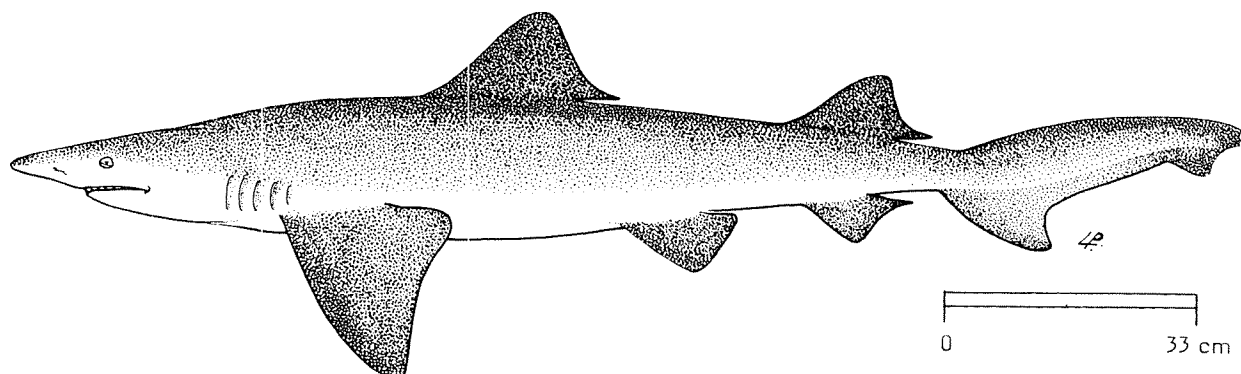


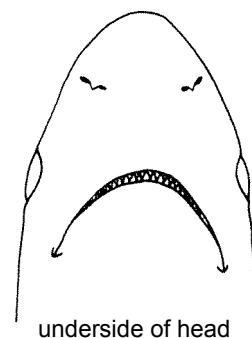
FAO SPECIES IDENTIFICATION SHEETS
FAMILY: CARCHARHINIDAE

FISHING AREA 51
(W. Indian Ocean)

Lamiopsis temmincki (Müller & Henle, 1839)

OTHER SCIENTIFIC NAMES STILL IN USE : Carcharhinus or Eulamia temmincki (Müller & Henle, 1839)

VERNACULAR NAMES:

FAO : En - Broadfin shark
 Fr - Requin grandes ailes
 Sp - Tiburón aletón

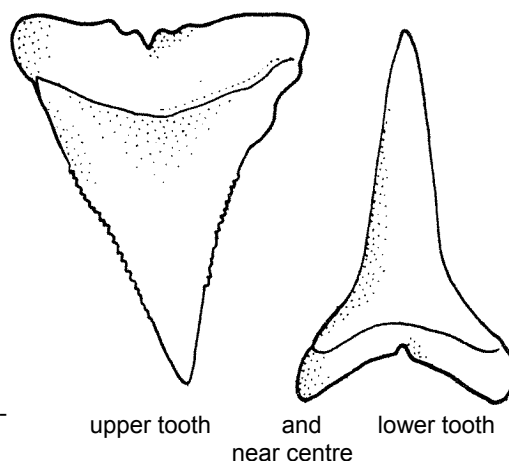
NATIONAL:


underside of head

DISTINCTIVE CHARACTERS:

A small to medium-sized shark. Body moderately stout. Snout moderately long, parabolic in shape, its length about equal to mouth width and greater than distance between nostrils; labial furrows short; anterior nasal flaps with a short, broad lobe; spiracles absent; teeth in upper jaw with high, broadly triangular, erect to semioblique, serrated cusps and no cusplets; teeth in lower jaw with erect, high, hooked, smooth-edged narrow cusps and no cusplets. First dorsal fin moderately large, with a narrowly rounded apex, its origin over inner margins of pectoral fins, its free rear tip moderately long; second dorsal fin very large, nearly or quite as large as first dorsal, its inner margin shorter than fin height, its origin anterior to anal fin origin; pectoral fins moderately long, basally very broad and not falcate, with narrowly rounded tips; anal fin with posterior margin slightly concave; upper precaudal pit a shallow longitudinal depression, not transverse and crescentic, No dermal ridge between dorsal fins, and no keels on caudal peduncle.

