well separated, but along the orbital margin, post-orbital region and antennal carinae, they are replaced progressively by small granules. Between hepatic and cervical sulci the spines are smaller, more spaced but still robust. Over the posterior dorsal carapace spines are dense, acute and robust. Some project anteriorly over the upper cervical groove. Over the upper part of the branchiostegite the spines are long and slender and densely packed. Over the lower portion of the branchiostegite the spines posteriorly are short and small while those of the pterygostomial region are almost granular.

The terga of the abdominal segments (pl. XV left figure) have smooth articular surfaces. The non-articular surfaces have well-marked grooves and are pitted. A groove separates the articular and non-articular portions and the anterior and posterior margins of this groove as well as the posterior margin of the segment are fringed with fine setae. The second to fourth segments have an anterior and posterior groove on each side. These grooves are not continuous across the midline but only a narrow zone separates the dorsal ends of the posterior grooves. These are broadest dorsally and become narrower laterally where they terminate in a small fork. The anterior groove terminates dorsally remotely from the midline but there are two small submedian pubescent pits in the anterior dorsal region of these segments. The upper part of the anterior groove is simple but the lower part is arborescent on the second and third segments, becoming less complicated on the third and fourth segments. The first abdominal segment has only a single groove which corresponds to the posterior groove and which decreases rapidly from the lateral posterior angle dorsally. The sixth abdominal segment has intermediate hirsute zones in its anterior half only, but the median portion forms a spinulate crest. The lateral margins of the terga are marked by well-developed

ridges which form the upper borders of depressions that occupy the major part of the dorsal regions of the pleura. The ridge of the sixth segment ends posteriorly submarginally, in a small spine. Except for those of the first and sixth segments, the pleura also have smaller depressions in their ventral portions. The depressions are pubescent and the raised surfaces feebly granular. The tergum of the first abdominal segment has its anterior lateral angle produced forwards as a robust, blunt, finger-like process that articulates with the posterior margin of the carapace. The pleuron is represented by a ventrally situated, ventrally directed acute slender process. The pleura of the second to fourth segments are acute with beaded margins and fringed with long setae, the anterior borders are convex, the posterior concave, the second pleuron being much broader than the other three. The pleuron of the sixth somite has the ventral angle bluntly rectangular, the upper portion pubescent, slightly depressed, and the lower portion smooth, punctate; the posterior-lateral angle non-spinose. The posterior margin bears two minute submedian spinules separated by a notch. The sterna of all abdominal segments, except the sixth, possess well-marked median spines. That of the first somite is distinctly smaller than the rest which are subequal.

The telson is sub-rectangular with sinuous lateral margins, convex anteriorly and concave posteriorly. The posterior margin is bi-convex. A pair of well-developed posteriorly directed, submedian spines are present on the dorsum at the level of the junction of anterior quarter and posterior three-quarters of its length. The posterior central region has a number of posteriorly directed spinules. Longitudinal, pubescent depressions are present antero-laterally. The telson is shorter than the posterior margin of the endopod.

The posterior dorsal angle of the basal segment of the uropod is bluntly pointed, and the proximal segment of the exopod is acutely pointed disto-laterally. Two ridges extend posteriorly from the hinge with the basal segment. The groove between these ridges has numerous small spinules and the distal border of the segment is also finely spinulated. The distal segment also has a few spinules on its dorsal surface. The endopod has a single dorsal ridge extending posteriorly from the hinge with the basal segment. Its dorsal surface lateral to this ridge is densely spinulate, and there are a few spinules medially and distally. The posterior margins of the caudal fan are fringed with long setae.

The antennular flagella are subequal in length, the outer more robust than the inner, and are slightly shorter than the post-orbital carapace length. The anterior margin of the basal peduncular segment is at the level of the anterior dorso-lateral rostral spines. The distal segment is about two-thirds the length of the intermediate.

The scaphocerite is shorter than the antennal peduncle but extends anteriorly beyond the merocerite, which bears a distinct spine on its anterior median border. The outer border of the scaphocerite is very slightly convex and its anterior and inner borders are roundly convex and fringed with long setae. The carpocerite is approximately equal to the merocerite, slightly smaller than the basicerite, which has a small disto-lateral spine, and all much larger than the ischiocerite. The

antennal flagellum more than five and a half times the post-orbital carapace length, and dorso-ventrally flattened proximally.

