

FAO SPECIES IDENTIFICATION SHEETS

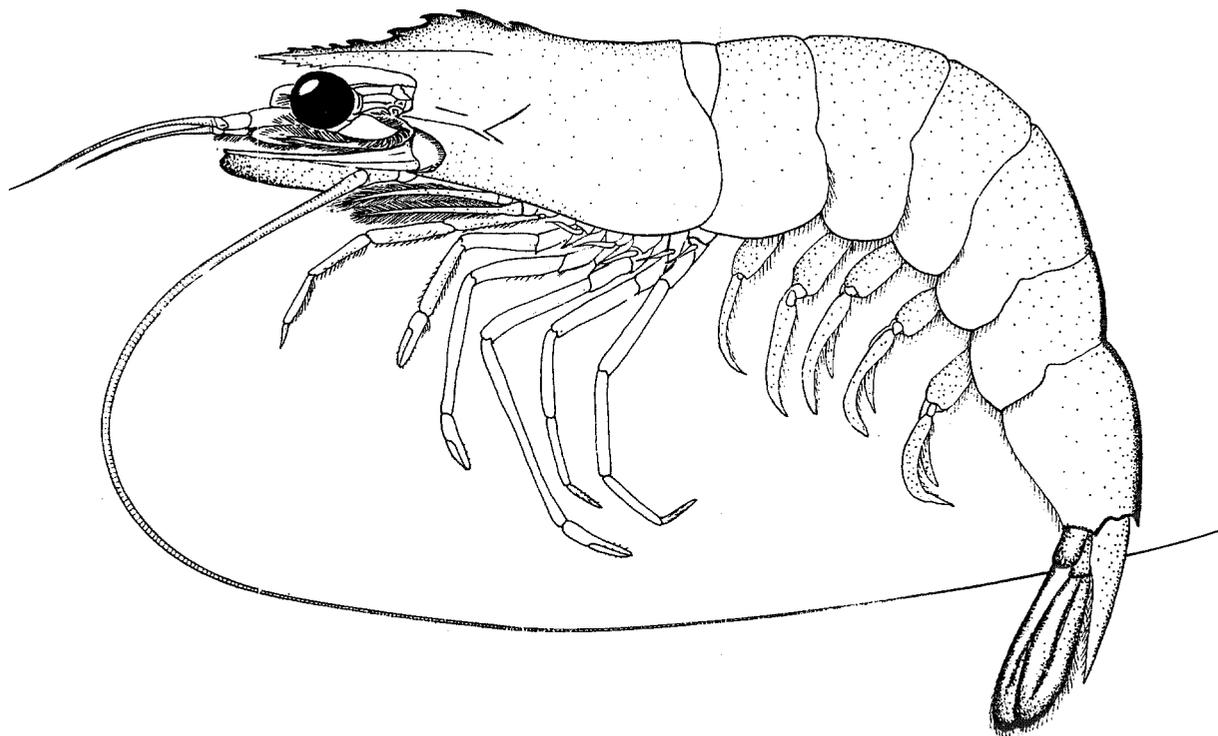
FISHING AREA 51
(W. Indian Ocean)

PENAEIDAE

Penaeid shrimps

Shrimps with a well developed and toothed rostrum which generally extends to or beyond distal edge of eye; no styliform projection on base of eyestalk and no tubercle on its mesial (inner) border. Carapace without postorbital spine and with short cervical groove ending well below dorsal midline (extending at most for 2/3 of distance between hepatic spine and middorsal line). Last 2 pairs of pereopods well developed; third and fourth pairs of pleopods biramous; endopods of second air of leopods in males bearing appendix masculina only (lacking appendix interna and lateral, projection). Telson sharply pointed, with or without fixed or movable spines on sides. One single well developed arthrobranch on penultimate thoracic segment (hidden beneath the carapace), 1 rudimentary arthrobranch occasionally present.

This family, the largest of the Penaeidea, includes the most valuable marine commercial species of shrimps occurring in Fishing Area 51.



