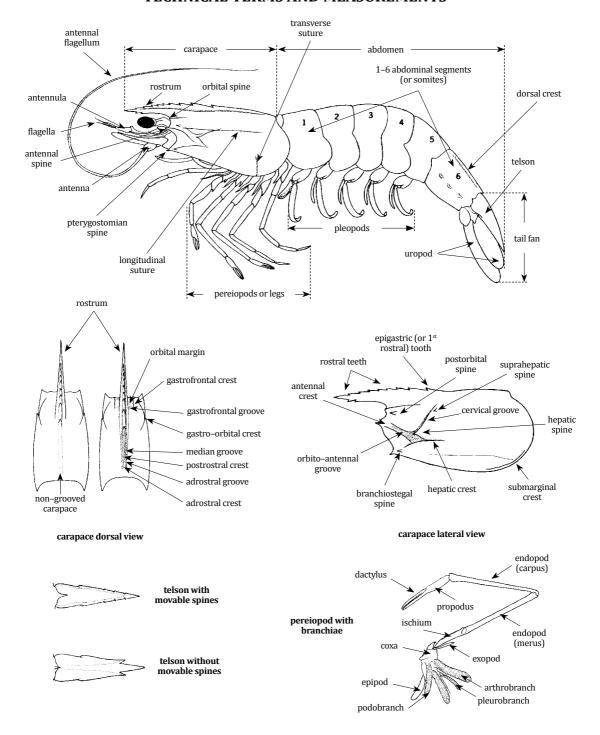
SHRIMPS AND PRAWNS

The "Guide to Suborders and Families" includes 2 suborders and 7 families, while the "Guide to Species" includes 25 species. The families Penaeidae and Aristeidae are of great commercial value on the local and international market (except those of small size). They also form the food of many fishes and play a major role in food relationships and ecology in both lagoons and the sea. Some are used as baits both live and dead. Two Palaemonid shrimps, *Macrobrachium rude* (Heller, 1862) and *Nematopalaemon tenuipes* (Henderson, 1893) are of moderate interest in capture fisheries.

TECHNICAL TERMS AND MEASUREMENTS

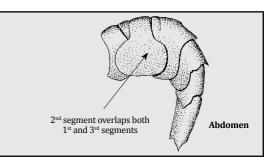


6 Shrimps and Prawns

GUIDE TO SUBORDERS AND FAMILIES

Suborder CARIDEA - Caridean shrimps

Pleuron of second abdominal segment overlapping those of first and third segment. First two pairs of thoracic legs, or only the second, ending in a pincer; the last three pairs with a simple claw. Eggs carried by the female.



PALAEMONIDAE

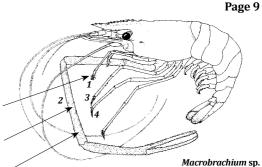
Palaemonid shrimps

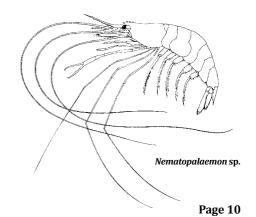
To about 34 cm. Marine, estuarine, and freshwater; benthic. Two species of interest to fisheries are included in the Guide to Species.



 $2^{\rm nd}$ pair of pereiopods with pincers and more robust than $1^{\rm st}$ pair, often very long and strong in adult males

Carpus of 2nd pair of pereiopods unsegmented





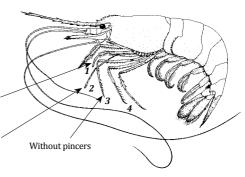
HIPPOLYTIDAE

Cock shrimps

To about 8 cm. Shallow marine and estuarine waters. One species of interest to fisheries is included in the Guide to Species.

