HYMENOPENAEUS HALLI SP. NOV., A NEW SPECIES OF PENAEID PRAWN FROM THE SOUTH CHINA SEA (DECAPODA, PENAEIDAE) 1)

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The genus Hymenopenaeus Smith has been subdivided by Burkenroad (1936) into four groups of species. The fourth of these groups is characterised by the presence of a branchiostegal spine and a pair of post-rostral teeth separated by an interval from the rostral series. In this group, which is further divided into two sections, there are six Indo-Pacific species, five of which belong to the section lacking a pterygostomial spine. The survey of the northern shelf area of the South China Sea at present being carried out by the “Cape St. Mary” of the Fisheries Research Station, Hong Kong, has established the presence of a further species of this group in the Indo-Pacific region.

The single specimen obtained shows considerable resemblance to H. neptunus (Bate, 1888), the type specimen of which is in the British Museum (Natural History). Comparison with Bate’s figures in the Challenger Report revealed several differences and these were confirmed by drawings of the petasma of the type specimen of H. neptunus (Bate) which were kindly prepared by Mr. R. W. Ingle of the British Museum (Natural History). These drawings indicate that Bate’s illustration is not reliable with respect to the petasma in particular and further illustrations of the petasma of H. neptunus (Bate) are provided in this paper.

The species is named in honour of Dr. D. N. F. Hall in recognition of his contribution to present knowledge of the Indo-Pacific Penaeidae. The holotype specimen has been deposited in the British Museum (Natural History).

Hymenopenaeus halli sp. nov. (figs. 1, 2 a-e)

"Cape St. Mary" Cruise 1/64, Stn. 26, Trawl T./131, 7 January 1964. Position 19° 22.5' N 114° 07.5' E to 19° 22.0' N 114° 11.0' E. Agassiz Trawl, 400-435 fms. — 1 male, holotype (British Museum (Nat. Hist.), Reg. No. 1965.1.7.1).

Description. — The single specimen available (fig. 1) lacks the fourth and fifth pairs of pereiopods. The right second and third pereiopods are also missing together with the flagella of the right antennule. Both antennal flagella are missing although the right is being regenerated.

The carapace is glabrous and feebly calcified. The rostrum is slender and directed obliquely upwards at an angle of about 15°. It bears five dorsal teeth which
decrease regularly in size distally. The interval between these teeth is similarly diminished anteriorly. The ventral margin lacks teeth but bears a single fringe of long setae. A lateral ridge is present extending from the posterior orbital margin to the tip of the rostrum and a well-marked groove is present immediately dorsally. The ventral margin of the rostrum is slightly convex in the proximal third but is straight over the distal two thirds. The rostrum is about half the post-orbital carapace length and extends anteriorly to the level of the proximal third of the intermediate segment of the antennular peduncle. The most posterior rostral tooth is situated slightly anteriorly to the posterior orbital margin.

A post-rostral carina extends posteriorly from the rostrum to the level of the cervical groove which it interrupts in the mid-line. The convex posterior half of this carina bears a larger anterior tooth and a smaller posterior tooth. The anterior half is concave and lacks teeth. A small tubercle is present on the posterior margin of the posterior tooth. Posterior to the cervical grooves the carapace is dorsally rounded but a small tubercle is present at about one twentieth of the post-orbital carapace length from the posterior dorsal margin.

The carapace bears antennal, post-antennal, hepatic and branchiostegal spines (fig. 2a). The antennal spine, which is small, is situated on the anterior margin of the carapace. There is no antennal carina. The post-antennal spine is the largest of the four spines and is directed slightly upwards. It is situated on a slightly more dorsal level than the antennal spine and is about half the distance between antennal and hepatic spines. The hepatic spine is the smallest spine and its lateral level is about half way between post-antennal and branchiostegal spines but twice