SIMILAR FAMILIES OCCURRING IN THE AREA:

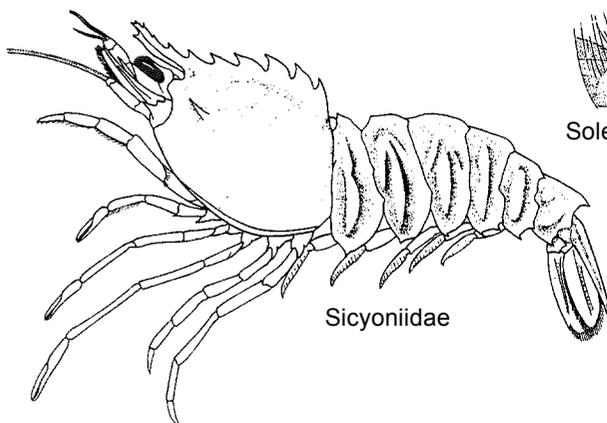
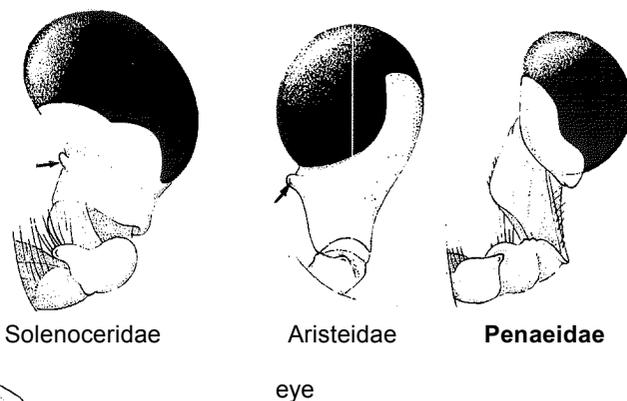
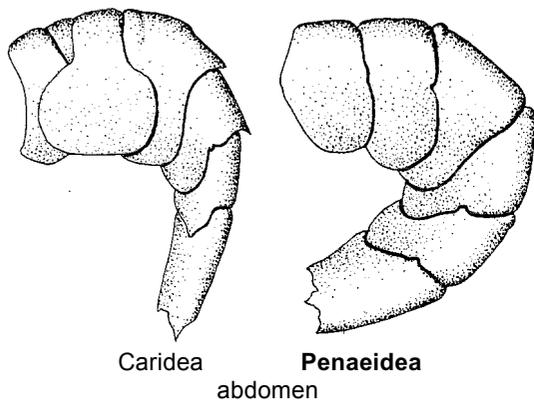
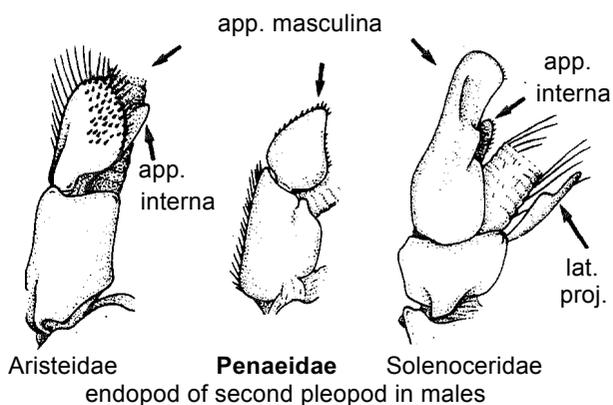
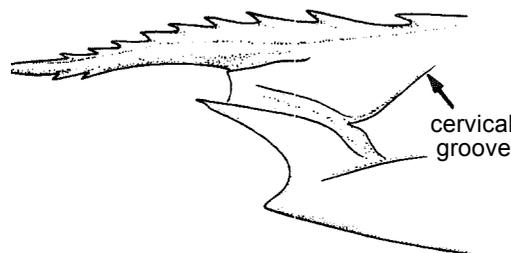
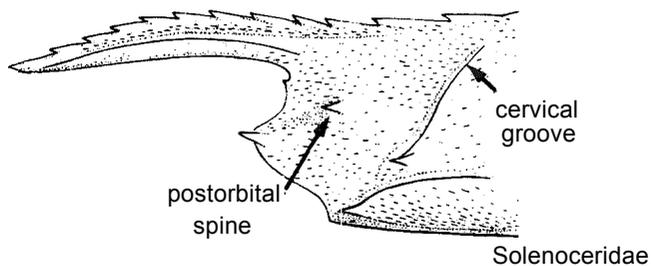
Solenoceridae: eyestalk with a tubercle on its mesial (inner) border; carapace with postorbital spine; cervical groove long, extending to, or close to, dorsal midline of carapace; endopods of second pair of pleopods in males bearing appendix masculina, appendix interna and lateral projection; telson with a fixed spine on each side of tip; 2 well developed arthrobranches on each side of penultimate thoracic segment.