Colour: grey or yellow-grey above, lighter below; no conspicuous markings.



upper tooth

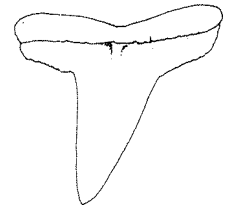
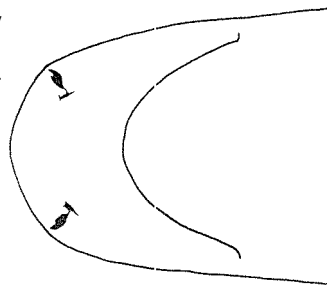
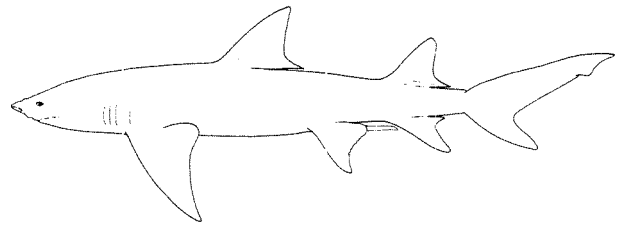
and
near centre

lower tooth

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Negaprion acutidens: snout shorter, its length less than mouth width, and broadly rounded or obtusely wedge-shaped; upper and lower teeth with narrow, smooth-edged, high, erect or semioblique cusps, bases of upper teeth weakly serrated or smooth; dorsal and pelvic fins falcate (not falcate in Lamiopsis temmincki); pectoral fins narrower and more falcate, and anal fin with a deeply notched posterior margin.

The combination of characters such as the moderately long snout, broadly triangular serrated upper teeth and narrow, hooked lower teeth, nearly or quite equal-sized dorsal fins, broad pectoral fins, anal fin with slightly concave posterior margin and non-crescentic precaudal pits readily distinguishes this species from other carcharinid sharks occurring in the area.



underside of head

upper tooth

Negaprion acutidens

SIZE:

Maximum: 168 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

In the area, occurs off Pakistan and western India. Elsewhere, in the Indo-West Pacific from scattered localities, off eastern India, Burma, Makassar Straits, Borneo and China.

A little-known coastal, inshore, tropical shark, apparently rare outside the Indian waters. Viviparous.

Not known to be dangerous to people.

PRESENT FISHING GROUNDS:

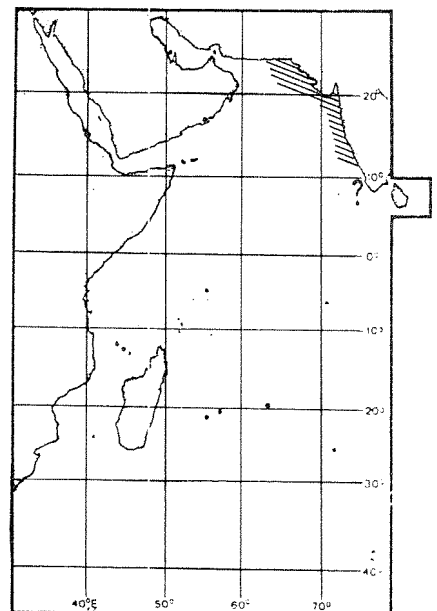
Off Pakistan and India, in inshore waters.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught in bottom and floating gillnets and with line gear.

Utilized fresh for human consumption; livers used for vitamin oil.

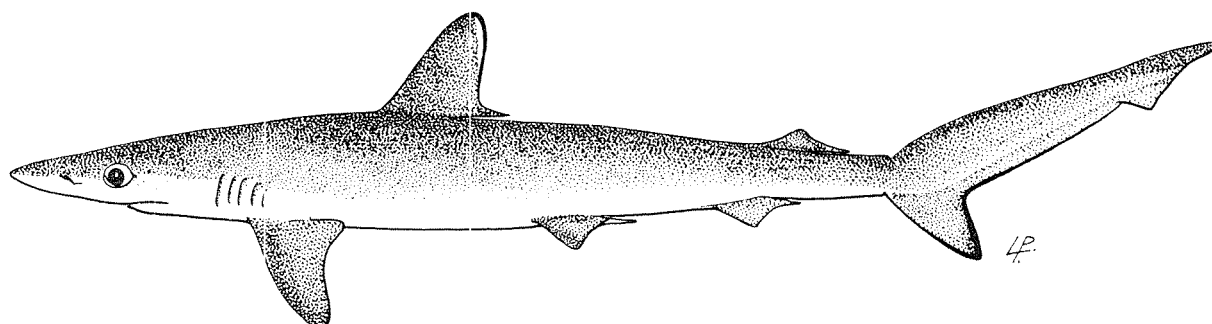


FAO SPECIES IDENTIFICATION SHEETS

FAMILY : CARCHARHINIDAE

FISHING AREA 51
(W. Indian Ocean)Loxodon macrorhinus Müller & Henle, 1839

OTHER SCIENTIFIC NAMES STILL IN USE:

Scoliodon acutus (Rüppell, 1837)Scoliodon ceylonensis Setna & Sarangdhar, 1946

VERNACULAR NAMES:

