

FAO SPECIES IDENTIFICATION SHEETS

FISHING AREA 51
(W. Indian Ocean)

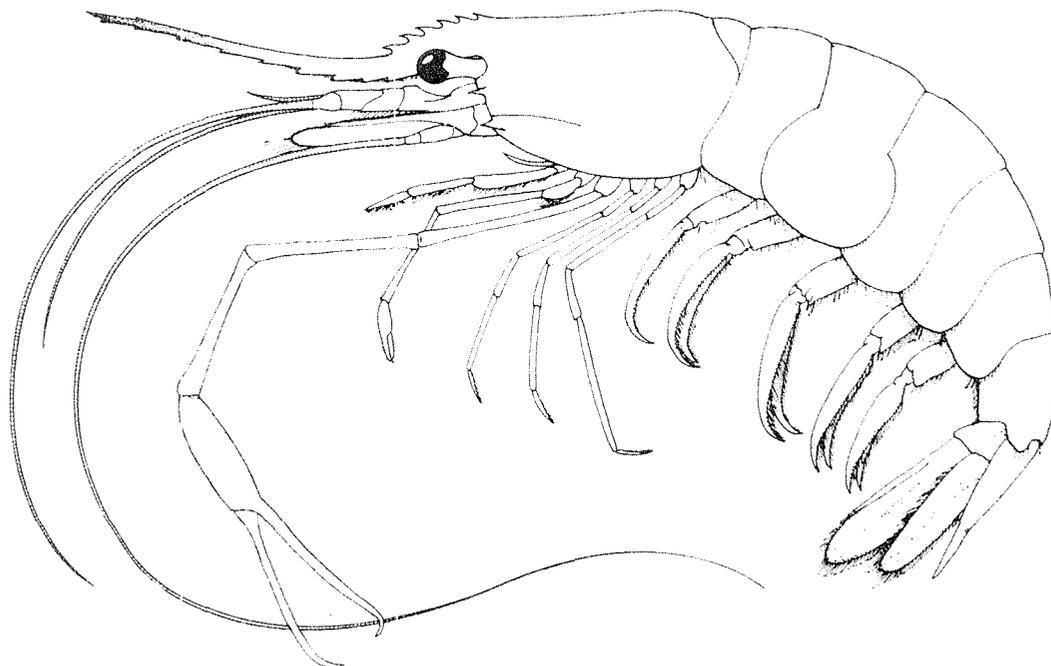
PALAEMONIDAE

Palaemonid shrimps

Small to moderate-sized shrimps, a few species large. Carapace cylindrical with a prominent laterally compressed rostrum carrying dorsal and ventral teeth. Anterior margin of carapace with an antennal and a branchiostegal spine, the latter sometimes replaced by a hepatic spine; rarely neither branchiostegal nor hepatic spines present. Pleura of second abdominal segment wide and covering both those of first and third somites. Telson elongate, with 2 pairs of dorsal spines and 2 or 3 pairs of posterior spines. First and second pairs of pereopods with pincers. First pair of pereopods shorter and more slender than second; pincers well developed, normal. Second pair of pereopods more robust than first, often very long and strong in adult males; pincers normal, carpus and merus not subdivided. Last 3 pereopods simple without pincers. Exopods on none of the legs. Males without petasma, females without thelycum. Males with an appendix masculine and an appendix interna on the endopods of second pleopods.

All species in the juvenile stage and many also as adults are translucent, often with dark lines or spots chromatophores). Large specimens sometimes more opaque and darker coloured.

The family consists of 4 subfamilies, of which only 2 occur in the area and only 1 is of commercial interest, namely the subfamily Palaemoninae. The other subfamily occurring in Fishing Area 51, the Pontoniinae, includes only small (generally less than 3 cm in total length) and usually commensal shrimps.