The eyes have a short peduncle and a well-developed round, black cornea.

The third maxilliped extends beyond the antennal peduncles by the length of the distal segment. The inner border of the ischiopodite has twenty well-developed, but rather irregular, denticles, decreasing in size proximally, the most anterior forming a large falcate process. The ventral ridge is fringed with long setae. The meropodite is about four-fifths the length of the ischiopodite. Its medial ridge is concave, has long setae and is devoid of spines. The ventral ridge is concave and hirsute but also has four teeth, which increase in size distally. The three distal segments are subequal, with medial and ventral margins setose. The exopod, which has a well-developed multi-articulate flagellum, has its basal part equal to about four-fifths of the length of the ischiopodite. The flagellum is subequal to the basal part. The exopod of the second maxilliped is a short stump, rather less than half of the length of the ischiopodite.

The first pair of chelipeds are well-developed and asymmetrical, the left being slightly smaller than the right. The chelae are compressed dorso-ventrally and both surfaces, as most of the other segments, are covered with small tubercles. The ischium is only feebly granulated ventrally and is smooth dorsally. The inner border is slightly granulated. The merus is more than two and a half times as long as the ischium. The dorsal surface ends anteriorly in a large acute spine and a slightly smaller one is present on the distal medial side. The lateral margin has a blunt distal process. All surfaces are granular and these granules tend to be arranged in longitudinal lines extending onto the spines. The medial ridge has about half a dozen acute spines along the subterminal distal half, more marked on the larger right chela. The sub-cylindrical carpus is about half the length of the merus and has medial and lateral distal dorsal spines, both distinctly smaller than the terminal spines of the merus. A very small series of small spines run along the lateral margin up to the dorsal spine. Near the origin of this row one of the spines is slightly more conspicuous than the rest. There is no ventral distal spine, and no proximal dorsal tubercle. The propodite is three and a third times the length of the carpus and about one and a half times the length of the merus. Markedly flattened dorso-ventrally, it is convex ventrally and angulated dorsally, widening distally from the articulation with the carpus to reach a maximum at the dactylar articulation. The straight median border of the palm is blunt, the slightly convex lateral border being acute and continuous with that of the dactyl. The granules along the median border are acute and directed distally, those along the lateral border being similar but smaller. Granules on the dorsal ridge of the palm are blunt with more acute tubercles on either side. The ventral tubercles are rather smaller and more uniform. The fingers are also flattened dorsoventrally, and taper gradually to recurved tips, that of the free finger crossing beneath that of the fixed finger. The fingers are feebly carinate and covered with small, distally directed tubercles. Their opposing margins are lined by a single row of small denticulations some of which are occa-

sionally slightly larger and more acute, especially distally. They are not hirsute. At one-third of the distance from the hinge to the tip of the fixed finger this line of denticules is interrupted, and ventral to the gap thus formed, is a single larger tooth. The cutting edge of the free finger opposes between this tooth and the cutting edge of the fixed finger. The teeth on the free finger are finer and more regular than those of the fixed finger. The smaller left chela is essentially similar except for the presence of a well-developed spine in the middle of the lateral border of the carpus.

The second pereiopod reaches beyond the tip of the rostrum and also extends anteriorly to the level of the anterior end of the carpus of either of the first pereiopods. The lateral aspect of the ischium is smooth, that of the merus and carpus granulate, and the propod and dactyl are also smooth. The inner surfaces smooth, the dorsal and ventral edges of the chela are hirsute and the cutting edge entire. The third pereiopod is longer than the third maxilliped by the length of the dactyl, and reaches as far anteriorly as the middle of the carpus of the first pereiopod. The lateral edges of the fingers of the chela are setose. The genital apertures are present on the coxae and are small circular openings. The fourth leg extends beyond the carpus of the first pereiopod by half the length of its dactyl. The fifth pereiopod is slightly shorter than the third, and all are otherwise similar to the second.

