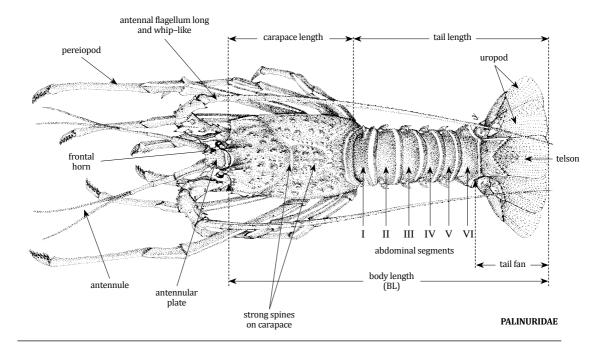
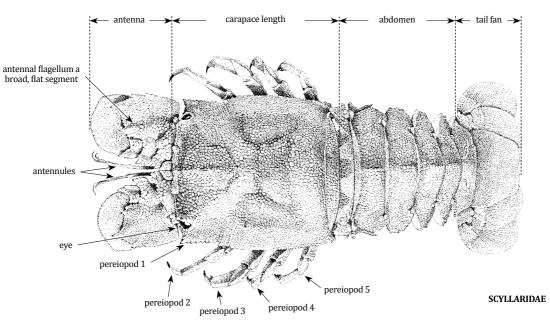
18 Lobsters

LOBSTERS

All species are of high commercial value locally and internationally. Five species occur in reasonable numbers in Kenya: *Panulirus homarus, Panulirus ornatus, Panulirus versicolor, Panulirus penicillatus* and *Panulirus longipes*. These are caught along the coast by the artisanal fishing fleet. Landings of these species are highest in the north coast particularly the Islands of Lamu District. The fishery has been declining, but currently the fishermen are only allowed to land the ungravid and the young weighing more than 250 g. One species, *Puerulus angulatus*, is caught by the industrial fishing fleet in off–shore waters, as well as members of the family Scyllaridae. The latter are also caught as by–catch by shallow water prawn trawling but are commercially unimportant, utilized as food fish by local people.

TECHNICAL TERMS AND MEASUREMENTS





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GUIDE TO FAMILIES

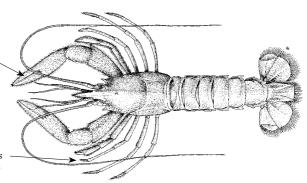
NEPHROPIDAE Page 20

True lobsters

To about 15 cm. Marine, mainly deep waters on soft substrates. Three species of interest to fisheries are included in the Guide to Species.



3rd pair of pereiopods with chela



PALINURIDAE

Spiny lobsters

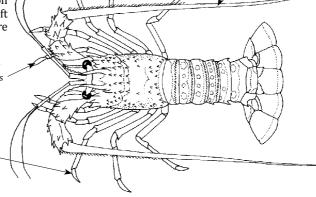
To about 50 cm. Marine, mostly shallow waters on coral and sand stone reefs, some species on soft substrata. Seven species of interest to fisheries are included in the Guide to Species.





1st pair of pereiopods simple

3rd pair of pereiopods without chela



SCYLLARIDAE

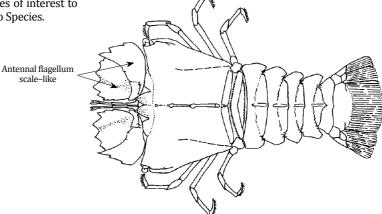
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Antennal flagellum

Slipper lobsters

To about 25 cm. Marine, shallow and deep waters down to 484 m; benthic. Five species of interest to fisheries are included in the Guide to Species.



20 - Nephropidae Lobsters

NEPHROPIDAE

True lobsters

Metanephrops and amanicus (Wood–Mason, 1891)

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

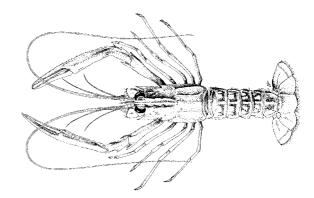
Habitat: Hard and mud substrates between 250 m and 750 m. but usually between 300 m and 450 m.

Fisheries: Bottom trawls.