Aristeidae: eyestalk with a tubercle on mesial (inner) border; upper antennular flagella strikingly shorter than lowers and inserted near posterior border of third article in species of interest to fisheries; endopods of second pair of pleopods in males bearing appendix masculina and appendix interna, but no lateral projection; 2 well developed arthrobranches on each side of penultimate thoracic segment.

Sicyoniidae: body thick, stony in appearance; cervical groove very faint or absent; abdomen with deep grooves and numerous tubercles; third and fourth pairs of pleopods single-branched.

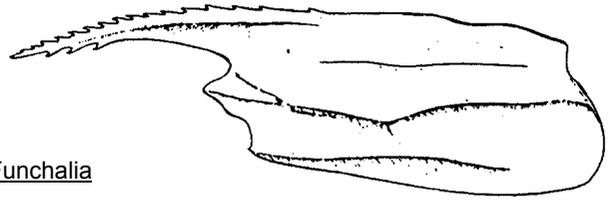
Sergestidae: small-sized shrimps; rostrum very short; last 2 pairs of pereopods shorter than anterior legs (fifth pair much shorter) or absent.

Shrimps belonging to the Infraorder Caridea: pleura of second abdominal segment overlapping those of first and third segments; no pincers on third pair of pereopods.

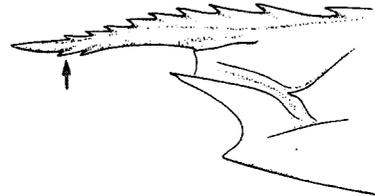


KEY TO GENERA OCCURRING IN THE AREA:

- 1a. Carapace with lateral keels (Fig.1); cutting portion of mandible elongate, sickle-shaped; pelagic shrimps Funchalia
- 1b. Carapace without lateral keels; cutting portion of mandible short and massive
- 2a. Rostrum toothed on dorsal, as well as on ventral margin (Fig. 2) Penaeus
- 2b. Rostrum toothed on dorsal margin only
- 3a. Telson tridentate, with a fixed spine on each side of Up (Fig.3)
- 4a. Rostrum shorter than the eyes; no spine on inner border of first article of antennular peduncle Trachypenaeopsis
- 4b. Rostrum longer than the eyes; inner border of first article of antennular peduncle bearing a spine (parapenaeid spine) (Fig. 4)
- 5a. Carapace with longitudinal and transverse sutures (Fig. 5) Parapenaeus
- 5b. Carapace without longitudinal or transverse sutures
- 6a. Males with symmetrical petasma (Fig. 6); a single arthrobranch on last thoracic segment, no trace of a second arthrobranch Penaeopsis
- 6b. Males with asymmetrical petasma (Fig.7); 2 arthrobranches present on last thoracic segment, one of them well developed, the other vestigial Metapenaeopsis