SIMILAR FAMILIES OCCURRING IN THE AREA:

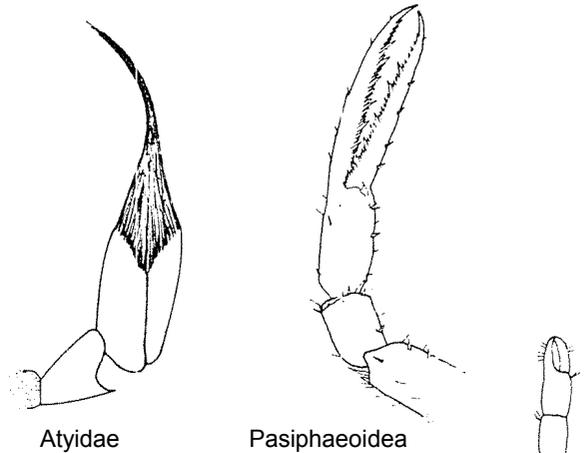
Superfamily Opolophoridae: pereopods usually with exopods; if not, fingers of pincers with terminal brushes of long hair (family Atyidae).

Superfamily Pasiphaeoidea: cutting edge of fingers of all pincers pectinate.

Superfamily Crangonoidea: first pair of pereopods subchelate.

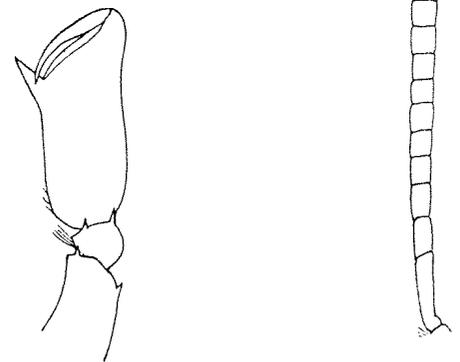
Other carideans present in the catches: carpus of second pair of pereopods subdivided.

Families of the Infraorder Penaeidea: pleura of second abdominal segment not overlapping those of first; 3 first pairs of pereopods ending in pincers.



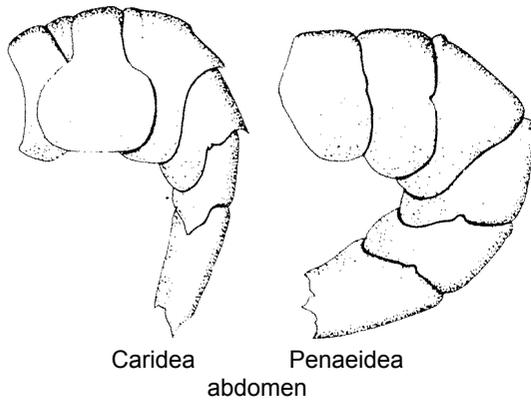
Atyidae

Pasiphaeoidea



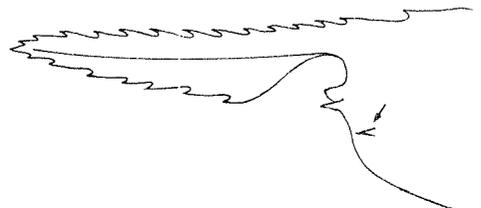
Crangonoidea

Other caridean families



Caridea

Penaeidea abdomen



KEY TO GENERA OF PALAEMONINAE OCCURRING IN THE AREA:

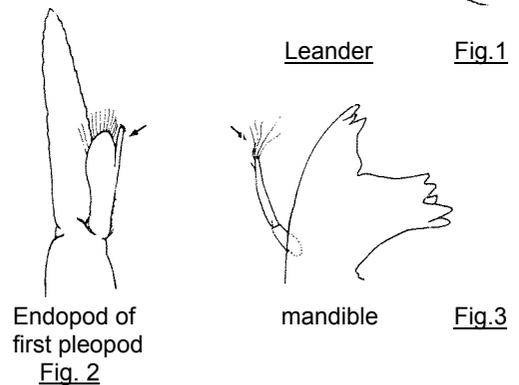
1a. Branchiostegal spine present, situated on, or slightly behind, anterior margin of carapace (Fig. 1)

2a. Endopods of first pleopods of male with appendix interna (Fig. 2); fifth pair of pereopods without transverse rows of hairs in distal part of propodus