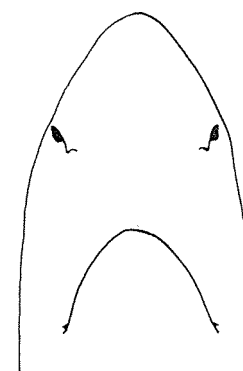
FAO : En - Sliteye shark
 Fr - Requin sagrin
 Sp - Tiburón ojuelo

NATIONAL:

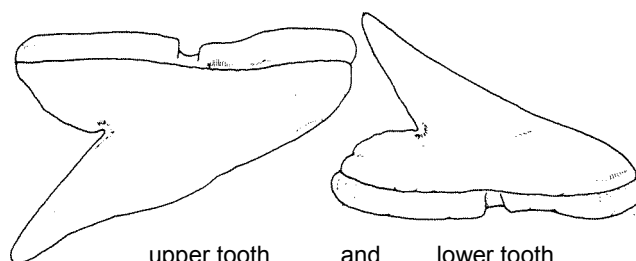
DISTINCTIVE CHARACTERS:

A small, very slender shark. Snout very long, parabolic in shape, its length greater than mouth width and distance between nostrils; labial furrows very short; anterior nasal flaps with a short, broadly triangular lobe; eyes large, with a posterior notch; spiracles absent; teeth in both jaws with low, narrow, oblique, smooth-edged cusps and no cusplets. First dorsal fin small, its origin behind free rear tips of pectoral fins by a distance greater than length of 4th gill opening, its base 2 or 3 times in distance between pectoral and pelvic fin bases, its free rear tip moderately long and not reaching backward to pelvic fin origins; second dorsal fin very small, its height less than a third of that of first dorsal, the inner margin elongated and over twice the fin height and the fin origin usually just behind anal fin insertion (occasionally over or slightly in front of it, but far behind anal midbase); pectoral fins small, narrow and slightly falcate; anal fin with a slightly concave posterior margin and long preanal ridges. Upper precaudal pit transverse and crescentic; no keels on caudal peduncle; interdorsal ridge usually absent.

Colour: grey above, pale below, fins with pale edges (transparent in life), caudal and first dorsal fins with a narrow dark margin, first dorsal also with a dusky tip.

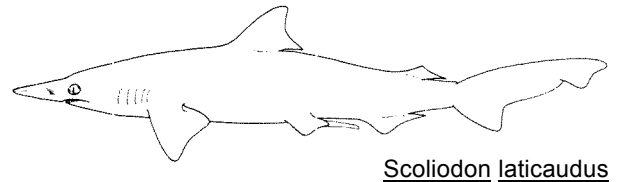


underside of head

upper tooth and lower tooth
 near centre

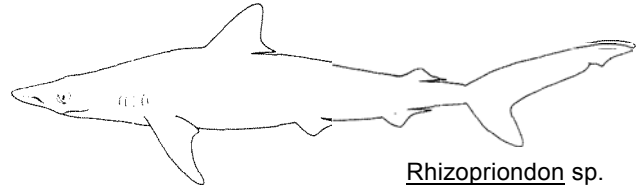
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Scoliodon laticaudus: head and snout broader and more flattened; body stouter; eyes unnotched; first dorsal fin larger, its base less than 2 times in distance between pectoral and pelvic fin bases, its free rear tip usually reaching to pelvic midbases; pectoral fins broadly triangular, and caudal fin not deeply notched on its postero-ventral margin.



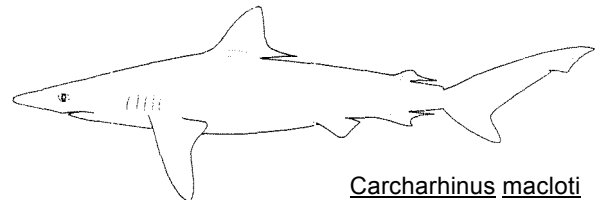
Scoliodon laticaudus

Rhizoprionodon species: body usually stouter: eyes without notches; origin of first dorsal fin over pectoral inner margins or just behind free rear tips by a distance much less than length of 4th gill opening; first dorsal fin base usually less than 2 times in distance between pectoral and pelvic fin bases; labial furrows more elongated (especially in R. acutus).



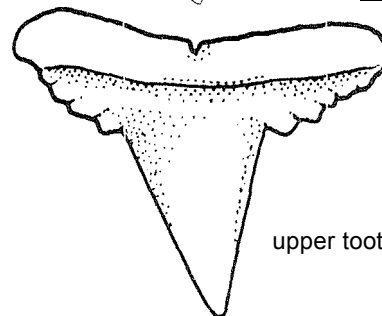
Rhizoprionodon sp.