1st pair of pereiopods with distinct pincers, a little more robust than the following leg

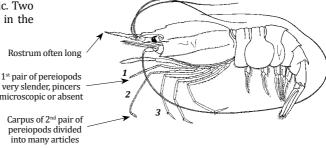
Carpus of 2nd pair of pereiopods divided into many segments



PANDALIDAE Page 10

Pandalid shrimps

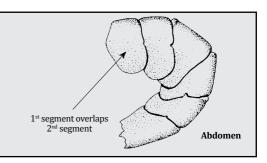
To about 15 cm. Marine, deep water; benthic. Two species of interest to fisheries are included in the Guide to Species.



very slender, pincers microscopic or absent

Suborder PENAEOIDEA - Penaeid shrimps

Pleuron of second abdominal segment overlapping that of third segment only; pincer of first 3 pairs of thoracic legs equal or sub-equal. Eggs carried by the female.

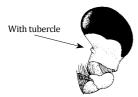


Post-orbital

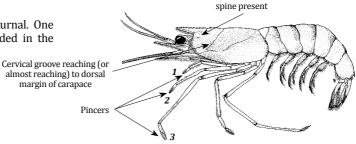
SOLENOCERIDAE

Solenocerid shrimps

To about 14 cm. Marine, benthic, nocturnal. One species of interest to fisheries is included in the Guide to Species.



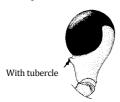
Eyestalk



ARISTEIDAE

Aristeid shrimps

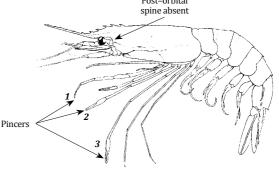
To about 33 cm. Marine, deep water; benthic. Two species of interest to fisheries are included in the Guide to Species.



Eyestalk



Page 11



8 Shrimps and Prawns

PENAEIDAE

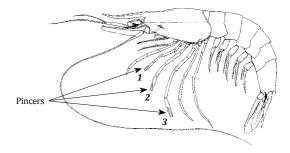
Page 12

Penaeid shrimps

To about 35 cm. Marine and estuarine, benthic. Sixteen species of interest to fisheries are included in the Guide to Species.



Eyestalk

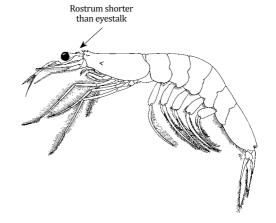


Page 17

SERGESTIDAE

Sergestid shrimps

To about 48 cm. Marine and brackish waters; benthic. One species of interest to fisheries is included in the Guide to Species.



Guide to Species Palaemonidae - 9

PALAEMONIDAE

Palaemonid shrimps

Macrobrachium rude (Heller, 1862)

Local name(s): N: Kambamajibaridi; S: Kamba (M/K).

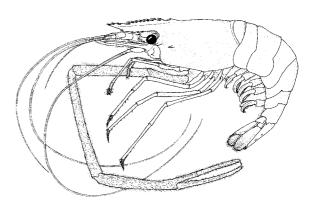
Habitat: Fresh and brackish waters; clear streams and rivers: returns to the sea to release larvae.

Fisheries: Traps, Cast nets, Seines, Set nets.

Distinctive Characters: Rostrum straight and rather long with 10–17 dorsal teeth and 3–8 ventral teeth; hepatic spine situated at lower level than antennal spine, not placed on same horizontal line; posterior margin of telson distinct, with 2 pairs of spines.

Colour: Translucent, with the large legs of the male rather uniformly dark reddish-brown; tips of pereiopods and distal half of uropods dark brownish.

FAO names: Hairy river prawn (En) Bouquet velu (Fr)



Size: To 13 cm (TL)

Nematopalaemon tenuipes (Henderson, 1893)

Local name(s): N: Kamba; S: Kamba (M/K).

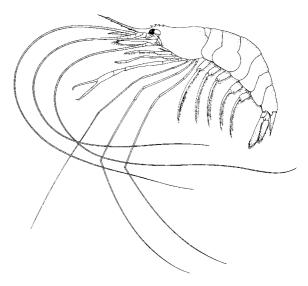
Habitat: Shallow coastal waters to rather deeper ones, also in estuarine and brackish waters.