3a. Mandible with a palp (Fig. 3) Leander

3b. Mandible without a pale Leandrites

2b. Endopod of first pleopod of male without well developed appendix interna; fifth pair of pereopods with transverse rows of hairs on distal part of posterior margin (Fig. 4)



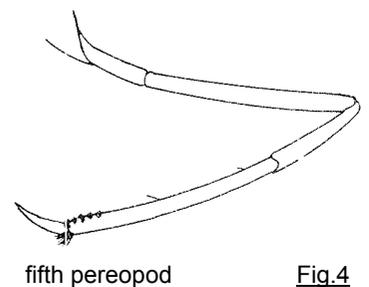
Leander

Fig.1

Endopod of first pleopod Fig. 2

mandible

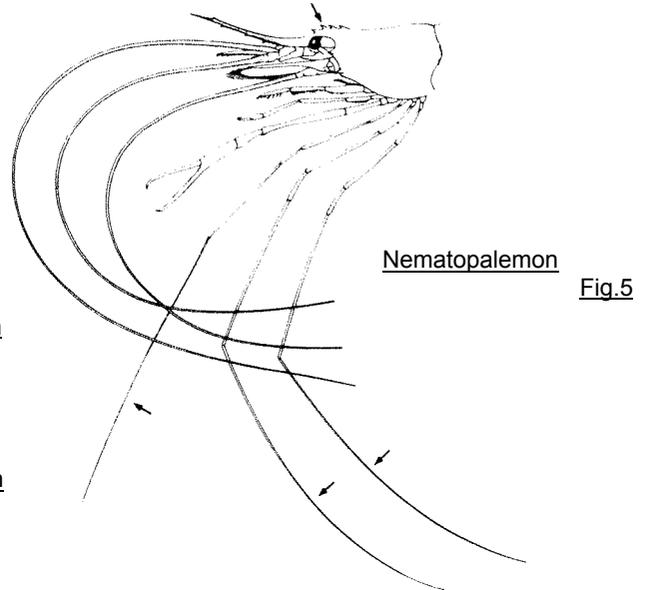
Fig.3



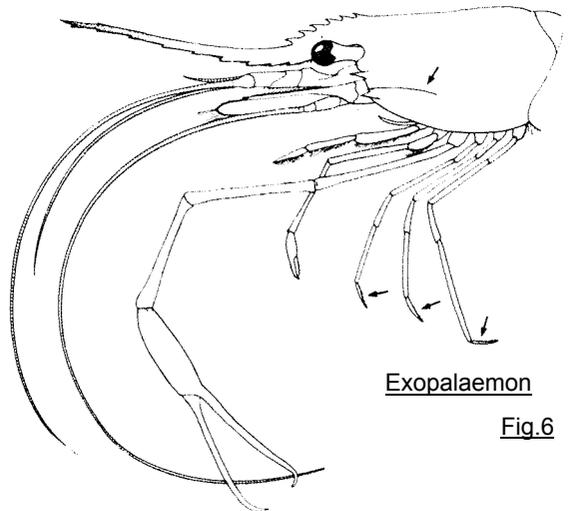
fifth pereopod

Fig.4

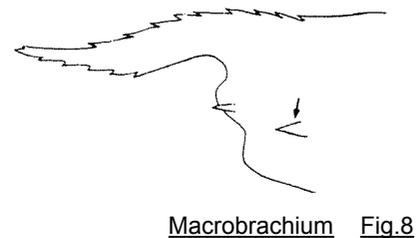
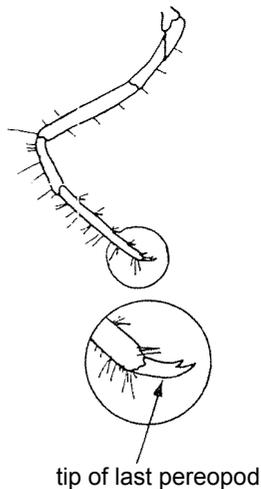
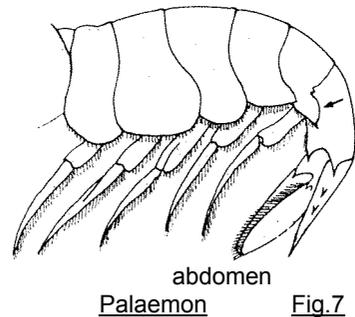
- 4a. Rostrum with an elevated basal dorsal crest of teeth (Fig.5); pleura of fifth abdominal segment rounded
- 5a. Dactyls of last 3 pairs of pereopods very strongly lengthened, longer than carpus and propodus together; branchiostegal groove absent from carapace (Fig. 5) Nematopalaemon
- 5b. Dactyls of last 3 pairs of pereopods always shorter than propodus; branchiostegal groove present on carapace (Fig. 6) Exopalaemon