Carcharhinus macloiti: eyes without notches; teeth with more erect cusps, upper teeth with strong cusplets; first dorsal fin larger, its base less than 2 times in distance between pectoral pelvic fin bases, the free rear tip longer, and the origin over pectoral inner margins; second dorsal fin origin posterior to anal fin origin but in front of anal midbase; anal fin with very short preanal ridges and with a deeply notched posterior margin.



Carcharhinus macloiti

The combination of characters including small size, long snout, slender body, eyes notches, oblique-cusped, smooth-edged teeth without cusplets, small, low second dorsal fin with origin far posterior to anal fin origin, anal fin with weakly concave posterior margin and long preanal ridges, and no keels on caudal peduncle, readily distinguishes this species from other carcharhinid sharks occurring in the area.



upper tooth

SIZE:

Maximum: 91 cm, maturing at 73 to 85 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

In the area, ranging from Natal, South Africa, southern Mozambique, arid Madagascar to the Red Sea, Gulf of Oman, India and probably Sri Lanka; also Mauritius and the Seychelles. Elsewhere, primarily in continental waters of the Indo-West Pacific eastward to Japan, Taiwan Island, the Philippine Islands and Australia.

Occurs in tropical, coastal, clear waters, near the surface and bottom; inshore and offshore at depths from 7 to 80 m. Viviparous, number of young usually 2 in a litter. Size at birth probably about 42 or 43 cm.

A common small, harmless shark, probably feeding on small fishes and crustaceans.

PRESENT FISHING GROUNDS:

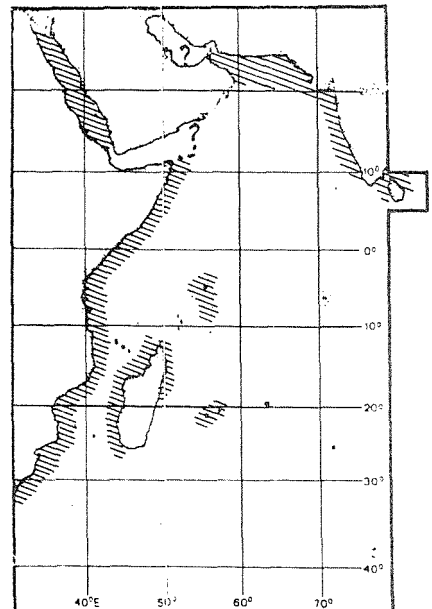
Probably throughout the area wherever it occurs, but definitely off India (especially in the extreme southeast, where it is one of the most abundant sharks caught).

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught in floating and bottom gillnets and with tine gear (including pelagic longlines).

Utilized fresh for human consumption.

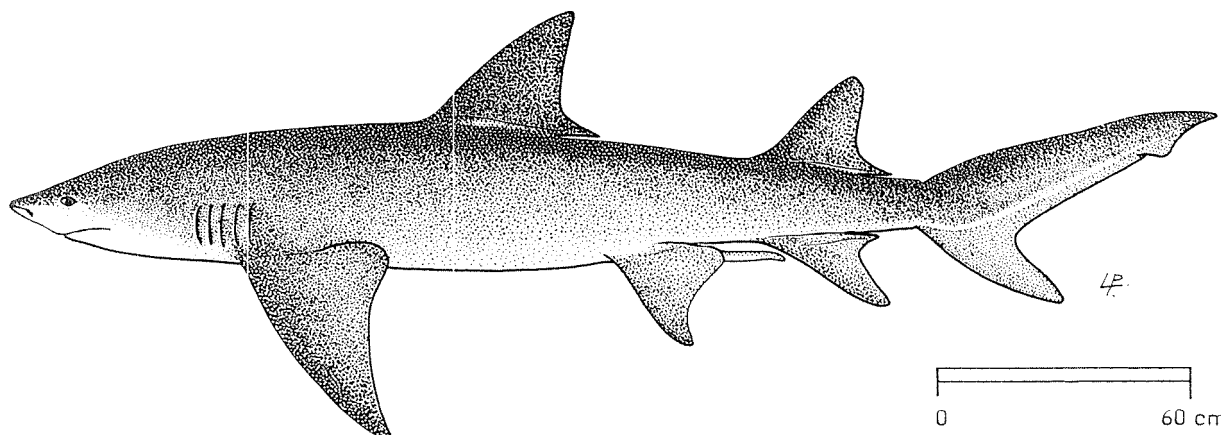


FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CARCHARHINIDAE

FISHING AREA 51
(W. Indian Ocean)*Negaprion acutidens* (Rüppell, 1837)

OTHER SCIENTIFIC NAMES STILL IN USE: None



VERNACULAR NAMES:

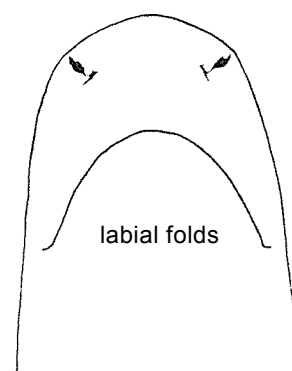
FAO: En - Sicklefim lemon shark
Fr - Requin citron faucille
Sp - Tiburón segador

NATIONAL:

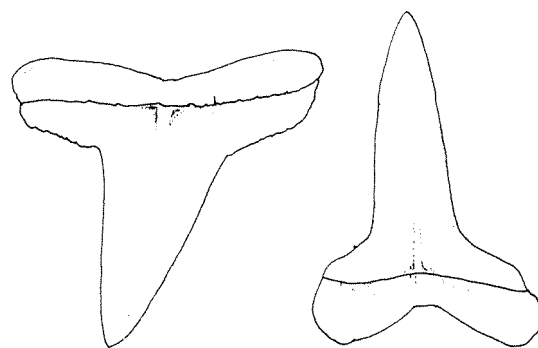
DISTINCTIVE CHARACTERS:

A large, stout shark. Snout short (shorter than width of mouth) and broad, rounded or obtusely wedge-shaped; labial folds short; spiracles usually absent; teeth narrow, their cusps smooth-edged, erect in anterior part of jaws, but becoming progressively oblique toward the sides; bases of upper teeth smooth or weakly serrated. Origin of first dorsal fin over or behind free rear tips of pectoral fins, closer to these fins than to the pelvis; second dorsal fin nearly as large as the first (its base more than 3/4 of first dorsal fin base); pectoral fins broad and strongly falcate, pelvic fins falcate. No dermal ridge between dorsal fins.

Colour: yellowish brown above, paler below.



underside of head

upper tooth and lower tooth
near centre

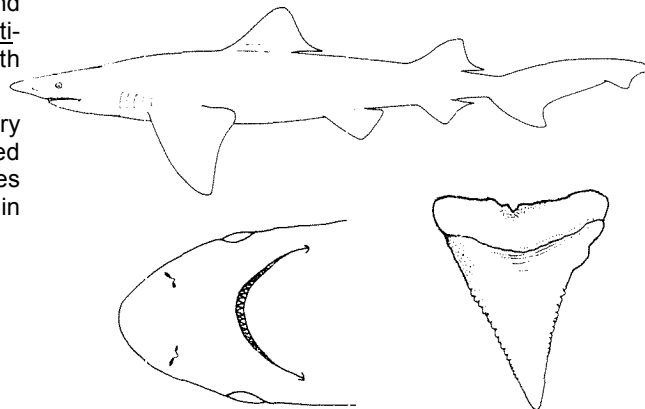
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Lamiopsis temmincki: snout longer, about equal to mouth width, and more narrowly rounded; upper teeth with broadly triangular, strongly serrated cusps and bases, lower teeth narrow-cusped and smooth-edged; dorsal and pelvic fins not falcate (strongly so in Negaprion acutidens), pectoral fins broader and less falcate, anal fin with weakly concave posterior margin.

The combination of characters such as the very large second dorsal fin, the short and broadly rounded snout and the characteristic teeth, readily distinguishes this species from other carcharhinid sharks occurring in the area.

SIZE:

Maximum: 310 cm; maturing to 214 cm.



underside of head upper tooth

Lamiopsis temmincki

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

In the area, from northern Natal, South Africa, Madagascar, Mauritius and the Seychelles to the Red Sea, India and probably Sri Lanka. Elsewhere, wide-ranging in the Indo-West Pacific, extending to the Australian region and Oceania.

Occurs in tropical, shallow inshore and offshore waters near the bottom; often found on and around coral reefs and on sandy plateaus near coral, at depths down to at least 30 m. Viviparous, 12 or 13 young in a litter; size at birth about 70 to 80 cm.

A fish-eating shark, but few details of its diet are available from the area. Potentially dangerous because of its large size, powerful jaws and dagger-like teeth; normally inoffensive and sluggish but very aggressive when provoked.

PRESENT FISHING GROUNDS:

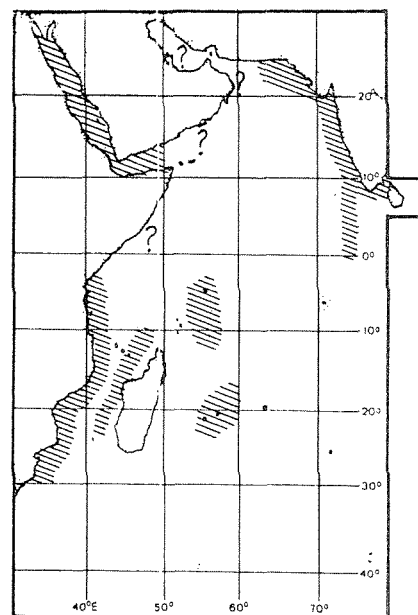
Probably throughout the area, but definitely off Pakistan and India.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught in floating and bottom gillnets and on line gear (including floating longlines).