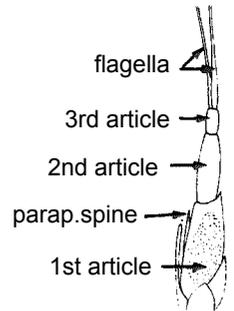
Funchalia Fig.1



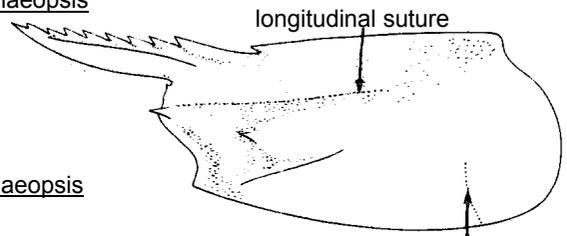
Penaeus Fig.2



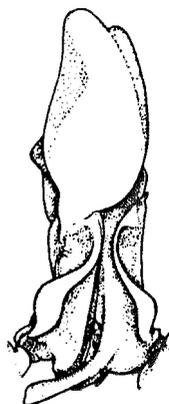
telson Fig.3



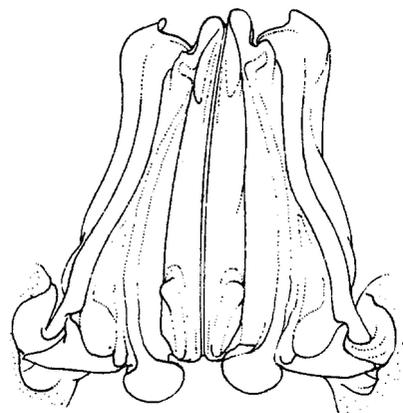
antennule Fig.4



Parapenaeus Fig.5



asymmetrical petasma, ventral view Metapenaeopsis Fig.7



symmetrical petasma, dorsal view Penaeopsis Fig.6

- 3b. Telson usually without fixed spines; no spine on inner border of first article of antennular peduncle
 - 7a. Exopods absent on second to fifth pereopods; occurring only along the South African coast Macropetasma
 - 7b. Exopods present on second to fourth pereopods
 - 8a. No exopod on fifth pereopod; pleurobranch present on penultimate thoracic segment Metapenaeus
 - 8b. Exopod present on fifth pereopod; no pleurobranch on penultimate, thoracic segment
 - 9a. Carapace without longitudinal suture
 - 10a. Telson unarmed; basal spines present on second and third pereopods Atypopenaeus
 - 10b. Telson armed with lateral spines; basal spine present only on first pereopod Trachypenaeopsis
 - 9b. Carapace with longitudinal suture
 - 11a. Longitudinal suture short; epipod present on third pereopod Trachypenaeus
 - 11b. Longitudinal suture usually long; epipod absent on third pereopod Parapenaeopsis

LIST OF SPECIES OF ECONOMIC INTEREST OCCURRING IN THE AREA:

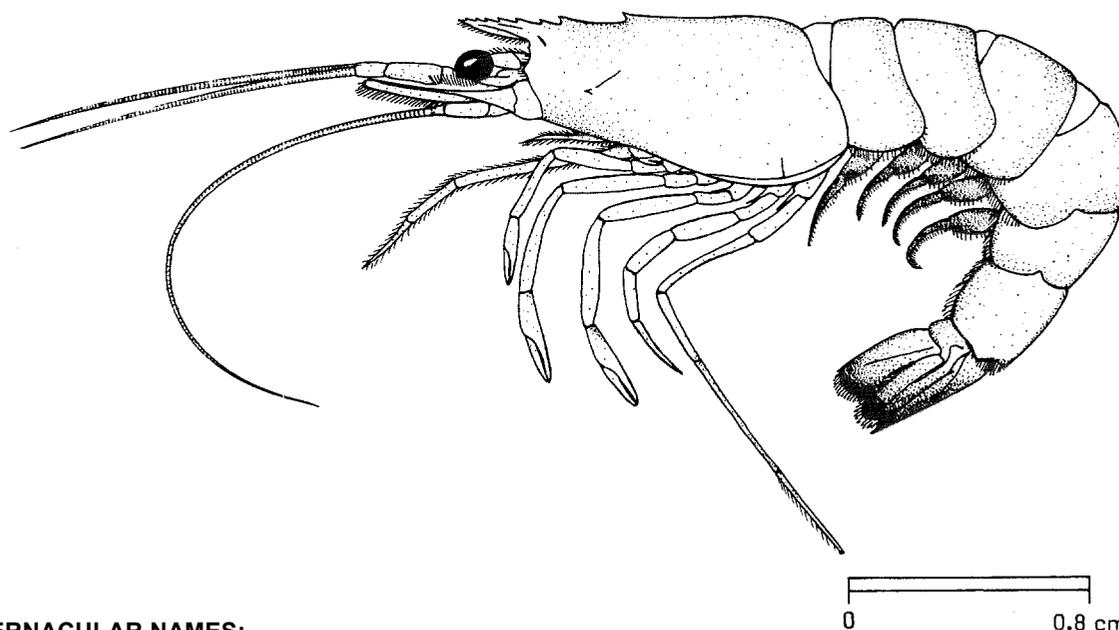
Code numbers are given for those species for which Identification Sheets are included.