- 4b. Rostrum without an elevated basal dorsal crest of teeth; pleura of fifth abdominal segment ending in a tooth (Fig. 7)
- 6a. Mandibular palp present (Fig.3) ... Palaemon
- 6b. Mandibular palp absent Palaemonetes



- 1b. Branchiostegal spine absent, anterior margin of carapace below antennal spine unarmed
- 7a. Both hepatic and branchiostegal spines absent Leptocarpus
- 7b. Hepatic spine present, branchiostegal spine absent (Fig. 8)
- 8a. Dactyls of last 3 pairs of pereopods simple .. Macrobrachium
- 8b. Dactyls of last 3 pairs of pereopods bifid (Fig.9). Brachycarpus



LIST OF SPECIES OCCURRING IN THE AREA: *

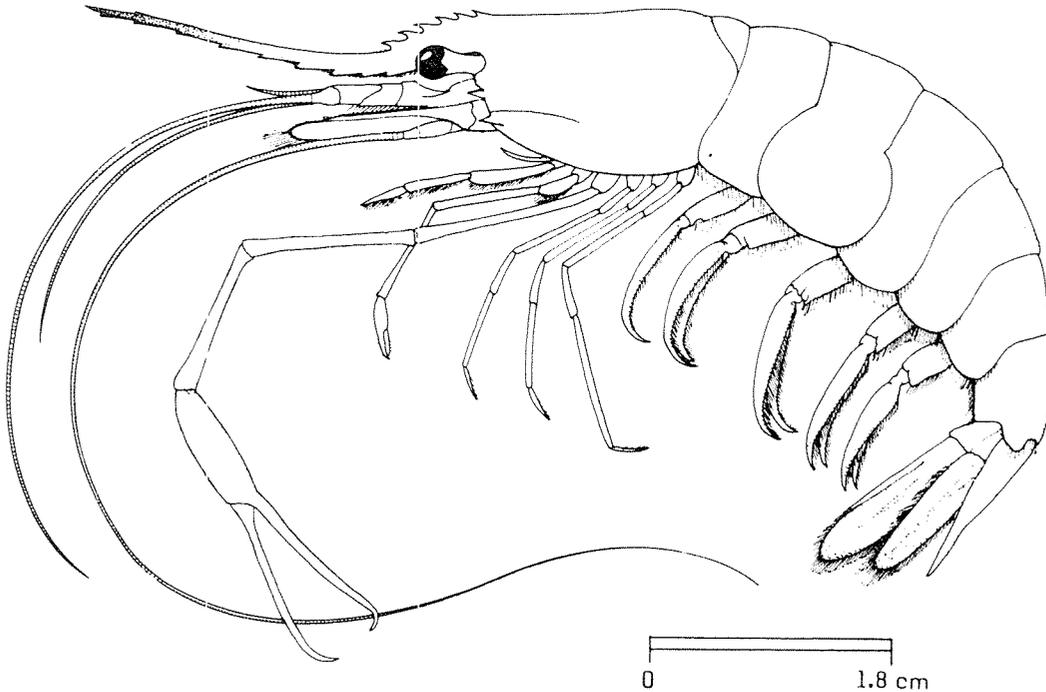
Code numbers are given for those species for which Identification Sheets are included:

<u>Exopalaemon styliferus</u> (H. Milne Edwards, 1.840)	PALAEM Exo 6
<u>Leptocarpus potamiscus</u> (Kemp, 1917)	
<u>Macrobrachium australe</u> (Guérin, 1838)	
<u>Macrobrachium equidens</u> (Dana, 1852)	PALAEM Macro 12
<u>Macrobrachium idae</u> Heller, 1862)	
<u>Macrobrachium lar</u> (Fabricius, 1798)	
<u>Macrobrachium malcolmsonii</u> (H. Milne Edwards, 1844)	PALAEM Macro 33
<u>Macrobrachium rosenbergii</u> (De Man, 1879)	PALAEM Macro 42
<u>Macrobrachium rude</u> (Heller, 1862)	PALAEM Macro 43
<u>Macrobrachium scabriculum</u> (Heller, 1862)	
<u>Nematopalaemon tenuipes</u> (Henderson, 1893)	PALAEM Nemat 3
<u>Palaemon concinnus</u> Dana, 1852	
<u>Palaemon pacificus</u> (Stimpson, 1860)	

* Only the marine and brackish water species that may be found in fishmarkets are listed.

FAO SPECIES IDENTIFICATION SHEETS

FAMILY: PALAEMONIDAE

FISHING AREA 51
(W. Indian Ocean)Exopalaemon styliferus (H. Milne Edwards, 1840)OTHER SCIENTIFIC NAMES STILL IN USE: Palaemon styliferus H. Milne Edwards, 1840
Leander styliferus (H. Milne Edwards, 1840)

VERNACULAR NAMES:

FAO : En - Roshna prawn
Fr - Bouquet rosna
Sp - Camarón rosna

NATIONAL:

DISTINCTIVE CHARACTERS:

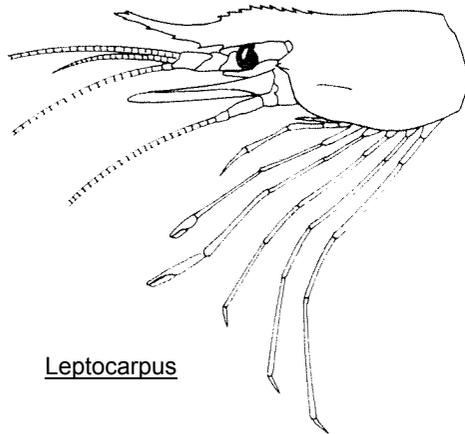
Rostrum long and slender, with an elevated basal crest of 5 to 7 teeth over the eye; most of distal part of dorsal margin toothless, save for 1 or 2 subdistal teeth; ventral margin with 6 to 10 teeth. Branchiostegal spine and branchiostegal groove present. Abdominal segments dorsally rounded, without crest. Pleura of fifth abdominal segment rounded. Second pair of pereopods longer and stronger than first, fingers of the pincer longer than palm, the latter slightly swollen. Dactyls of fifth pair of pereopods about 1/3 as long as propodus.

Colour: whitish translucent, with distal part of rostrum dark reddish brown and some darker spots on tips of uropods and telson. Ovigerous females with large dark spots on first 4 abdominal pleura. Eggs of berried females yellowish.

