NEPH

1983

FAO SPECIES IDENTIFICATION SHEETS

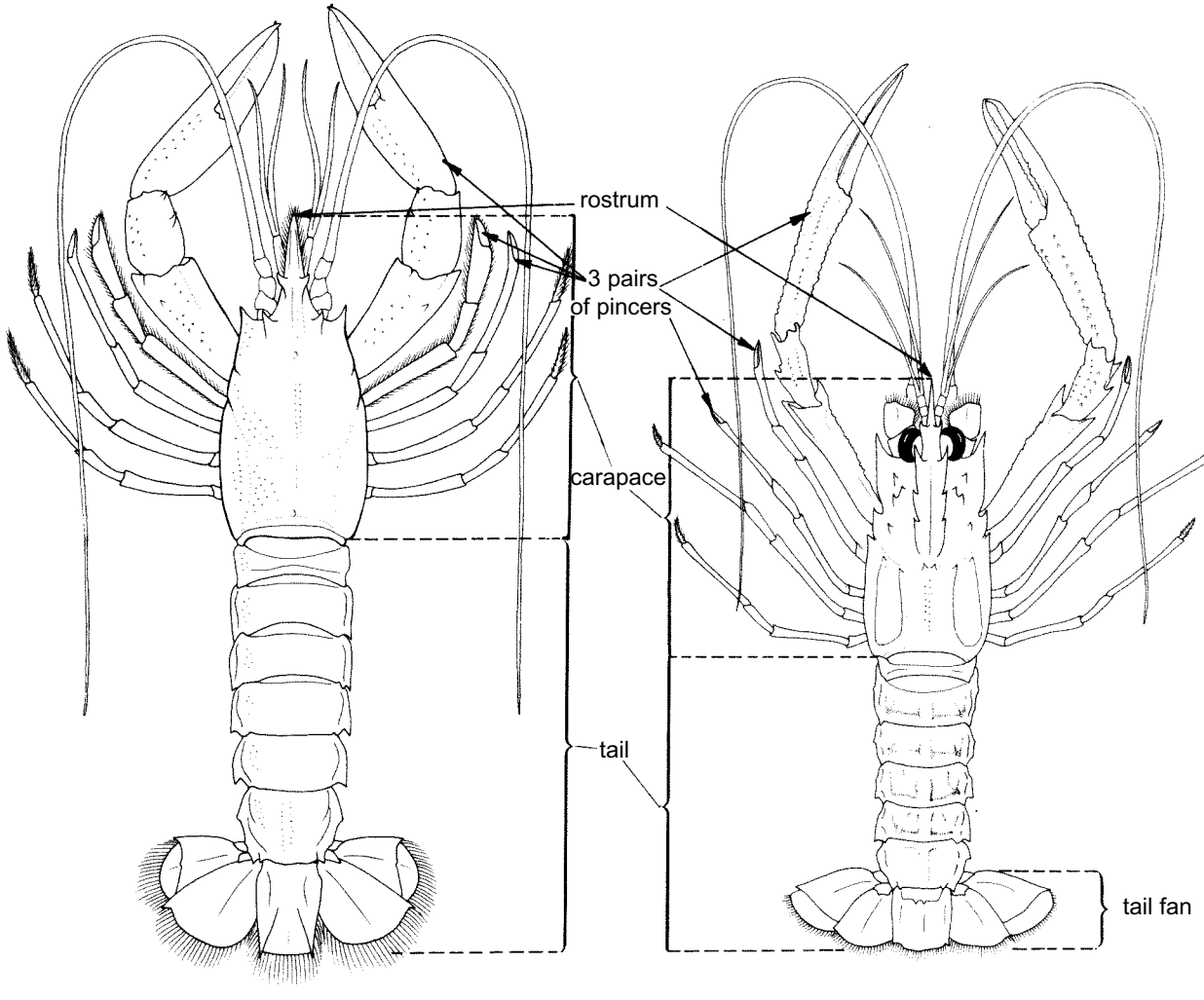
FISHING AREA 51
(W. Indian Ocean)

NEPHROPIDAE

True lobsters and lobsterettes

Moderate- to large-sized crustaceans. Carapace (or "head") cylindrical, with a well developed, median rostrum and variously ornamented with spines or nodules, occasionally smooth; eyes movable, usually well developed and with black pigment, but small and lacking pigment, or even absent, in some deep-water forms. Antennae long and whip-like, antennules slender, ending in 2 long flagella. Tail powerful, with a well developed fan, abdominal segments smooth, or with one or more transverse grooves, or spiny, or granulate. First 3 pairs of walking legs ending in true pincers, the first pair, and especially its pincers, usually enlarged.