Distinctive Characters: Carapace between ridges with large spines; post-rostral carinae with 3 teeth; chelae of first pereiopods heavily ridged and spinulose, without large spines; no prominent basal spine on outer edge of movable finger of large chela; inner margin of merus of 1st pereiopod weakly spinulose; raised parts of dorsal surface of abdominal somites smooth and naked; 2nd to 5th abdominal somites with marked dorsomedian carina, flanked by a pair of conspicuous longitudinal grooves.

Colour: Orange or red, with pink bands on chelae.

FAO names: Andaman lobster (En) Langoustine Andamane (Fr)



Size: To 21 cm, common 18 cm (BL)

Metanephrops mozambicus Macpherson, 1990

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

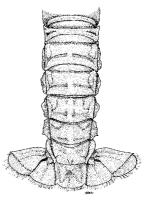
Habitat: Hard and mud substrates from 200 m to 750 m, most common between 400 and 500 m.

Fisheries: Bottom trawls.

Distinctive Characters: Carapace smooth between ridges with large spines; post-rostral carinae with three teeth; chelae of first pereiopods heavily ridged and spinulose, without large spines; no prominent basal spine on outer edge of movable finger of large chela; inner margin of merus of first pereiopod weakly spinulose; surface of abdominal tergites conspicuously sculptured; spine in middle of lateral margin of sixth abdominal somite short, tip far from postero-lateral margin of somite.

Colour: Generally orange or pink.

FAO names: African lobster (En) Langoustine du Mozambique (Fr)



Size: To 21 cm, common 18 cm (BL)

Nephropsis stewarti Wood–Mason, 1872

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

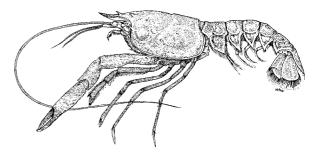
Habitat: Mud substrates from 170 m to 1060 m.

Fisheries: Bottom trawls.

Distinctive Characters: Body cylindrical pubescent; carapace granular, with a well developed median rostrum armed with 1 pair of lateral spines; a single spine behind each eye; eyes very small, lacking pigments; tail with a well developed fan, the outer blade of which shows a transverse fissure; first 3 pairs of legs ending in true pincers; first pair rather stout with short and very hairy (woolly) fingers.

Colour: Generally pink or red.

FAO names: Indian Ocean lobsterette (En) Langoustine indienne (Fr)



Size: To 15 cm (TL), common 10 cm (BL)

Guide to Species Palinuridae - 21

PALINURIDAE

Spiny lobsters

Linuparus somniosus Berry & George, 1972

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

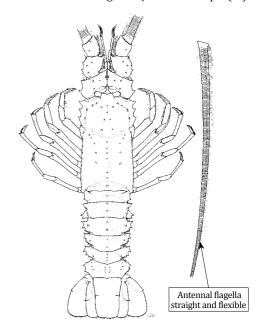
Habitat: Rough substrates with sand and mud from 216 m to 375 m.

Fisheries: Bottom trawls.

Distinctive Characters: Carapace angular dorsally, with 1 median and 2 lateral longitudinal crests behind the cervical groove, each crest with tubercles; posterior groove of carapace wide in the middle, narrow laterally; 2 or 4 pointed lobes between the eyes; surface of carapace with numerous small granules and larger tubercles; antennules slightly over reaching antennal peduncle; antennae long; base of antennae touching each other; antennular plate very small, covered by a stridulating organ; tail powerful; each abdominal segment with at most 1 transverse groove and on each side a longitudinal, tuberculate crest over the bases of the pleura; first 5 segments with a median crest bearing 1 or 2 large and some small tubercles; legs 1 to 4 without pincers.

Colour: Reddish-brown dorsally; laterally and ventrally mostly whitish; antennal flagella dirty white.

FAO names: African spear lobster (En) Langouste javelot d' Afrique (Fr)



Size: To 35 cm (BL)

Panulirus homarus (Linnaeus, 1758)

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

Habitat: Inhabits shallow waters among rocks, often in the surf zone. Maximum depth 90 m.

Fisheries: Traps, Gill nets, Cast nets, Lobster pots, Hand and scoop nets by divers, Spears.

Distinctive Characters: Carapace rounded, covered with numerous spines of various sizes; flagella of antennules longer than peduncle; rostrum absent; bases of antennae separated by a broad antennular plate bearing 2 equal, well separated pairs of principal spines and scattered smaller spines in between; each abdominal segment with a transverse groove, sometimes interrupted in the middle, its anterior margins formed into shallow scallops; legs 1 to 4 without pincers.