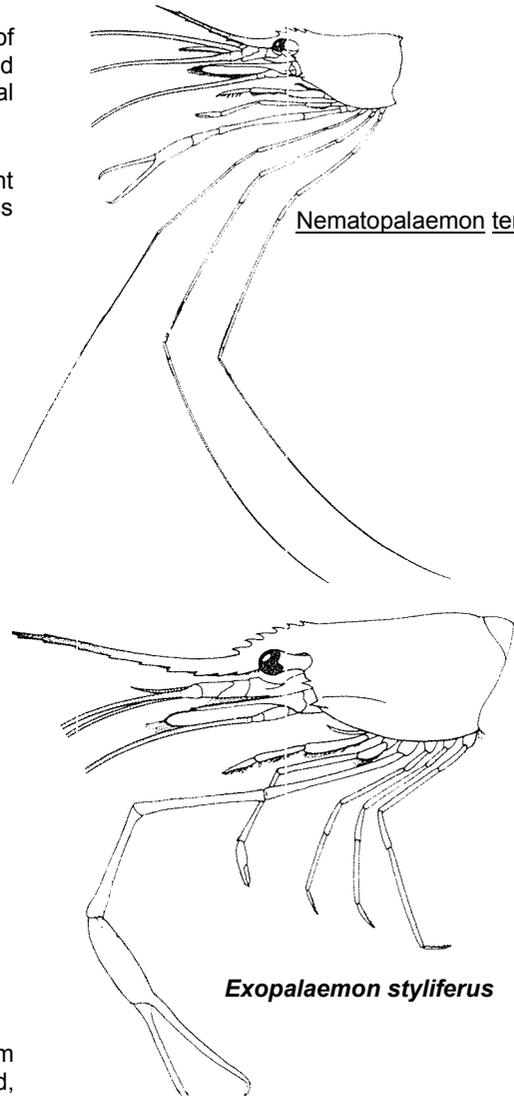
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Nematopalaemon tenuipes: dactyls of last 3 pairs of pereopods much longer than propodus and carpus combined (dactyls shorter than propodus in E. styliferus); branchiostegal groove absent (present in E. styliferus).

Species of Leptocarpus: branchiostegal spine absent (present in E. styliferus); dactyls of last pair of pereopods less than 1/4 of propodus.



Leptocarpus



Nematopalaemon tenuipes

Exopalaemon styliferus

SIZE:

Maximum total length: males, 9 cm; females, 8.6 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Within the area, it occurs in the Arabian Sea from Pakistan to south India. Further east, it extends to Thailand, north coast of Borneo and Indonesia.

Inhabits shallow marine or brackish coastal waters; seldom found in freshwater.

PRESENT FISHING GROUNDS:

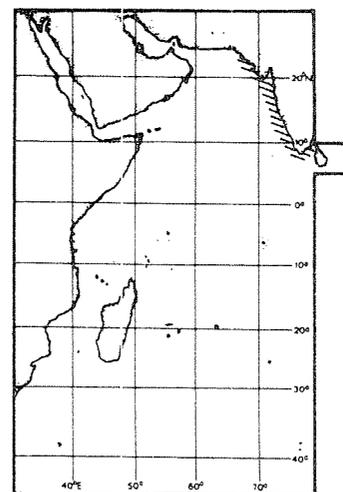
Abundantly fished and of major importance in the central and north-west coast of India (Gujarat and Maharashtra).

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species by FAO.

Caught with barrier and stake nets, bag nets, shore seines, boat seines and cast nets.

Marketed mainly fresh, dried or as shrimp paste.