The sterna of the thoracic limbs consist of raised plates with sharp lateral margins and depressed centres, which increase in size posteriorly. That of the first pereiopods has a median groove; of the second, a pair of acute slender forwardly curved submedian spines; of the third, a pair of blunt anterior lateral processes; the fourth, antero-lateral and lateral angles and a rounded postero-lateral border with a depressed centre traversed by oblique ridges converging anteriorly. That of the fifth pereiopods consists only of a transverse bar between the limb bases.

The first pair of pleopods are reduced and uniramous. Second to fifth pairs well developed, biramous and subequal.

Allotype. — ♂ 186+ mm in total length. Tip of rostrum broken and left first pereiopod very small and in process of regeneration. Right branchiostegite removed. Obtained with holotype. Rijksmuseum van Natuurlijke Historie, reg. no. Crust. D 21152.

Description. — The male is essentially similar to the female but is slightly larger. The left cheliped is fully developed but the right is very small and is already being regenerated.

The tip of the rostrum is missing but it is otherwise similar to the female. Of the three spines situated on the anterior dorso-lateral region of the carapace the anterior is represented, on both sides, by a pair of smaller spines, the middle one is similar and the posterior one small and inconspicuous. The posterior marginal ridge of the carapace is relatively narrower than in the female with the dorso-median notch and groove less well marked.

The antero-lateral process of the first abdominal segment is rather more acute and the ventral more robust and directed more posteriorly. The grooves on the terga of second to fourth segments (pl. XV right figure) are similar to those of

the female but the lower end of the anterior groove is less complicated and some parts are separated to form pubescent depressions on the second and third segments. The posterior border of the sixth segment has a minute median tubercle. The telson shows a uniformly convex posterior border. The uropods are as in the female.

The disto-lateral border of each basicerite bears a pair of subequal spines.

The third maxilliped is the same as in the female. The left first pereiopod is robust with the tubercles more strongly developed and more spiniform. A well-developed spine is present at the middle of the lateral border of the carpus. The other pereiopods are very similar to those of the female. The genital apertures are situated on the coxae of the fifth pereiopod and are small and circular. The sterna of the pereiopods bear raised plates similar in general form to those of the female. The anterior border of the first bears a distinct pair of small, curved, laterally directed spines. A small, acute, forwardly directed spine is situated between the first and second plate, which bears a pair of long, slender, acute, forwardly directed spines on its anterior border. Another very small, median spine lies between the second and third plate, which is very similar to that of the female. The fourth plate has a similar outline to that of the female but its centre is more depressed and lacks the divergent ridges. The fifth sternum is a simple transverse bar, similar to that of the female, but bears submedian tufts of long setae not present in the female.

The first pleopod is uniramous and modified, the distal half being longitudinally channelled along its median aspect, and terminating distally in a small ventrally directed hooked process. The second pleopod is biramous, the rami being subequal and the endopod bearing, on its inner aspect, a well-developed appendix masculina with a setose medial border. The remaining pleopods are similar to each other and to those of the female. The median spine on the first abdominal tergum is larger than in the female.

The branchial formula conforms to that of the genus, i.e.,

	Maxillipeds			Pereiopods				
	1	2	3	1	2	3	4	5
Pleurobranchiae	—	—	—	—	1	1	1	1
Arthrobranchiae	—	—	2	2	2	2	2	—
Podobranchiae	—	—	1	1	1	1	1	—
Mastigobranchiae	1	1	1	1	1	1	1	—

Colour pattern. — The colour pattern of the fresh specimens is a striking combination of "deep-sea red" and white. The pattern is essentially similar in male and female. Almost the whole carapace is uniformly red, the only exceptions being the middle half of the rostrum, which is white, the dorso-lateral and ventral spines, as well as the tip, being red. The region enclosed by the cervical groove, the hepatic groove and above the hepatic spine, including the grooves themselves is also white but the spines born on this region are bright red. The abdominal terga are white but the fine setae edging the grooves are red. The lateral ridges of the terga are bright red. The pleura have the central depressions white with