Fisheries: Stake traps, Shore seines, Boat seines, Cast nets.

Distinctive Characters: Rostrum long and slender with 4–7 teeth over the eye; most of distal part of dorsal margin toothless, save for a small sub–distal tooth; ventral margin with 2 to 6 teeth; 2nd pair of pereiopods longer and stronger than 1st, fingers of pincer longer than palm, the latter slightly swollen; dactyls of 3rd to 5th pairs of pereiopods extremely long and thin, far longer than propodus and carpus combined.

Colour: Whitish translucent with distal part of rostrum dark reddish-brown; some reddish-brown on antennae, antennules and distal margins of uropods and telson; also a reddish-brown spot on base of uropods.

FAO names: Spider prawn (En) Bouquet araignée (Fr)



Size: To 7.6 cm (males), 8.2 cm (females)(TL)

HIPPOLYTIDAE

Cock shrimps

Exhippolysmata ensirostris (Kemp, 1914)

Local name(s): N: Kamba; S: Kamba (M/K).

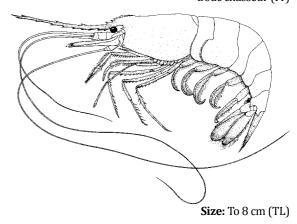
Habitat: Sand and mud bottoms in shallow waters.

Fisheries: Bottom trawls.

Distinctive Characters: Rostrum with 3–4 widely spaced dorsal teeth and an elevated crest of 7–12 closed spaced teeth; 7–16 more or less equally spaced ventral teeth; abdominal segments dorsally smooth, without spines; pleura of 5^{th} segment sharply pointed; telson with a long, pointed teeth, with or without a pair of small distolateral spines; 2^{nd} pair of pereiopods with small pincers.

Colour: Whitish or pinkish with the appendages, especially the 3rd maxillipeds, pleopods and uropods, red, often dark–red; rostrum and flagella also reddish.

FAO names: Hunter shrimp (En) Bouc chasseur (Fr)



PANDALIDAE

Pandalid shrimps

Heterocarpus laevigatus Bate, 1888

Local name(s): N: Kamba; S: Kamba (M/K). **Habitat:** Sand bottoms or sand–mud bottoms from

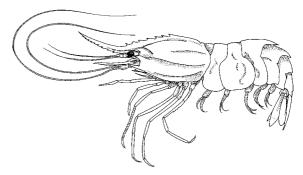
302 m to 1156 m

Fisheries: Bottom trawls.

Distinctive Characters: Rostrum with 1 dorsal tooth on its base, and 7-9 ventral teeth; pterigostomial spine larger than the antennal spine; carapace dorsally carinate with 5 teeth, with 2 lateral carinae well developed, the postorbital and branchiostegal carinae reach the posterior part of the carapace, and the antennal carina is short and restricted to the basis of the antennal spine.

Colour: Pink to orange with red vertical stripes on the abdomen and segment joints.

FAO names: Smooth nylon shrimp (En) Crevette nylon inerme (Fr)



Size: To 18 cm (TL)

Heterocarpus woodmasoni Alcock, 1901

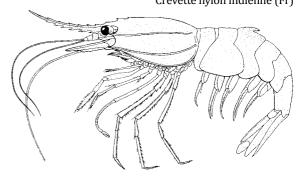
Local name(s): N: Kamba; S: Kamba (M/K). **Habitat:** Mud bottoms from 290 m to 640 m.

Fisheries: Bottom trawls.

Distinctive Characters: Carapace with 2 longitudinal crests on each side, extending over the full length of carapace; rostrum long, slightly curved, with 9–11 dorsal and 6–9 ventral teeth; a conspicuous elevated sharp tooth at middle of dorsal crest of 3rd segment; 6th segment with 2 submedian dorsal crests.

Colour: Pink to red, with a very conspicuous, rounded, dark spot on the postero–dorsal area of the $3^{\rm rd}$ abdominal segment, including the dorsal tooth.