Colour: Dark greenish to blackish with numerous, very small white spots especially distinct on posterior half of abdomen, without transverse bands; antennules banded with white and green; legs with distinct spots and stripes white.

FAO names: Scalloped spiny lobster (En) Langouste festonnée (Fr)

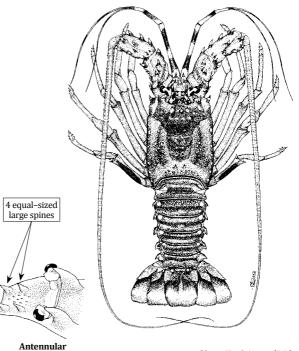


plate Size: To 31 cm (BL)

22 - Palinuridae Lobsters

Panulirus longipes (A. Milne Edwards, 1868)

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

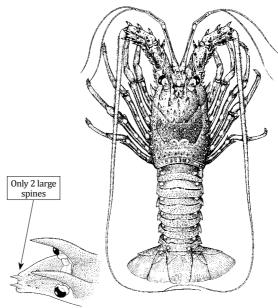
Habitat: Inhabits clear or slightly turbid waters in shallow rocky areas and on coral reefs; nocturnal. Maximum depth 18 m.

Fisheries: Traps, Gill nets, Cast nets, Lobster pots, Hand and scoop nets by divers, Spears.

Distinctive Characters: Carapace rounded covered with numerous spines of varying size; flagella of antennules longer than peduncles; rostrum absent; bases of antennae separated by a broad antennular plate; each abdominal segment with a complete transverse groove joining the pleural groove; legs 1 to 4 without pincers.

Colour: Ground colour variable from brown through blue to indigo; carapace and tail covered with numerous medium-sized pale spots and a central darker region on the carapace; antennal and antennular flagella cross-banded; legs with white spots and yellow lines in between.

FAO names: Longlegged spiny lobster (En)
Langouste diablotin (Fr)



Antennular plate

Size: To 30 cm, common 20-25 cm (BL)

Panulirus ornatus (Fabricius, 1798)

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

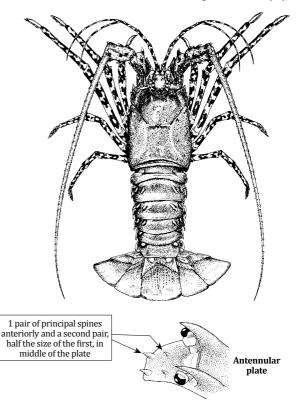
Habitat: Inhabits shallow, sometimes slightly turbid coastal waters usually on sand and mud substrates, but also on coral reefs and rocky bottoms. Maximum depth 8 m.

Fisheries: Traps, Gill nets, Cast nets, Lobster pots, Hand and scoop net by divers, Spears.

Distinctive Characters: Carapace rounded, covered with numerous spines and tubercles of different sizes; flagella of antennules longer than antennular peduncles; bases of antennae separated by a broad antennular plate; each abdominal segment smooth without a transverse groove; legs without pincers.

Colour: Bluish or greenish spines on yellow carapace; anterior part of carapace and near the bases of the frontal horns and the anterior spines with a vermicular pattern of pale and dark lines; abdomen with a broad, dark transverse band over the middle of the segments, each segment with a large pale spot on sides and an additional oblique elongate mark higher up on the 2nd, 3rd and 4th segments; no transverse white band along posterior margin of the segments; antennular flagella banded; legs with distinct, sharply defined dark and pale blotches.

FAO names: Ornate spiny lobster (En) Langouste ornée (Fr)



Size: To 50 cm, common 30.5 cm (BL)

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Panulirus penicillatus (Olivier, 1791)

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

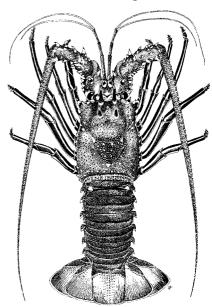
Habitat: Clear shallow waters over rocky substrates down to 4 m; nocturnal.

Fisheries: Hand and scoop nets by divers, Spears, Trammel nets.