Colour: variable, depending on the species; some drab, others marked with pink or red. Deep-sea forms are whitish or pinkish.



Nephropsis Metanephrops

examples of basic types of true lobsters

This family comprises seven species in Fishing Area 51 ranging in size from 4 to over 25 cm, and occurring in depths ranging from slightly less than 300 to over 2 000 m. All lobsters and lobsterettes are bottom-dwelling species, usually preferring muddy or sandy bottoms; of some species it is known that they make burrows in the substrate. The only species of some commercial importance at this time in the Western Indian Ocean is the Andaman lobster, Metanephrops andamanicus. Other species, likewise from deeper waters. caught in, exploratory trawling cruises, might possibly have some potential when fishing operations extend further into deeper water and they are here described on individual sheets to facilitate their identification.

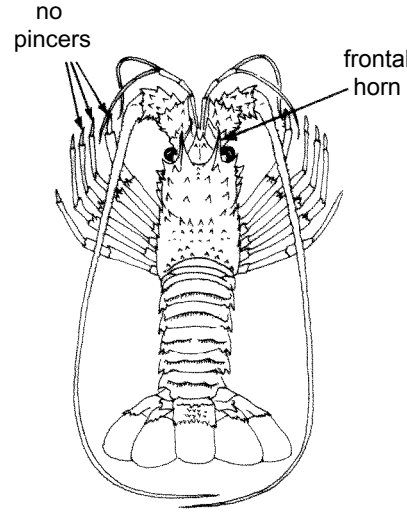
SIMILAR FAMILIES OCCURRING IN THE AREA :

Palinuridae: carapace without a median rostrum (or with rostrum reduced to a short single spine), but with frontal horns over the eyes; first 4 walking legs without pincers, first pair not greatly enlarged, except in males of Justitia.

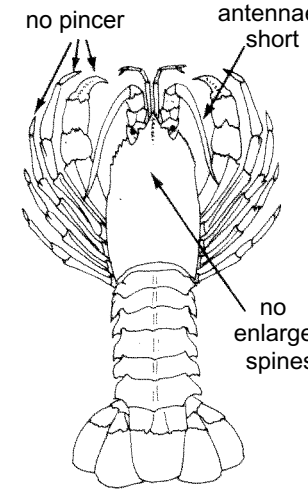
Synaxidae (Palinurellus wieneckii): carapace covered with small, rounded nodules, but without enlarged spines; antennae short; walking legs without pincers; entire body hairy and bright orange or red.

Scyllaridae: body strongly flattened; rostrum rudimentary or absent; no enlarged pincers: antennae scale-like.

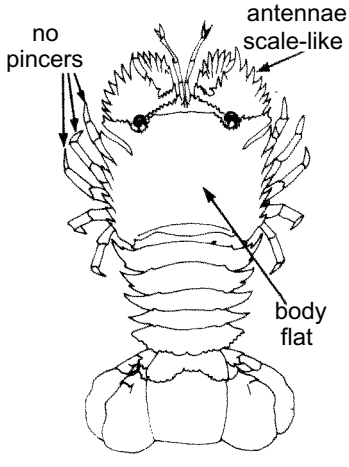
Polychelidae (no species of interest to fisheries ìn Fishing Area 51). blind, deep-sea lobsters with a very soft body; rostrurn rudimentary or absent; 4 or 5 pairs of legs with pincers; telson pointed.



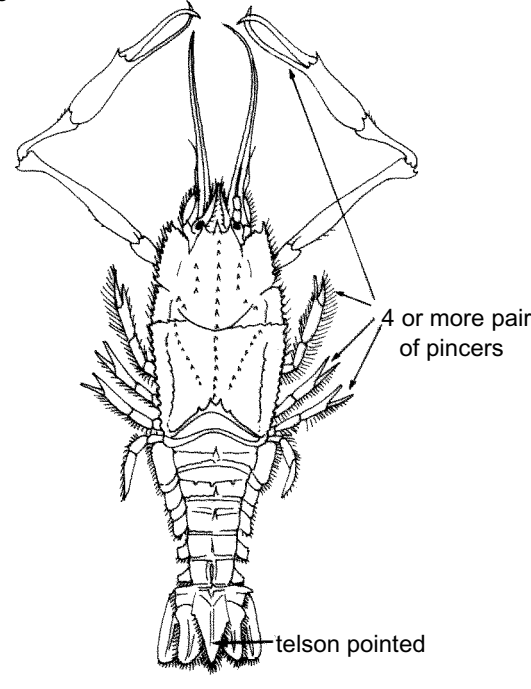
Palinuridae



Synaxidae



Scyllaridae



Polychelidae

KEY TO GENERA OCCURRING IN THE AREA:

1a. Eyes large with black pigment; antennal scale present (Fig.1); body not uniformly spinulose ..... Metanephrops

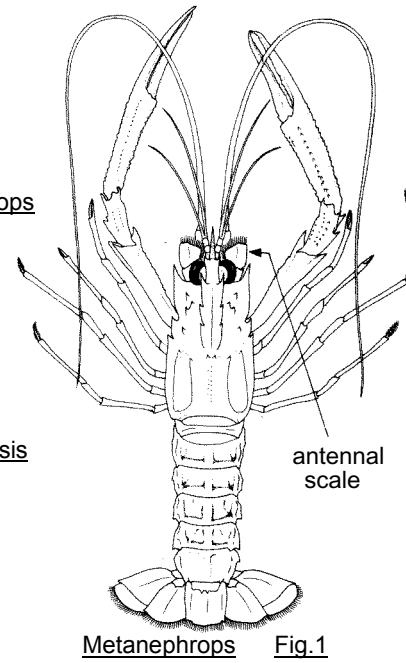
1b. Eyes small, reduced, without pigment

2a. Antennal scale absent; abdomen without a distinct median ridge; pincers with soft pubescence (Fig.2); body not uniformly spinulose..... Nephropsis

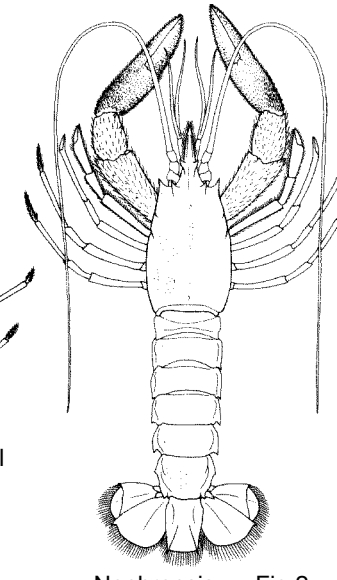
2b. Antennal scale present; pincers without soft pubescence (Figs 3,4)

3a. Pincers of first pair of legs very long and narrow, more than 10 times as long as wide; abdomen without median ridge; body uniformly spinulose or nearly so (Fig.3)...Acanthacaris

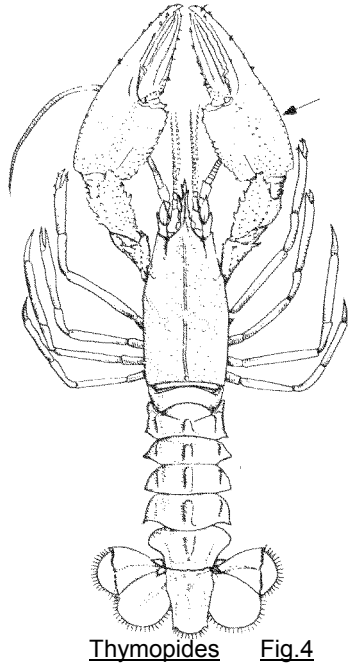
3b. Pincers of first pair of legs broad and heavy, less than 3 times as long as wide; abdomen with a blunt median longitudinal ridge (Fig.4); body not uniformly spinulose..... Thymopides



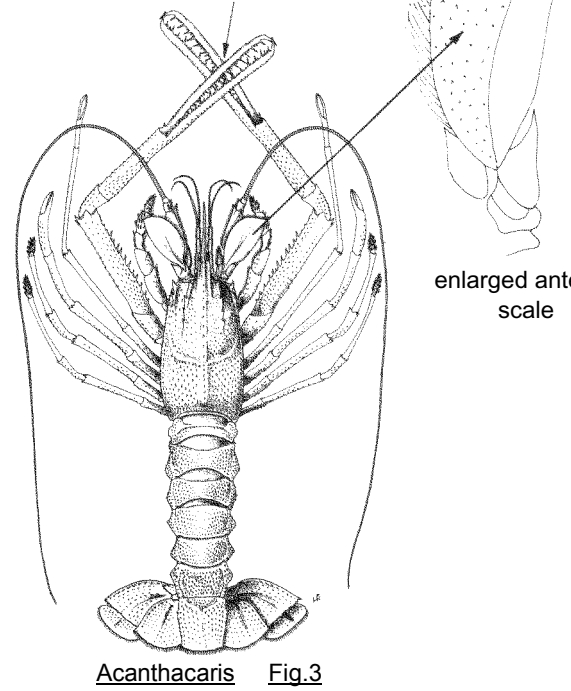
Metanephrops Fig.1



Nephropsis Fig.2



Thymopides Fig.4



Acanthacaris Fig.3

LIST OF SPECIES OCCURRING IN THE AREA:

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

Acanthacaris tenuimana Bate, 1888	NEPH Acant 2
Metanephrops andamanicus (Wood-Mason, 1892)	NEPH Metan 2
Nephropsis ensirostris Alcock, 1901	
Nephropsis malhaensis Borradaile, 1910	
Nephropsis stewarti Wood-Mason, 1873	NEPH Nephps 3
Nephropsis suhmi Bate, 1888	
Thymopides grobovi (Burukovsky & Averin, 1976)	

Prepared by L.B. Holthuis, Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands. Family sheet partly based on Species Identification Sheets for the Western Central Atlantic (Fishing Area 31), prepared by R.B. Manning, Department of Invertebrate Zoology, National Museum of Natural History, Smithsonian Institution, Washington, D.C., USA

NEPH Acant 2

1983

FAO SPECIES IDENTIFICATION SHEETS

FAMILY: NEPHROPIDAE

FISHING AREA 51
(W. Indian Ocean)

Acanthacaris tenuimana Bate, 1888

OTHER SCIENTIFIC NAMES STILL IN USE:

Phoberus tenuimanus Bate, .1888
Phoberus coecus sublevis Wood-Mason & Alcock, 1891
Acanthacaris opipara Burukovsky & Musij, 1976

VERNACULAR NAMES:

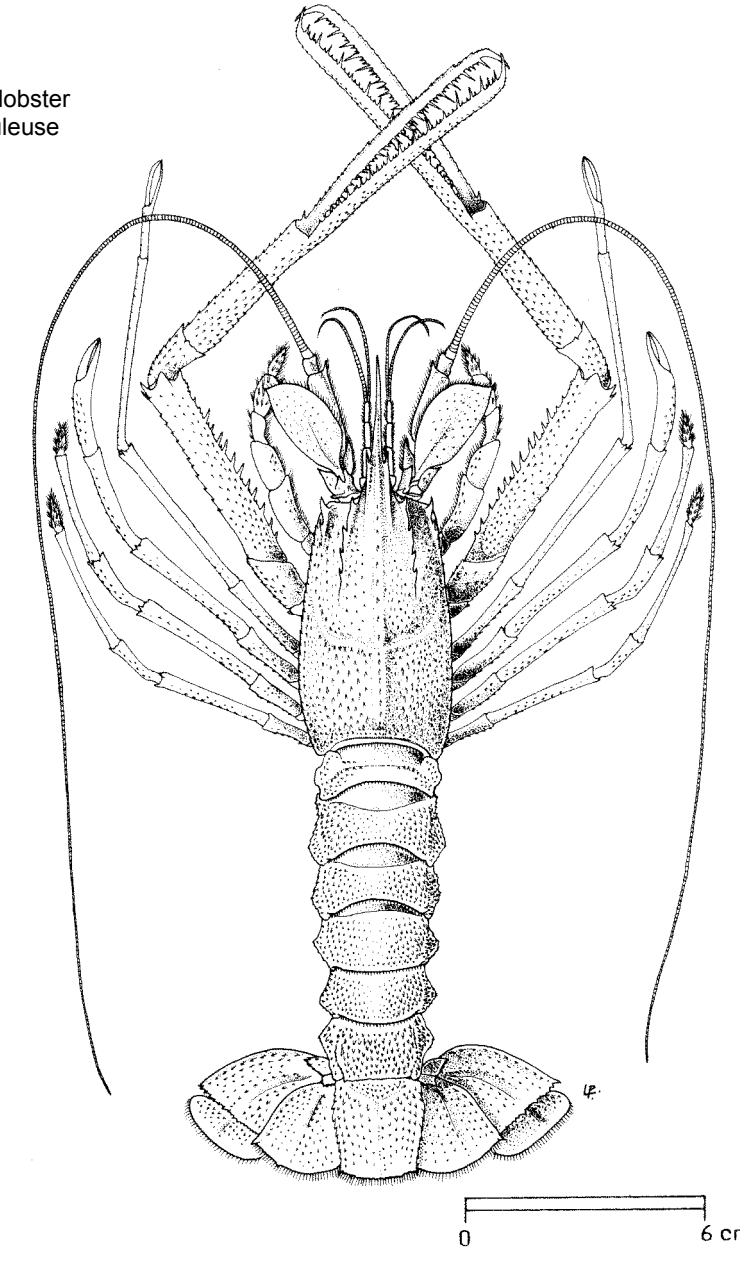
FAO : En - Prickly deep-sea lobster
Fr - Langoustine spinuleuse
SO - Cigala raspa