FAO names: Indian nylon shrimp (En) Crevette nylon indienne (Fr)



Size: To 13 cm (males), 15 cm (females)(TL)

Guide to Species Solenoceridae - Aristeidae - 11

SOLENOCERIDAE

Solenocerid shrimps

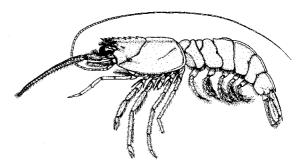
Solenocera choprai Nataraj, 1945

Local name(s): N: Kamba; S: Kamba (M/K). **Habitat:** Soft bottoms from 75 m to 110 m.

Fisheries: Bottom trawls.

Distinctive Characters: Body hairless except at base of rostrum where it is distinctly pubescent; rostrum with 6–9 dorsal teeth; post–rostral crest markedly elevated and laminose, reaching posterior margin of carapace and interrupted by a notch just ahead of cervical groove; post–orbital spine present. **Colour:** Body, pereiopods and pleopods red; antennae banded dark red and white; uropods dark red, except for some white areas.

FAO names: Ridgeback shrimp (En)



Size: To 9.5 cm (males), 13 cm (females)(TL)

ARISTEIDAE

Aristeid shrimps

Aristaeomorpha foliacea (Risso, 1827)

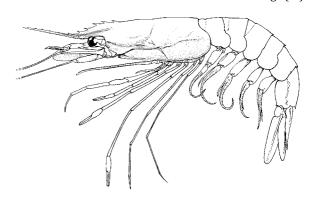
Local name(s): N: Kamba; S: Kamba (M/K). **Habitat:** Mud bottoms from 250 m to 1000 m.

Fisheries: Bottom trawls.

Distinctive Characters: Rostrum long in females, shorter in males, with 4–10 dorsal teeth; hepatic spine present and strong; telson with 4 pairs of movable spines.

Colour: Body red scarlet.

FAO names: Giant red shrimp (En)
Gambon rouge (Fr)



Size: To 17 cm (males), 22.5 cm (females)(TL)

Aristaeopsis edwardsiana (Johnson, 1868)

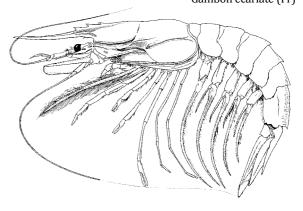
Local name(s): N: Kamba; S: Kamba (M/K). **Habitat:** Mud bottoms from 270 m to 1850 m.

Fisheries: Bottom trawls.

Distinctive Characters: Rostrum with 3 dorsal teeth; hepatic spine absent; cervical sulcus almost reaching dorsal midline; exopod of 2nd maxilliped long, covered with hair.

Colour: Dark red.

FAO names: Scarlet shrimp (En) Gambon écarlate (Fr)



Size: To 19 cm (males), 33 cm (females)(TL)

12 - Penaeidae Shrimps and Prawns

PENAEIDAE

Penaeid shrimps

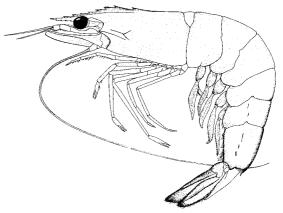
Fenneropenaeus indicus (Milne Edwards, 1837)

Local name(s): N: Kamba; S: Kamba (M/K). **Habitat:** Shelf areas from the coastline to 90 m. **Fisheries:** Bottom trawls, Drift nets, Set nets, Gill nets.

Distinctive Characters: Carapace hairless; rostrum slender and long, with 7–9 teeth on dorsal and 4–6 teeth on ventral margin; adrostral crest and groove extending as far as or just beyond epigastric tooth; petasma with distomedian projections over hanging distal margin of costae.

Colour: Body pale pink to yellowish, semitranslucent, with olive-green to grey-blue speckles; rostral and mid dorsal abdominal crests mostly brown, but reddish at the base.