reddish setae, the margins bright red, with the intermediate portion a rosy pink. The caudal fan has the exopod whitish, pink medially: endopod reddish, apart from carinae, and the posterior central portion of the telson, with all lateral and posterior margins, spinules, and marginal setae, dark red. Antennular and antennal peduncles white, except lateral aspects of antennal peduncle. Scaphocerite pink with red borders. All flagellae red. Cornea black, peduncle red. Mouthparts all red. First pereiopod in female red except for palm and bases of fingers dorsally, which are white. A small red spot proximal to the hinge is present on the right chela and the right carpus has a feeble white blotch dorsally and proximally. Ventrally the left chela has an indistinct central white patch on the palm but that of the right is uniform, apart from a narrow band of white along the lateral margin continuous with the white of the dorsum. The other pereiopods are all deep red, as are the endopodites and exopodites of the pleopods. The colouration of the male is the same and that of its fully grown chela corresponds to the right chela of the female.

Measurements. — The main measurements of the two specimens are given in table I.

TABLE I

Measurements (mm)

	Holotype ♀	Allotype ♂
Rostrum	30.0	31.0
Carapace, length	56.5	59.0
Carapace, width	35.5	35.5
Carapace, depth	40.0	40.0
Total length	179.0	186 ±
Telson, length	23.5	24.5
Telson, max. breadth	21.5	22.5
Antennular flagellum	56.0	62.0
Antennal flagellum	300 ±	320 +
Scaphocerite, length	11.7	11.5
Scaphocerite, width	11.5	11.5
Max. diam. of cornea	7.0	7.5

	Pereiopod							Pereiopod						
	Mxp 3	Lt 1	Rt 1	2	3	4	5	Mxp 3	Lt 1	Rt 1	2	3	4	5
Ischium	20.0	15.0	16.0	14.0	13.0	13.7	12.0	14.5	17.0	—	13.4	13.0	13.5	12.0
Merus	13.0	41.0	41.5	18.3	25.5	25.7	26.5	12.5	42.5	—	29.3	27.0	31.0	27.4
Carpus	9.0	17.5	21.0	13.0	13.0	14.5	14.0	8.3	21.75	—	13.75	13.7	15.0	14.0
Propodus	8.5	60.0	67.5	25.5	27.0	27.0	28.0	8.0	75.0	—	25.5	28.0	29.0	30.0
Dactylus	8.5	35.0	37.5	11.5	8.5	10.7	10.2	7.3	41.0	—	12	8.3	11.3	11.0

The rostral length is measured from the tip to the posterior orbital margin. Carapace length is from the posterior orbital margin to posterior border of the carapace in the dorsal midline. Carapace width and depth are maximal measurements and are taken slightly anterior to the cervical groove. Total length is with the specimen outstretched, measured from rostral tip to the centre of the posterior border of the telson. Total length and rostral length for the paratype are approximate; antennal flagellae have the extreme tips missing. All limb measurements from the left side except dactyl of 4th leg in holotype.

Ecological Data. — The two specimens were obtained from a single haul of a 10 ft Agassiz trawl net made from 400 to 435 fms on a gently sloping bottom. Attempts to obtain a sample of the sea bottom were unsuccessful. The haul covered a distance of 3½ miles. The species was not obtained in the previous haul made in the same locality, from 314 to 328 fms, nor in the subsequent haul, from 520 to 560+ fms.

The hydrological conditions at the bottom, in the same locality (Station No. 27 at 812 m) were: temperature 5.13° C, salinity 34.56 ‰, O_2 27.34, oxygen 2.36 ml/l, saturation 34 %.

The invertebrate fauna was characterized by vast numbers of a large orange-red pennatulid, many hexactinellid sponges and a wide variety of echinoderms. The crustacean fauna included three species of *Nephropsis* Wood-Mason. Other decapods obtained, many of which were unfortunately extensively damaged, were *Aristeus virilis* (Sp. Bate), *Hymenopenaeus* sp., *Acanthephyra* sp., *Nematocarcinus* sp., *Plesionika alcocki* (And.), *Heterocarpus dorsalis* Sp. Bate, *Glyphocrangon hastacauda* Sp. Bate, *Parapagurus* cf. *pilosimanus* Smith and *Platymaia alcocki* Rathbun.