<u>Atypopenaeus stenodactylus</u> (Stimpson, 186U)	PEN Aty 2
<u>Metapenaeopsis stridulans</u> (Alcock, 1905)	PEN Meta 16
<u>Metapenaeopsis toloensis</u> Hall, 1962	PEN Meta 17
<u>Metapenaeus affinis</u> (H. Milne Edwards, 1837)	PEN Metap 1
<u>Metapenaeus brevicornis</u> (H. Milne Edwards, 1837)	PEN Metap 4
<u>Metapenaeus dobsoni</u> (Miers, 1878)	PEN Metap 8
<u>Metapenaeus elegans</u> De Man, 1907	PEN Metap 10
<u>Metapenaeus ensis</u> (De Haan, 1844)	PEN Metap 12
<u>Metapenaeus lysianassa</u> (De Man, 1888)	PEN Metap 17
<u>Metapenaeus monoceros</u> (Fabricius, 1798)	PEN Metap 19
<u>Metapenaeus moyebi</u> (Rishinouye, 1896)	PEN Metap 20
<u>Metapenaeus stebbingi</u> Nobili, 1904	PEN Metap 22
<u>Parapenaeopsis acclivirostris</u> Alcock, 1905	PEN Para 1
<u>Parapenaeopsis cornuta</u> (Kishinouye, 1900)	PEN Para 4
<u>Parapenaeopsis coromandelica</u> Alcock, 1906	PEN Para 5
<u>Parapenaeopsis hardwickii</u> (Miers, 1878)	PEN Para 6
<u>Parapenaeopsis maxillipedo</u> Alcock, 1905	PEN Para 8
<u>Parapenaeopsis sculptilis</u> (Heller, 1862):	PEN Para 11
<u>Parapenaeopsis stylifera</u> (H. Milne Edwards, 1837)	PEN Para 12
<u>Parapenaeopsis uncta</u> Alcock, 1905	PEN Para 14
<u>Parapenaeus longipes</u> Alcock, 1905	PEN Parap 6
<u>Penaeopsis balssi</u> Ivanov and Hassan, 1976	PEN Pe 3
<u>Penaeopsis jerryi</u> Perez Farfante, 1979	PEN Pe 4