FAO names: Indian white prawn (En) Crevette royale blanche (Fr)



Size: To 18.4 cm (males), 23 cm (females)(TL)

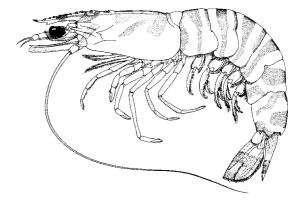
Marsupenaeus japonicus (Bate, 1888)

Local name(s): N: Kamba; S: Kamba (M/K). **Habitat:** Shelf areas from the coastline to 90 m. **Fisheries:** Bottom trawls, Set nets, Gill nets.

Distinctive Characters: Carapace smooth; rostrum with 9–11 dorsal teeth and 1 ventral tooth; gastrofrontal crest present; gastro–frontal groove bifurcate posteriorly; hepatic crest almost horizontal to base of antennal crest and from there sloping anteroventrally; telson armed with 3 pairs of movable spines.

Colour: Body pale yellow to pink with red-brown to dark brown transverse bands; rostrum banded; carapace with anterolateral and dorsal patches and 2 bands, last abdominal band not reaching ventral margin; pereiopods yellow proximally, blue or bluish distally, their basal part white.

FAO names: Kuruma prawn (En) Crevette kuruma (Fr)



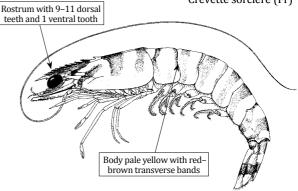
Size: To 20 cm (males), 23.5 cm (females)(TL)

Melicertus canaliculatus (Olivier, 1811)

Local name(s): N: Kamba; S: Kamba (M/K). Habitat: Coastline to deep waters down to 50 m. Fisheries: Bottom trawls, Stake traps, Bag nets. Distinctive Characters: Carapace smooth; adrostral crest and groove long, extending almost to posterior margin of carapace, the groove wide; post-rostral crest well developed as far back as adrostral groove, with a deep median groove throughout its length; telson lacking lateral spines. Colour: Rostrum brown, tip cream-coloured; carapace with 2 dorsal bands perpendicular to axis of body and a 3rd one leaning antero-ventrally and reaching anterior margin of carapace; pereiopods yellow, tips bluish or pinkish; pleopods yellow with

brown and white spots at bases.

FAO names: Witch prawn (En) Crevette sorciere (Fr)



Size: To 14.5 cm (males), 18.2 cm (females)(TL)

Guide to Species Penaeidae - 13

Melicertus latisulcatus (Kishinouye, 1896)

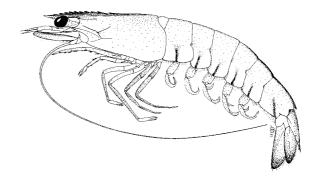
Local name(s): N: Kamba; S: Kamba (M/K). **Habitat:** From the coastline down to 80 m on sand or mud bottoms.

Fisheries: Bottom trawls.

Distinctive Characters: Carapace smooth; rostrum with 9–12 dorsal teeth and 1 ventral tooth; adrostral crest and groove long, extending almost to posterior margin of carapace; gastro–frontal crest present; gastro–frontal groove bifurcate posteriorly; hepatic crest almost horizontal to base of antennal crest and from there sloping antero–ventrally; telson armed with 3 pairs of movable spines.

Colour: Body pale yellow to brown; antennal, rostral, post–rostral and mid–dorsal abdominal crests dark brown; pleura of first 5 abdominal segments each with a short vertical red or brown stripe; a diagonal stripe of the same colour may be present on last segment.

FAO names: Western king prawn (En) Crevette royale occidentale (Fr)



Size: To 16.2 cm (males), 20 cm (females)(TL)

Melicertus marginatus (Randall, 1840)

Local name(s): N: Kamba; S: Kamba (M/K).

