

Rostrum of two very short slender acute spines ($\frac{1}{8}$ length of carapace), separate from base, basal width twice length, distal width hardly exceeding basal width.

Hepatic margin with a single acute spine surrounded by several smaller spinules, one of which may be subequal with main spine. Branchial margin with two spines, slightly larger than hepatic spine, towards posterior part of anterolateral margin, first at a slightly lower level than either hepatic spine or second branchial spine. Posterolateral margins of carapace minutely spinulated.

Dorsal surface with three mid-dorsal tubercles, one on posterior part of mesogastric region just behind level of marginal hepatic spine, one centrally surmounting tumid cardiac region just behind widest part of carapace, sometimes bearing two small submedial spinules, and one small tubercle on intestinal region between cardiac tubercle and posterior margin of carapace. Four tubercles on each side of midline, one small protogastric pair opposite marginal hepatic spine forming an inverted triangle with medial gastric tubercle and three paired branchials, one just behind level of medial gastric tubercle and two posteriorly close to margin of carapace, first just in front of cardiac tubercle, second just behind, and lateral to, medial intestinal tubercle.

Orbit consisting above only of narrow supraorbital eave, incomplete below. Eave bearing midway along a short, but prominent, slender, supraorbital spine, weakly curved upwards and forward, several minute spinules sometimes also present, of which one or two in front of spine may be slightly enlarged. Several small postorbital spinules, one usually larger than others. Eyestalk long and stout, completely visible in both dorsal and ventral view, bulbous basally, bearing midway along anterior surface a large blunt tubercle, a small tubercle level with this on both dorsal and ventral surfaces; cornea obliquely subterminal, slightly ventral, large, ovoid, a very small tubercle dorsally at distal extremity of eyestalk.

Basal antennal article long and slender, subrectangular, anterolateral angle armed with a single strong spine directed forward and slightly outward; outer surface weakly excavated basally as wide shallow groove, a small spinule close to medial edge near base; antennal flagellum inserted beside rostrum and completely visible on each side of it, half length of carapace, slender, two basal segments short and stouter than following with one or two spines on lateral surface, third segment very long, almost half total length of flagellum, following segments decreasing in length and tapering gradually; a few short curled hairs extending along dorsal surface of first three segments.

Antennular fossae very large, longitudinally subovate, narrow, basal segment of antennules bearing somewhat medially a row of 3 to 5 minute tubercles on outer surface; inter-antennular spine strong, projecting downwards as a blunt tooth, anterior surface deeply excavated; anterior process of epistome short, slender, sharply pointed.

Epistome slightly longer than wide, widening posteriorly. Mouthfield subrectangular, narrowing posteriorly, anterior margin almost transverse, weakly concave medially. Pterygostomian regions triangular, weakly excavated at posteromedial corner, separated from subhepatic region by a shallow groove, a small tubercle, visible in dorsal view, midway along lateral margin.

Third maxillipeds almost meeting in midline. Ischium large, broadly subrectangular, medial half of distal edge greatly extended anteriorly, rounded, lateral half weakly concave to bear merus; medial edge with large, irregularly shaped teeth overlaid, but not concealed, by a fringe of very long hairs; outer surface covered basally and toward medial and lateral edges by flattened plates of irregular shape and size, those at base and along lateral edge bearing short sharp spinules; a shallow groove, narrow posteriorly, extending longitudinally along middle of outer surface. Merus longitudinally subovate, narrow basally, as long as, and distally as wide as, ischium, about 4 spinules along lateral edge distally; outer surface excavated as a shallow longitudinal groove medially, a few rounded plates bordering groove, some bearing short spinules, a few scattered hairs along medial edge of merus. Palp articulating at summit of, and slightly lower than, merus, cylindrical and stout, bearing long hairs along medial and lateral surfaces.

Chelipeds very long (twice length of carapace in adult male), stout, surfaces granular, spines and long hairs scattered along dorsal and ventral surfaces. Ischium short with a few scattered spinules. Merus long and stout, almost $\frac{1}{3}$ total length of cheliped, subtrigonal, a row of long and short spines along ventrolateral edge, a few smaller spines along ventromedial and dorsal edges, a small spine dorsally overlying distal articulating edge. Carpus