The fish fauna was represented by ten specimens belonging to six bathydemersal genera. All were black in colour and had large eyes. One species of the family Bathygadidae, probably *Bathygadus furvescens* Alcock, was present and five species of the Macruridae, *Coryphenoides tydemani* (Weber), *Metaeocephalus nigrescens* Smith & Radcliffe, *Lamprogrammus* sp., *Ventrifossa* sp. and? *Malacocephalus* sp.

DISCUSSION

The single specimen of N. *arafurensis* described by De Man was extensively damaged. A male example, it lacked the first pair of pereiopods, the two posterior abdominal segments with the caudal fan, and the antennal flagella. The specimen was obtained from the Kei Islands in the Banda Sea in the Indonesian Archipelago, about 2000 miles from the type locality of *N. neptunus,* and at a depth of 306 fms. The present specimens correspond perfectly to the definition of the genus as given by Barnard (1950) and comparison with De Man's incomplete description and illustrations of *N. arafurensis* reveals numerous differences that makes the separation of the two species simple. The main features possessed by *N. neptunus* that distinguish it from *N. arafurensis* De Man are as follows:

i) the presence of an anterior and posterior transverse pubescent groove on each side of the second to fourth abdominal terga.

ii) the median post-cervical carina having more numerous and smaller spinules.

iii) the absence of a posterior dorso-lateral carina on the carapace.

iv) the region between the post-rostral carinae being heavily spinulose and lacking a median ridge with a tubercle.

v) the post-rostral carinae are not convergent posterior to the orbital margin and have three instead of five teeth.

vi) the lateral border of the antennal spine is straight and not convex.

vii) the ischium of the third maxilliped is strongly toothed along its ventromedial margin with a large hooked tooth distally. De Man stated that the third maxilliped of *N. arafurensis* is the same as that of *N. sibogae* De Man, being finely serrate and ending with a small spinule.

viii) of the three spines situated between the upper end of the hepatic groove and the orbital margin, the most posterior is the smallest. In *N. arafurensis* this spine appears distinctly larger than the two anterior spines.

ix) the spinules along the posterior and lateral carinae of the carapace are blunt and tubercular. In *N. arafurensis* they appear to be acute and the anterior ends of the carina are marked by strong spines not found in *N. neptunus*.

Yaldwyn (1954) has reviewed the information available on the colour patterns in the genus *Nephrops*. Most of the descriptions are of species found in shallower waters. The striking half-red, half-white colour pattern is quite distinct from the patterns recorded for the other species, *N. norvegicus* (L.), *N. andamanicus* Wood-Mason and *N. challengeri* Balss. The depth at which the specimens were obtained is near the lower limit recorded for the genus. The only deeper record is that for a specimen of *N. norvegicus* taken from 415 to 450 fms (Senna, 1903). The colour pattern of this specimen was not recorded and therefore cannot be compared. In its colour pattern *N. neptunus* resembles the pattern described for the genus *Sergestes*, subgenus *Sergestes* M. Edw. (Dennell, 1940, 1955; Yaldwyn, 1957) and other bathypelagic Crustacea (Hardy, 1956). This type of colour pattern does not appear to have been recorded in bathybenthic Decapoda. Unlike the bathypelagic species the red pigmentation appears to be cuticular instead of being contained in chromatophores. The eyes of this species are relatively smaller than those found in shallower waters of the same region, i.e. *N. thompsoni* Sp. Bate. Of the three species of the genus *Nephropsis* Wood-Mason, all with very much reduced, non-functional eyes, that were obtained from the same station, one was white, one was half-red, half-white and the third was wholly dark red.

ACKNOWLEDGMENTS

I wish to thank Mr. J. D. Bromhall, Director, Fisheries Research Station, Hong Kong, for helpful criticism of this paper and Mr. W. L. Chan, of the same organization, for the identification of the fish specimens.

RÉSUMÉ

Une espèce nouvelle de *Nephrops, N. neptunus,* obtenue à une profondeur de plus de 800 m, dans la Mer de Chine du Sud, est décrite. Deux spécimens seulement ont été obtenus: un mâle et une femelle non-ovigère. L'espèce est très proche de *N. arafurensis* de Man et ses caractéristiques sont énumérées. La distribution des couleurs: une moitié rouge, une moitié blanche, est notée.

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Received for publication 16 March 1964.