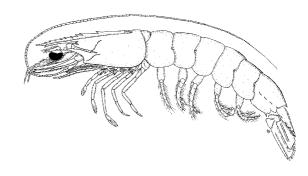
Habitat: Sand or mud-sand bottoms, from the coastline to 300 m.

Fisheries: Bottom trawls.

Distinctive Characters: Rostrum with 8–10 dorsal teeth and 1–2 ventral teeth; adrostral crest and groove extending almost to posterior border of carapace; telson with 3 pairs of movable spines.

Colour: No information.

FAO names: Aloha prawn (En) Crevette aloha (Fr)



Size: To 20.5 cm (TL)

Metapenaeus monoceros (Fabricius, 1798)

Local name(s): N: Kamba; S: Kamba (M/K).

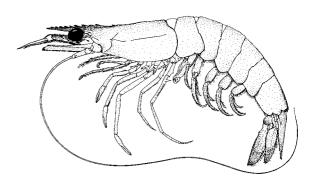
Habitat: From the coastline down to deeper waters, on mud, sand or silt bottoms. Maximum depth 70 m.

Fisheries: Bottom trawls, Boat Seines, Shore lines, Gill nets.

Distinctive Characters: Body pubescent on dorsal part of carapace and abdominal patches; rostrum armed with 9–12 dorsal teeth and no ventral teeth; telson armed only with spinules.

Colour: Body pink, green–greyish or whitish with brown specks; rostral and mid–dorsal abdominal crests brown; antennae red; pereiopods and pleopods of same colour as body, distal part of uropods purple–blue, external margin of exopods red.

FAO names: Speckled shrimp (En) Crevette mouchetée (Fr)



Size: To 15 cm (males), 20 cm (females)(TL)

14- Penaeidae Shrimps and Prawns

Metapenaeus stebbingi Nobili, 1904

Local name(s): N: Kamba; S: Kamba (M/K).

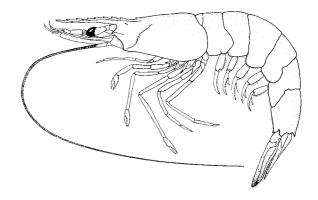
Habitat: Soft bottoms from the shore down to deeper waters. Maximum depth 90 m.

Fisheries: Bottom trawls, Stake traps, Cast nets, Seines.

Distinctive Characters: Almost entire body hairless; rostrum armed with 7–10 teeth along entire dorsal margin reaching or exceeding distal margin of antennular peduncle; telson armed on each side with a row of small and movable spines.

Colour: Body, pereiopods and pleopods white to creamy–yellow with grey and rust coloured specks; antennae and distal part of uropods rusty colour to grey–purplish.

FAO names: Peregrine shrimp (En) Crevette faucon (Fr)



Size: To 11 cm (males), 14 cm (females)(TL)

Parapenaeopsis acclivirostris Alcock, 1905

Local name(s): N: Kamba; S: Kamba (M/K).

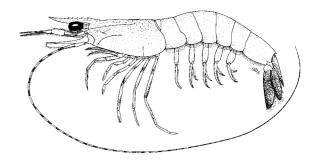
Habitat: From the coastline down to rather deeper waters. Maximum depth 50 m.

Fisheries: Bottom trawls, Gill nets, Seines.

Distinctive Characters: Rostrum nearly straight uplifted and armed with 6–9 teeth along the entire dorsal margin and no ventral teeth; lateral lobes of petasma without wing–like projections; telson unarmed.

Colour: Pale with dull red specks on carapace; antennal flagella and pereiopods banded with dark pink; pleopods orangish; uropods and telson dark red.

FAO names: Hawknose shrimp (En) Crevette aquiline (Fr)



Size: To 4.7 cm (males), 7.3 cm (females)(TL)

Parapenaeus fissurus (Bate, 1881)

Local name(s): N: Kamba; S: Kamba (M/K).

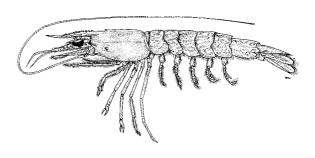
Habitat: Sand and mud bottoms from 50 m to 274 m.