Used fresh and dried-salted for human consumption; livers processed for vitamin oil; offal processed for fishmeal; and fins used for the oriental sharkfin trade. Fins of this species are considered the best for soup of any sharks caught in southeastern India.

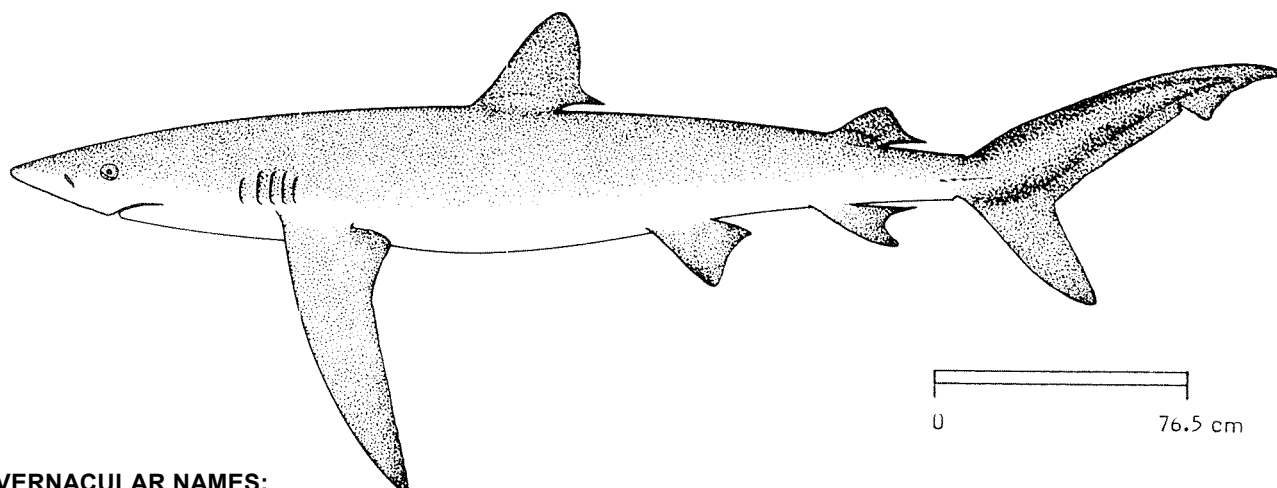


FAO SPECIES IDENTIFICATION SHEETS

FAMILY : CARCHARHINIDAE

FISHING AREA 51
(W. Indian Ocean)*Prionace glauca* (Linnaeus, 1758)

OTHER SCIENTIFIC NAMES STILL IN USE: None



VERNACULAR NAMES:

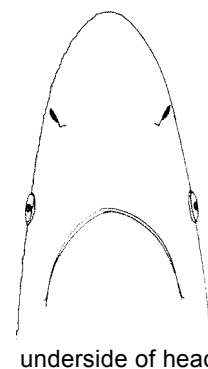
FAO En - Blue shark
 Fr - Peau bleue
 Sp - Tiburón azul

NATIONAL:

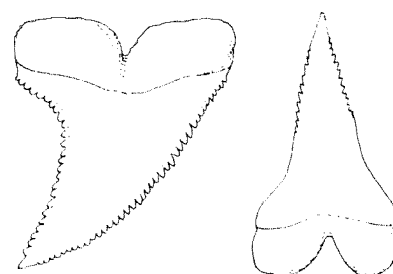
DISTINCTIVE CHARACTERS:

A very slender, fusiform shark. Snout long, (its length greater than mouth width and narrowly rounded; upper labial folds very short; spiracles absent; nictitating eyelids present; teeth serrated, broadly triangular and curved in upper jaw, narrower in lower jaw; upper medial tooth very large, nearly the size of teeth on either side of it (but sometimes absent); inner gill arches with gillraker papillae (visible through open mouth). First dorsal origin well posterior to free rear tips of pectoral fins, its base closer to pelvic than to pectoral fin origins; second dorsal fin much smaller than first; pectoral fins very long, narrow and somewhat falcate. A weak keel present on sides of caudal peduncle. No dermal ridge between dorsal fins.

Colour: dark blue above, bright blue on sides, white below, fading to purple-blackish after death; tips of pectorals and anal dusky.