NATIONAL:

DISTINCTIVE CHARACTERS:

A rather large lobster. Body cylindrical; completely covered with small spines and sharp tubercles; carapace with a well developed median rostrum. Eyes very small, lacking pigment; antennae long and whip-like; antennal scales well developed. Tail powerful, with a well developed fan. First 3 pairs of legs ending in true pincers; legs of the first pair equal, very slender, longer than body, covered with sharp spinules and ending in elongate and slender pincers (more than 10 times longer than high); the fingers 1.5 to twice as long as palm, elongate, with long teeth on cutting edges, but without hairs. Second pair of legs very much longer and less spiny than third pair.

Colour: uniform delicate pink



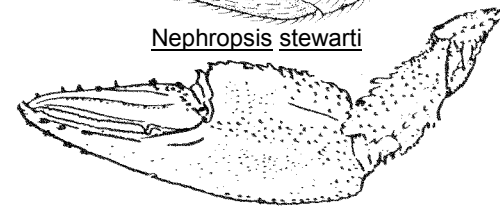
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Nephropsis species: eyes also unpigmented, but size of animal much smaller (to about 12 cm), no antennal scales, and pincers shorter and heavier, with hairy fingers. Body not requlary covered with spinules.

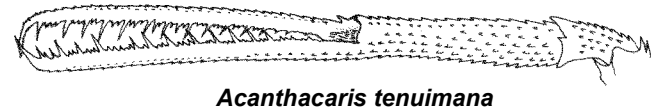
Thymopides grobovi: eyes also unpigmented. Pincers of first pair less than 3 times as long as high (more than 10 times in A. tenuimana). Body not uniformly covered with spinules.

Metanephrops andamanicus: eyes large and v,ith black pigment; rostrum armed with lateral and ventral teeth only.

Nephropsis stewarti



Thymopides grobovi



Acanthacaris tenuimana
pincer

SIZE:

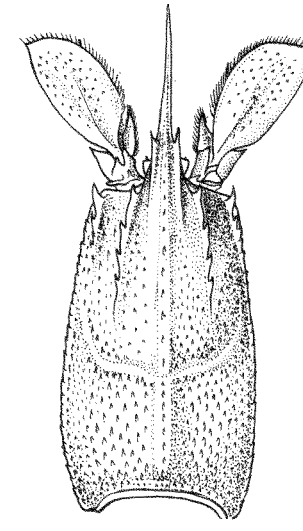
Maximum: total body length about 26 cm; carapace length about 8 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Within the area, recorded from Natal (South Africa) and off the Laccadive Islands, off the west Coast of India. Outside the area, from the South China Sea and Indonesia. It is possible that the western form (from the Arabian Sea and Natal) is a species or subspecies distinct from the eastern form (South China Sea and Indonesia), in which case the western form should be referred to as Acanthacaris sublevis (Wood-Mason & Alcock, 1891) (or A. tenuimana sublevis) and the eastern form as Acanthacaris tenuirnana tenuimana Bate, 1988.

A deep-water lobster which lives in burrows on soft, bottoms at depths between 850 and 1 670 m.

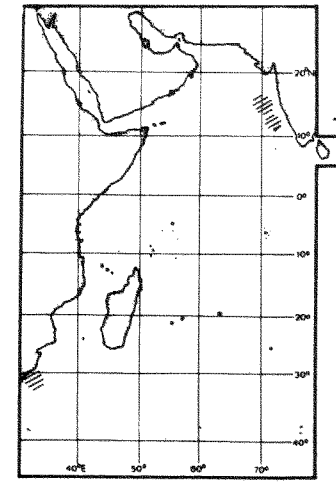
Metanephrops andamanicus



carapace ***Acanthacaris tenuimana***

PRESENT FISHING GROUNDS:

Not fished at present, taken incidental to deep trawling activities. Its Carribean counterpart (A. caeca (A. Milne Edwards)) has been caught in sizable quantities during explanatory deep-trawling operations with oversized bottom trawls. A similar possibility may exist for the present species in the Indian Ocean



CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Taken by deep-sea trawls.