Fisheries: Bottom trawls.

Distinctive Characters: Rostrum with 6–8 dorsal teeth and no ventral teeth; longitudinal suture not easily detectable unless dried on surface; branchiostegal spine present; telson armed with 1 pair of fixed lateral spines.

Colour: No information.

FAO names: Neptune rose shrimp (En)
Crevette neptune (Fr)



Size: To 7.8 cm (males), 10.7 cm (females)(TL)

Guide to Species Penaeidae - 15

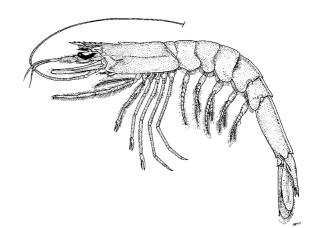
Parapenaeus investigatoris Alcock & Anderson, 1899

Local name(s): N: Kamba; S: Kamba (M/K). **Habitat:** Deep waters from 220 m to 1240 m.

Fisheries: Bottom trawls.

Distinctive Characters: Rostrum with 6–7 dorsal teeth and no ventral teeth; longitudinal suture distinct; branchiostegal spine present; telson armed with 1 pair of fixed lateral spines.

Colour: No information.



Size: To 7.6 cm (males), 8.2 cm (females)(TL)

FAO names: Explorer rose shrimp (En)

Crevette rose chercheuse (Fr)

Parapenaeus longipes Alcock, 1905

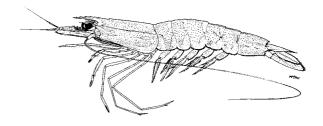
Local name(s): N: Kamba; S: Kamba (M/K). **Habitat:** Rather deep waters from 10 m to 90 m.

Fisheries: Bottom trawls.

Distinctive Characters: Body hairless; rostrum slightly curved downward and armed with 6–7 dorsal teeth and no ventral teeth; branchiostegal spine absent; no trace of hepatic crest; longitudinal suture present; antennular flagella shorter than carapace; telson armed with 1 pair of fixed lateral spines.

Colour: Pink to whitish, speckled with pink chromatophores; a red spot on distomedian part of outer uropods.

FAO names: Flamingo shrimp (En) Crevette flamand (Fr)



Size: To 7.6 cm (males), 7.9 cm (females)(TL)

Penaeopsis balssi Ivanov & Hassan, 1976

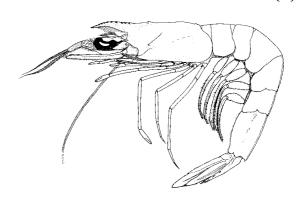
Local name(s): N: Kamba; S: Kamba (M/K). **Habitat:** Soft sand and mud bottoms from 280 m to 980 m.

Fisheries: Bottom trawls.

Distinctive Characters: Body hairless; rostrum usually markedly curved and short with 9–13 dorsal teeth; cervical and hepatic crests and grooves well defined; no longitudinal suture; telson armed with a pair of fixed lateral spines and 2 pairs of small movable spines.

Colour: Frozen specimens are red to pinkish.

FAO names: Scythe shrimp (En)
Crevette faux (Fr)



Size: To 12.8 cm (males), 15 cm (females)(TL)

16- Penaeidae Shrimps and Prawns

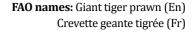
Penaeus monodon Fabricius, 1798

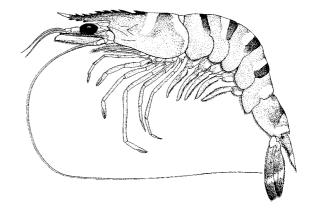
Local name(s): N: Kamba; S: Kamba (M/K).

Habitat: From the coastline to about 150 m on sand or mud bottoms; juveniles in mangrove swamps.

