Solenocerid shrimps

Shrimps with a well developed and toothed rostrum which extends at least to centre of eye diameter; no styliform projection at base of eyestalk, but a tubercle present on its mesial (inner) border. Carapace with postorbital spine and long cervical groove which end at, or close to, dorsal midline. Last 2 pairs of pereopods well developed; endopods of second pair of pleopods in males bearing appendix masculina appendix interna and lateral projection; third and fourth pairs of pleopods biramous. Telson tridentate in most species (with a fixed spine on each side of tip). Two well developed arthrobranchs on the penultimate thoracic segment (hidden beneath the carapace).

This family includes only marine representatives. All except four of the species occurring in the W. Indian Ocean are too small or not abundant enough to be of present or potential economic interest.
SIMILAR FAMILIES OCCURRING IN THE AREA:

Aristeidae, Penaeidae and Sicyoniidae: post-orbital spine on carapace absent. Further distinguishing characters of these families are the following:

Aristeidae: telson bearing movable spines; endopods of second pair of pleopods in males bearing appendix masculina and appendix interna but no lateral projection.

Penaeidae: eyestalk without tubercle on inner border; cervical groove much shorter, ending well below dorsal midline of carapace; endopods of second pair of pleopods in males bearing appendix masculina only; a single well developed arthrobranch on penultimate thoracic segment (hidden beneath carapace).

Sicyoniidae: body thick, stony in appearance; abdomen with deep grooves and numerous tubercles; cervical groove very faint or absent.

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. Telson with several pairs of movable lateral spines anterior to fixed pair (Fig. 1a); podo-branches present on at least second and third maxillipeds ........................................ Haliporus

1b. Telson without movable spines, generally with a pair of fixed lateral spines (Fig. 1b); podo-branches restricted to second maxilliped

2a. Dorsal and ventral antennular flagella lamellate (Fig. 2a); lateral ramus of uropod generally lacking distolateral spine ............ Solenocera

2b. Dorsal and ventral antennular flagella subcylindrical (occasionally ventral flagellum depressed) (Fig. 2b); lateral ramus of uropod armed with a distolateral spine

3a. Epigastric (first rostral) tooth separated from second rostral tooth by about same interval as that between second and third rostral teeth (Fig. 3)

4a. Rostrum low, with ventral margin straight or concave; submarginal carina present (Fig. 3) ................. Pleoticus

4b. Rostrum deep, with ventral margin pronouncedly convex; submarginal carina absent (Fig. 4) .... Hadropenaeus

3b. Epigastric or epigastric and second rostral teeth separated from remaining teeth by a relatively long interval (Figs. 5 and 6)

5a. Epigastric and second rostral teeth separated from remaining ones by a long interval; suprahepatic spine absent (Fig. 5) ...................... Hymenopenaeus

5b. Epigastric tooth separated from other rostral teeth by a long interval; suprahepatic spine present (Fig. 6) ...... Haliporoides
LIST OF SPECIES OCCURRING IN THE AREA:

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

**Hadropenaeus lucasii** (Bate, 1881)

**Haliporoides sibogae madagascariensis** Crosnier, 1978
**Haliporoides triarthus** Stebbing, 1914

**Haliporus taprobanensis** Alcock & Anderson, 1899
**Haliporus villosus** Alcock & Anderson, 1894

**Hymenopenaeus aequalis** (Bate, 1888)
**Hymenopenaeus fattahi** Ramadan, 1938
**Hymenopenaeus furci** Crosnier, 1978
**Hymenopenaeus halli** Bruce, 1966
**Hymenopenaeus laevis** (Bate, 1881)
**Hymenopenaeus propinquus** (De Man, 1907)
**Hymenopenaeus sewelli** Ramadan, 1938

**Pleoticus steindachneri** (Balss, 1914)

**Solenocera africana** Stebbing, 1917
**Solenocera algoensis** Barnard, 1947
**Solenocera bedokensis** Hall, 1962
**Solenocera choprai** Nataraj, 1945
**Solenocera comata** Stebbing, 1915
**Solenocera crassicornis** (H. Milne Edwards, 1837)
**Solenocera hextii** Wood-Mason & Alcock, 1891
**Solenocera koelbeli** De Man, 1911
**Solenocerapectinata** (Bate, 1888) (? = S. pectinulata Kubo, 1949)
**Solenocera waltairensis** George & Muthu, 1970

FAO SPECIES IDENTIFICATION SHEETS

FAMILY: SOLENOCERIDAE

Haliporoides triarthus Stebbing, 1914

FISHING AREA 51
(W. Indian Ocean)

OTHER SCIENTIFIC NAMES STILL IN USE: Hymenopenaeus triarthus (Stebbing, 1914)

VERNACULAR NAMES:

FAO: En - Knife shrimp
     Fr - Salicoque navaja
     Sp - Camarón navaja

NATIONAL:

DISTINCTIVE CHARACTERS:

Body finely pubescent. Rostrum very high and prominent, arched or straight, extending far beyond the eye, with 10 to 14 teeth on dorsal margin (2 behind the anterior margin of carapace) and 1 or 2 on ventral; no postrostral crest; cervical groove reaching dorsal midline; postorbital and pterygostomian spines present; suprahepatic spine also present, but very small; telson armed with a pair of fixed distolateral spines; antennular and antennal flagella longer than the body; first pereopods armed with 1 to 3 spines on merus, none on basis.

Two geographically separated subspecies of H. triarthus, are recognized. The northern form (H. triarthus vniroi, Crosmer 1978) has a lower rostrum which is not as strongly arched as in the southern form H. triarthus.

Colour: uniformly red, frozen specimens paler.
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Haliporoides sibogae: usually 7 to 9 dorsal teeth on rostrum (usually 10 or 12 in H. triarthrus), suprahepatic spine stronger; merus of first pereopod with 3 to 5 spines (1 to 3 in H. triarthrus).

Solenocera species: rostrum short, hardly exceeding the eye and without ventral teeth (extending far beyond eye and with ventral teeth in H. triarthrus); antennular flagella shorter than body; carapace hairless and with a distinct hepatic crest.

SIZE:

Maximum total length: males, 15 cm; females, 17.5 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

South and southeast Africa from Table Bay (off Cape Town, South Africa) to central Mozambique (off Beira). H. triarthrus vniroi occurs off Mozambique, while H. t. triarthrus is found off South Africa.

Inhabits depths between 290 and 550 m on soft mud or sandy bottoms; off Mozambique, it is fished at depths of 500 to 550 m.

PRESENT FISHING GROUNDS:

Of major commercial importance within its range; landed at Durban in South Africa and at Beira in Mozambique.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

The 1980 catch reported from Fishing Area 51 totalled 1,029 tons (South Africa only).

Caught with otter trawls.

Marketed frozen; in South Africa also marketed fresh (headed) and peeled.