<u>Penaeus</u> (<u>Fenneropenaeus</u>) <u>indicus</u> H. Milne Edwards, 1837	PEN Pen 13
<u>Penaeus</u> (<u>Fenneropenaeus</u>) <u>merquiensis</u> De Man, 1888	PEN Pen 14
<u>Penaeus</u> (<u>Fenneropenaeus</u>) <u>penicillatus</u> Alcock, 1905	PEN Pen 15
<u>Penaeus</u> (<u>Marsupenaeus</u>) <u>japonicus</u> Bate, 1888	PEN Pen 19
<u>Penaeus</u> (<u>Melicertus</u>) <u>canaliculatus</u> (Olivier, 1811)	PEN Pen 20
<u>Penaeus</u> (<u>Melicertus</u>) <u>latisulcatus</u> Kishinouye, 1896	PEN Pen 21
<u>Penaeus</u> (<u>Penaeus</u>) <u>monodon</u> Fabricius, 1798	PEN Pen 26
<u>Penaeus</u> (<u>Penaeus</u>) <u>semisulcatus</u> De Haan, 1844	PEN Pen 27
<u>Trachypenaeus</u> <u>curvirostris</u> (Stimpson, 1860)	PEN Trachyp 5
<u>Trachypenaeus</u> <u>granulosus</u> (Haswell, 1879)	PEN Trachyp 10
<u>Trachypenaeus</u> <u>sedili</u> Hall, 1961	PEN Trachyp 12

FAO SPECIES IDENTIFICATION SHEETS

FAMILY: PENAEIDAE

FISHING AREA 51
(W. Indian Ocean)*Atypopenaeus stenodactylus* (Stimpson, 1860)OTHER SCIENTIFIC NAMES STILL IN USE: *Atypopenaeus compressipes* (Henderson, 1893)

VERNACULAR NAMES:

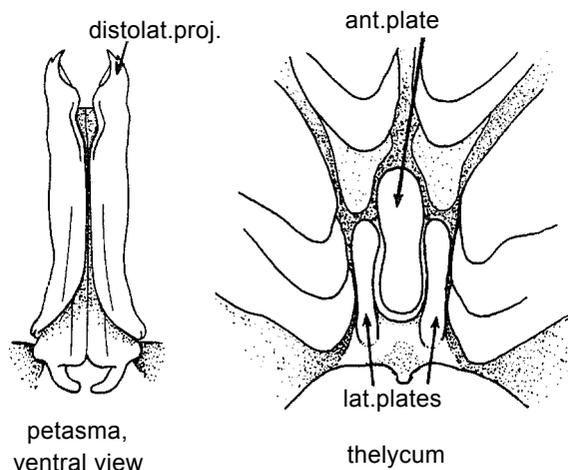
FAO : En - Periscope shrimp
Fr - Crevette périscope
Sp - Camarón periscopio

NATIONAL:

DISTINCTIVE CHARACTERS:

Carapace very slightly pubescent. Rostrum short and straight, not exceeding distal margin of first antennular segment and armed with 6 to 9 (usually 9) dorsal teeth; postrostral crest ending near posterior margin of carapace; postorbital groove deep; hepatic spine present; middorsal crest on fourth and fifth abdominal segments distinct, but not ending in a posterior spine on each segment; antennular flagella longer than carapace; propodus and dactyl of fifth pereopod very long and slender. Petasma (in males) with distolateral projections directed forward, narrowing from base to tip, with inner surface deeply concave and with an indentation at tip. In females, anterior plate of thelycum tongue-like, with rounded anterior and posterior ends; lateral plates bar-shaped enclosing posterior half of anterior plate and delimitating with posterior sternal plate a seminal receptacle.

Colour: pink to reddish pink.



DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

This is the only species of the genus so far known to occur in the area; all other species of *Atypopenaeus* possess at least one of the following differing characters: rostrum long and slender, presence of strong spines at posterior end of middorsal crest on fourth and fifth abdominal segments, absence of hepatic spine.

SIZE:

Maximum total length: males, 4 cm; females, 5 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Within the area, India, as far north as the Gulf of Cambay and northern Sri Lanka. Further east it extends to China, Japan and the Philippines.

A marine species inhabiting close to the shore from 10 to 30 m depth on muddy bottom.

PRESENT FISHING GROUNDS:

Caught in large numbers throughout the year near Bombay, on the west coast of India; also abundant along the northeast coast of Sri Lanka.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught mainly with bag nets and other artisanal gear.

Marketed fresh, dried or cooked.