Fisheries: Bottom trawls, Boat seines, Shore seines. **Distinctive Characters:** Carapace smooth; rostrum with 7–8 dorsal teeth and 3–4 ventral teeth; post–rostral crest well developed, almost reaching posterior margin of carapace; gastro–orbital crest very prominent, ending above middle of hepatic crest; hepatic crest straight, almost horizontal distinctly separated from base of antennal crest.

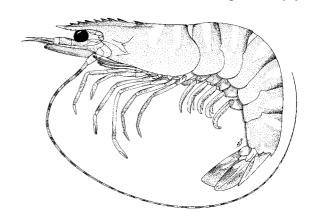
Colour: Body green–grey to brown, sometimes reddish or bluish; dorso–posterior margin of carapace generally cream yellow; often a transverse band of the same colour near middle of carapace; abdomen with dark brown to dark grey and pale yellow dorsal transverse bands.





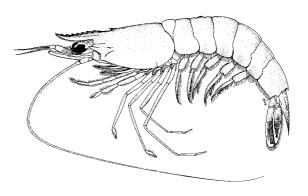
Size: To 27 cm (males), 34 cm (females)(TL)

FAO names: Green tiger prawn (En) Crevette tigrée verte (Fr)



Size: To 18 cm (males), 23 cm (females)(TL)

FAO names: Southern rough shrimp (En) Crevette gambri archée (Fr)



Size: To 8.1 cm (males), 10.5 cm (females)(TL)

Penaeus semisulcatus De Haan, 1844

Local name(s): N: Kamba; S: Kamba (M/K).

Habitat: Continental shelf from the coastline down to 130 m. on mud or sand bottoms.

Fisheries: Bottom trawls, Drift nets, Boat seines, Beach seines.

Distinctive Characters: Carapace smooth; rostrum with 5–8 dorsal teeth and 2–4 ventral teeth; adrostral crest and groove extending beyond epigastric tooth; post–rostral crest almost reaching posterior margin of carapace, with a distinct median groove; gastro–frontal crest absent; hepatic crest straight, sloping antero–ventrally; 5th pereiopod with exopod.

Colour: Body pale brown, sometimes greenish; carapace often with 2 yellow-cream dorsal transverse bands; abdomen with brown-grey and pale yellow dorsal transverse bands; antennae banded white and brown.

Trachysalambria curvirostris (Stimpson, 1860)

Local name(s): N: Kamba; S: Kamba (M/K).

Habitat: Found on sand and mud bottoms from 10 m to 300 m.

Fisheries: Bottom trawls, Gillnets.

Distinctive Characters: Entire body densely pubescent; rostrum armed with 7–11 dorsal teeth and no ventral teeth; hepatic groove discernible; telson armed with 3–4 pairs of small movable lateral spines sub–equal in size; longitudinal suture short.

Colour: Body pink to reddish-brown, sometimes whitish on sides; abdominal crest whitish; pereiopods white with some pink; pleopods white with red or reddish-brown patches; uropods bright red to reddish-brown, sometimes dark brown with distinct white margins.

Guide to Species Sergestidae - 17

SERGESTIDAE

Sergestid shrimps

Acetes erythraeus Nobili, 1905

Local name(s): N: Kamba; S: Kamba (M/K).

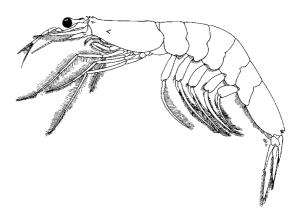
Habitat: Marine and brackish habitats on mud or sand bottoms down to 55 m.

Fisheries: Bag nets, Seines, Push nets, Bottom trawls.

Distinctive Characters: Rostrum, which has two dorsal denticles or teeth, is shorter than eyes; first 3 pereiopods elongated and no 4th and 5th pereiopods; females larger than males.

Colour: In life, whole body almost transparent; milky or yellowish when dead.

FAO names: Tsivakihini paste shrimp (En) Crevette tsivakihini (Fr)



Size: To 48 cm (TL)