Distinctive Characters: Carapace rounded covered with numerous spines and nodules of various size; flagella of antennules longer than antennular peduncle; rostrum absent; bases of antennae separated by a broad antennular plate bearing 2 pairs of almost equal principal spines joined at their bases, their tips diverging; each abdominal segment with a transverse groove not joining the pleural groove; anterior legs 1 to 4 without pincers.

Colour: Ground colour ranging from yellow–green through brown-green to blue black or dark reddish brown, with many cream spots on upper surface of carapace, and many tiny pale spots on abdomen; antennular flagella uniform green or brown; legs with fine or broader longitudinal white to yellow stripes; males are usually darker than females.

FAO names: Pronghorn spiny lobster (En) Langouste fourchette (Fr)



Size: To 40 cm, common 35 cm (BL)

Panulirus versicolor (Latreille, 1804)

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

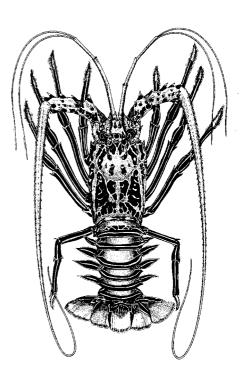
Habitat: Shallow waters, from the sub-littoral zone down to 15 m, on coral reefs, often on the seaward edges of the reef plateau; nocturnal.

Fisheries: Hand and scoop nets by divers, Spears, Trammel nets.

Distinctive Characters: Carapace rounded, covered with numerous spines of various sizes; flagella of antennules longer than antennular peduncle; rostrum absent; bases of antennae separated by a broad antennular space bearing 2 pairs of unequal and separate principal spines; abdominal segments without transverse grooves; legs 1 to 4 without pincers.

Colour: Green-blue with a distinctive pattern of blue-black patches and white lines on carapace; a transverse band of white, bordered by 2 black lines across each abdominal segment; legs and antennules longitudinally striped; bases of antennae bright pink, not extending onto antennular plate.

FAO names: Painted spiny lobster (En) Langouste barriolée (Fr)



Size: To 40 cm, common 30 cm (BL)

Puerulus angulatus (Bate, 1888)

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

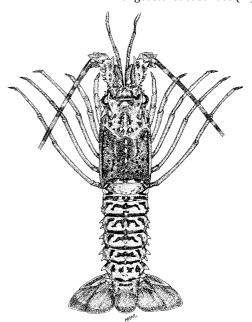
Habitat: Sand or mud substrates from 274 m to 536 m.

Fisheries: Off-shore bottom trawls.

Distinctive Characters: Post–orbital spine absent; three or more teeth between the frontal horns and the cervical groove; median keel of carapace with 3 post–cervical and 2 intestinal teeth; tubercles of carapace usually distinct and not obscured by the pubescence; eyes small, longer than broad; 5th pereiopod of male not chelate.

Colour: Light orange overall; pereiopods white; bands on abdomen.

FAO names: Banded whip lobster (En) Langouste fouet bandée (Fr)



Size: Common around 21 cm (BL)

SCYLLARIDAE

Slipper lobsters

Scyllarides squammosus (H. Milne-Edwards, 1837)

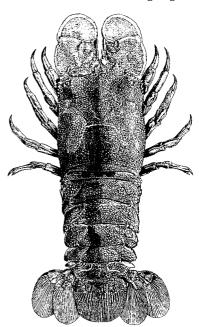
Local name(s): N: Kamba mzuka; S: Kambamawe (M/K).

Habitat: Reefs and rocky areas from 20 m to 50 m. **Fisheries:** Hand by divers, Traps, Bottom trawls.

Distinctive Characters: Inner orbital angle with two strong pointed teeth, which are larger than any of the tubercles on that margin; grooves on the carapace distinct; lateral margin of the carapace with a cervical incision only; anterior margin of the carapace between the eye and the anterolateral margin, convex; outline of posterior margin of the pleura of the 2nd abdominal somite straight or evenly convex; median carinae present on abdominal somites.

Colour: Body reddish, marbled with brown or grey; first abdominal segment bearing dorsally 3 large red spots, the median of which is up twice as wide as the other two; the spots are often somewhat fused anteriorly, but always distinct posteriorly; legs not distinctly banded; antennules brownish.

FAO names: Blunt slipper lobster (En) Cigale grenue (Fr)



Size: To 40 cm (BL)

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Scyllarides tridacnophaga Holthuis, 1967

Local name(s): N: Kamba mzuka; S: Kamba (M/K). **Habitat:** Shallow waters from 5 m to 112 m.