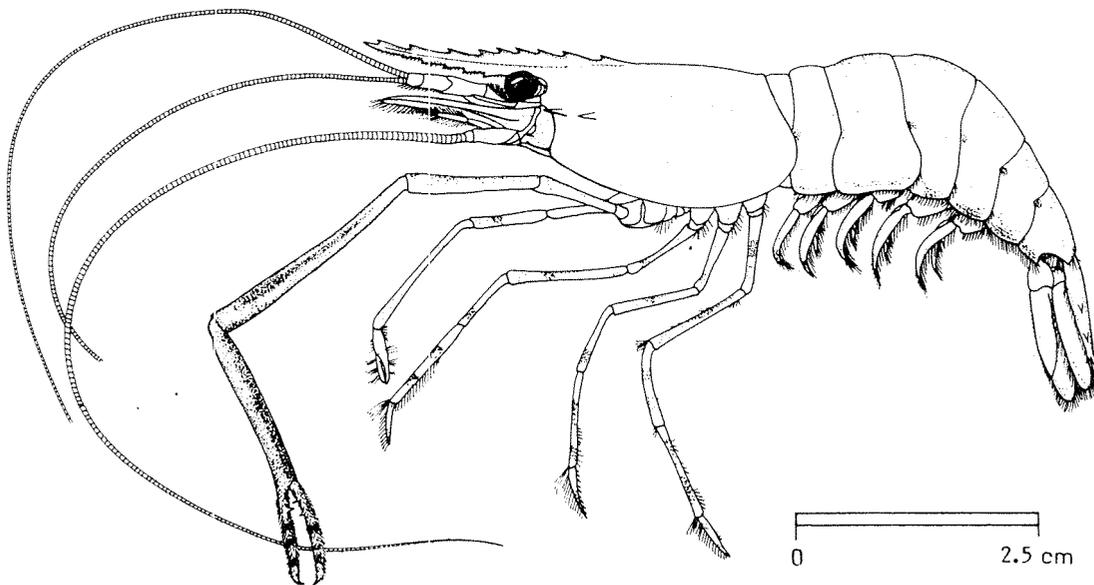


FAO SPECIES IDENTIFICATION SHEETS

FAMILY: PALAEMONIDAE

FISHING AREA 51
(W. Indian Ocean)*Macrobrachium equidens* (Dana, 1852)

OTHER SCIENTIFIC NAMES STILL IN USE:

This species is often indicated as "*Palaemon sundaicus*"
(*Palaemon sundaicus* auct. non Heller, 1862)

VERNACULAR NAMES:

FAO: En - Rough river prawn
Fr - Bouquet chagrin
Sp - Camarón lija

NATIONAL

DISTINCTIVE CHARACTERS:

Rostrum rather long, reaching to about end of antennal scale its distal art usually upcurved and not strongly narrowed; dorsal margin armed with 9 to 13 usually 10 or 11 teeth, usually placed at regular intervals, the posterior 2 or 3 behind the orbital margin; ventral margin armed with 4 to 7, usually 5, teeth. Hepatic spine located on horizontal line through antennal spine; the ridge of antennal spine extending in the direction of hepatic spine. Posterior margin of telson distinct, with 2 pairs of spines, inner air reaching distinctly beyond the acute median angle of the margin. In adult males, carapace (especially anterolateral part rough by the presence of minute spinules; second pair of pereopods long and strong, the fingers, but not the other parts, covered by a dense velvety pubescence; 1 or 2 enlarged proximal teeth on cutting edges of fingers, rest of the edges entire and no rows of granules at either side of the edges; carpus shorter than propodus and distinctly longer than merus.

Colour: translucent, marbled or spotted with greyish, greenish or reddish. Second pair of pereopods, and especially the palms, marbled with dark brownish (tortoise shell-like).

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Macrobrachium rosenbergii: rostrum longer, usually reaching distinctly beyond the antennal scale, and with 8 to 14 ventral teeth (reaching to about end of antennal scale and with 4 to 7, usually 5, ventral teeth in M. equidens); telson tapering regularly to a sharp point, its tip overreaching posterolateral spines (telson with distinct posterior margin and with 2 pairs of spines, the inner one overreaching posteromedian angle of telson in M. equidens).

Macrobrachium rude: rostrum usually straight and distinctly narrowing distally (tip upcurved and more uniform in height in M. equidens); hepatic spine situated at a lower level than antennal spine both on a horizontal line in M. equidens); second pair of pereopod of adult male pubescent throughout.

Macrobrachium australe: antennal and hepatic spine not on same horizontal line; second pair of pereopods of adult male with numerous teeth over the entire cutting edge (only 1 or 2 proximal teeth in M. equidens, the rest of the edge is entire); fingers hairless, but palm of the smaller leg of second pair is pubescent.

SIZE:

Maximum total length: 9.8 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Within the area, the species occurs from east Pakistan to south India and Sri Lanka; also present in Madagascar; records of the species from the east coast of Africa mostly pertain to Macrobrachium rude. Further east, it extends as far as China, the Philippines and New Caledonia.

Inhabits rivers and estuarine areas (fresh and brackish waters).

PRESENT FISHING GROUNDS:

Fished in small numbers along the Indian coast and off Sri Lanka.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught mainly with traps and cast nets.

Marketed fresh or dried.