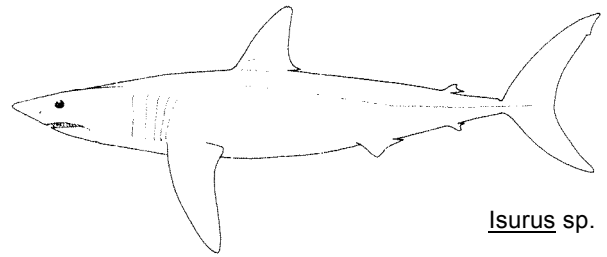
underside of head

upper tooth and lower tooth
 near centre

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

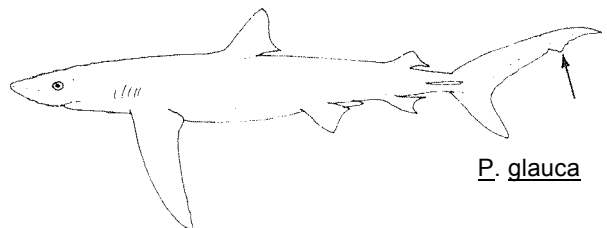
The combination of characters such as the unique colouration, the long snout and pectoral fins, the characteristic teeth, the posterior position of first dorsal fin, the gillrakers, and the weak precaudal keels, readily distinguishes this species from other carcharhinids in the area.

Isurus species (Lamnidae): also blue above but with characteristic unserrated teeth, a conical snout, no nictitating eyelids, longer gill slits, strong caudal keels, and a lunate caudal fin.



SIZE:

Maximum recorded: 383 cm, though larger specimens (up to 4.8 to 6.5 m) are mentioned on poor evidence in the literature. Most specimens below 335 cm.



GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

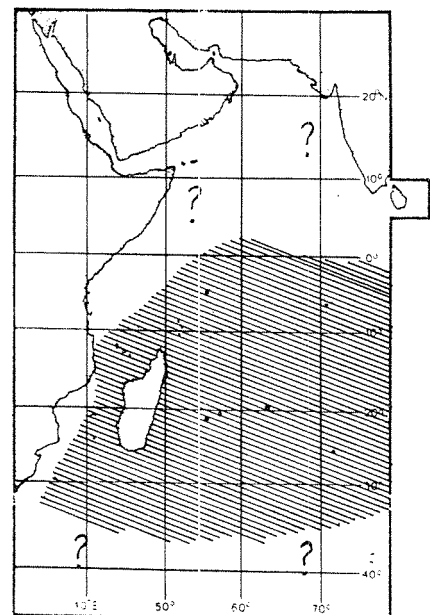
Apparently wide-ranging in the area, but details of its distribution in the area north of the Comores Islands are sketchy; apparently absent from the Red Sea and the "Gulf". the most wide-ranging of cartilaginous fishes, apparently present in all tropical to cool-temperate seas, with only a few exceptions.

A slow-cruising, very common oceanic species capable of bursts of speed when excited. Usually well offshore and in the open sea near the surface, but sometimes penetrating coastal waters. Viviparous, litters usually large, ranging from 4 to 63 young.

Feeds on a wide variety of bony fishes, small sharks, squids, pelagic crustaceans and occasionally sea birds and carrion. Sometimes aggressive to people in the water, and considered a dangerous species although attacks on people are relatively uncommon.

PRESENT FISHING GROUNDS:

Offshore waters in the area.



CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught mainly with pelagic longlines in the area.

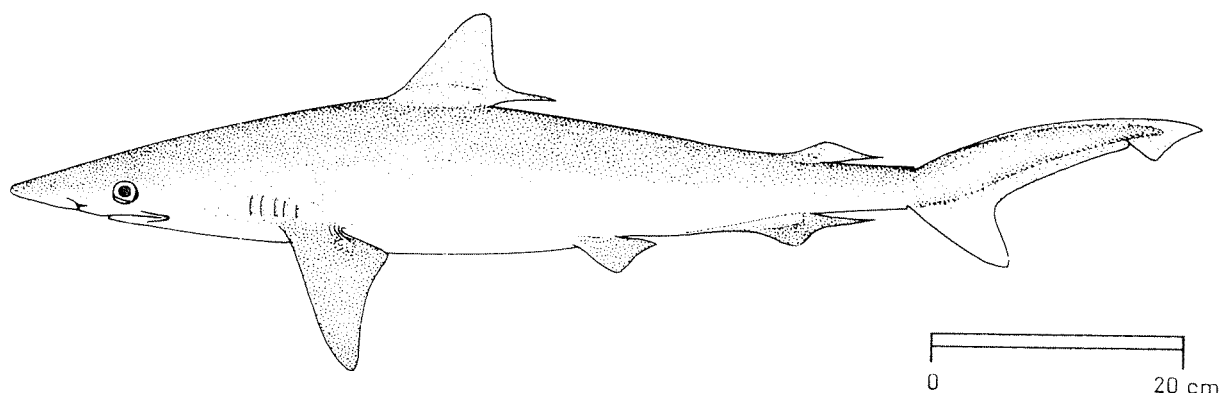
Mode of utilization not reported.