Fisheries: Bottom trawls.

Distinctive Characters: Cervical groove narrow and shallow in its median area; cardiac knob thereby very little pronounced; pre–gastric tooth distinctly two–topped; carpus of the first pereiopod with a distinct dorsal groove and without a conspicuous basal swelling; central spot on first abdominal somite sharply defined, as distinct as laterals; outline of pleura of 2nd abdominal somite broadly rounded; median ridges on 2nd to 4th abdominal somite, sharp and distinctly set off from rest of surface; 4th abdominal somite of adult specimens not conspicuously higher than the 3rd.

Colour: Body reddish-brown.

FAO names: Clamkiller slipper lobster (En)



Size: To 30 cm (BL)

FAO names: Soft locust lobster (En)

Cigale douce (Fr)

Scyllarus batei Holthuis, 1946

Local name(s): N: Kamba mzuka; S: Kamba (M/K). **Habitat:** Sand and mud substrates from 160 m to 484 m.

Fisheries: Bottom trawls.

Distinctive Characters: Carapace rectangular, about as long as broad, with 2 shallow incisions on the lateral margin, the anterior one the deepest; dorsal surface with 3 rather sharp longitudinal keels, the median keel with 3 teeth, one behind and two before the cervical groove; surface of carapace with distinct pubescence, tubercles numerous on the ridges, scarce in between; antennae large, paddle-shaped, each with two large and some small segments; the anterior large segment with 6 or 7 sharp triangular teeth; posterior large segments dorsally with a single sharp oblique carina; abdomen with a rather sharp high median carina and, on each segment, 1 or 2 transverse carinae with high or squamiform tubercles; hardly any arborescent ornamentation on the segments.

Colour: Pale brown with the ridges and tubercles pale purple; a rather conspicuous red spot in each postero-lateral angle of the carapace.



Size: To 7 cm (BL)

26- Scyllaridae Lobsters

Scyllarus rugosus H. Milne-Edwards, 1837

Local name(s): N: Kamba mzuka; S: Kamba (M/K). **Habitat:** Usually occurs on sand and mud bottoms, mainly from 20 m to 60 m.

Fisheries: Bottom trawls.

Distinctive Characters: Carapace with a median teeth before the cervical groove which is blunt and inconspicuous; the rostral tooth is reduced to a tubercle, the pre–gastric tooth is replaced by a double row of 1 or 2 tubercles and a few inconspicuous median tubercles; the gastric tooth is the most conspicuous, broad and blunt and bears a double row of tubercles; the surface of the carapace is very uneven and has high tubercles; 4th antennal segment has a sharp and high oblique median carina; outside the carina the upper surface of the segment shows a row of tubercles.

Colour: Dorsal surface of body greyish or purplishbrown with darker spots; the distal segment of the antenna is often lighter; the first abdominal somite shows dorsally often a dark blue colour.

FAO names: Hunchback locust lobster (En)



Size: To 6 cm (BL)

Thenus orientalis (Lund, 1793)

Local name(s): N: Kamba mzuka; S: Kamba (M/K). **Habitat:** Mud and sand bottoms from 8 m to 100 m. **Fisheries:** Bottom trawls.

Distinctive Characters: Carapace flat, wide in front, distinctly narrowing posteriorly; lateral margins straight, with only 2 teeth, one at the end, the other in the anterior 1/4; posterior 3/4 without teeth; anterior tooth forming part of the orbit which is situated at the anterolateral angle of carapace; upper surface of carapace with numerous small granules and a median carina with 3 sharp teeth; a sharp tooth behind the orbit; anterior large segment of antenna with 3 sharp triangular teeth on inner half of distal margin; some small teeth at either side of these posterior large segments ending in a large sharply-pointed, inward-curved tooth; outer margin with 3 smaller teeth; abdomen granular with transverse grooves over middle of each segment; 5th segment with a sharp spiniform tooth in the middle of posterior margin.

Colour: Pale yellowish–brown with the granules of a darker brown; tips of the teeth whitish; tail fan with a yellow tinge.

Remarks: Of major importance to fisheries.

FAO names: Flathead locust lobster (En)

Cigale raquette (Fr)



Size: To 25 cm (BL)