FAO SPECIES IDENTIFICATION SHEETS

FAMILY : CARCHARHINIDAE

FISHING AREA 51
(W. Indian Ocean)Rhizoprionodon acutus (Rüppell, 1837)

OTHER SCIENTIFIC NAMES STILL IN USE:

Scoliodon acutus (Rüppell, 1837)Scoliodon palasorra (Bleeker, 18153)Scoliodon walbeehmi (Bleeker, 1856)

VERNACULAR NAMES:

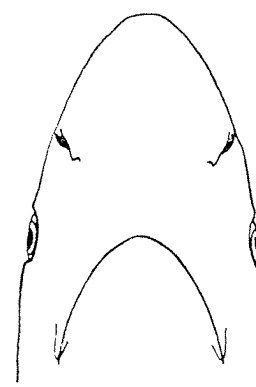
FAO: En - Milk shark
Fr - Requin à museau pointu
Sp - Cazón picudo

NATIONAL:

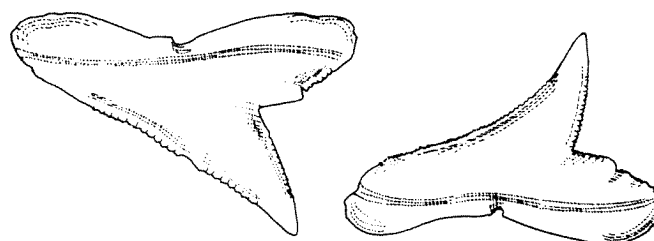
DISTINCTIVE CHARACTERS:

A small, slender shark. Snout long and depressed, its length usually greater than width of mouth, its tip narrowly rounded; eyes without a posterior notch; no spiracles; labial furrows well-developed and moderately long, the upper ones about equal in length to eye diameter and ending well behind eyes; teeth similar in both jaws, low-crowned, oblique and narrow-cusped, with the outer edges deeply notched and without cusplets, smooth-edged in young but often finely serrated in adults. Origin of first dorsal fin over or posterior to inner corners of pectoral fins, base length of first dorsal twice or less in distance between pectoral and pelvic fin bases, free rear tip usually anterior to pelvic fin origins; second dorsal fin smaller than anal fin, its origin far posterior to midlength of anal fin base; anal fin with slightly concave posterior margin and a pair of long preanal ridges.

Colour: grey or grey-brown above, white below, dorsal and anal fins with dusky or blackish edges, fins slightly darker than back.



underside of head



upper and lower lateral teeth

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Rhizoprionodon oligolinx: often stouter body, upper labial furrows very short, much less than eye length, precaudal vertebrae more, 84 to 91 (55 to 79 in R. acutus); fresh specimens examined lighter and more bronzy but usually darker when preserved.

Loxodon macrorhinus: labial furrows very short, eyes with posterior notches, origin of first dorsal fin behind pectoral free rear tips, first dorsal fin base over two times in distance between pectoral and pelvic fin bases.

Scoliodon laticaudus: head and snout broader and more flattened, labial furrows shorter, body stouter, free rear tip of first dorsal fin usually reaching pelvic mid bases, pectoral fins broadly triangular, preanal ridges short, and caudal fin not deeply notched on its postero-ventral margin.

Carcharhinus macroti: labial furrows very short, teeth with more erect cusps, the uppers with strong cusplets, first dorsal fin with a longer free rear tip, second dorsal fin origin in front of anal midbase, anal fin with very short preanal ridges and with a deeply notched posterior margin.

The combination of characters including the small size, long snout, slender body, absence of spiracles, moderately long labial furrows, unnotched eyes, oblique, narrow-cusped teeth without cusplets in both jaws, very low second dorsal fin originating about over anal fin insertion, small pectoral fins, slightly concave posterior margin of anal fin and long preanal ridges serves to distinguish this shark from other carcharhinids occurring in the area.

SIZE:

Maximum: to 102 cm; adults maturing at 68 to 72 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

In the area, widespread from South Africa and Madagascar along the east African coast to the Red Sea, then east to the "Gulf", Pakistan, India and Sri Lanka. Elsewhere, in the Eastern Atlantic from Madeira arid Mauritania to Angola; arid eastward from the area to Japan and Australia.

An extremely abundant, small, inshore and offshore shark of the tropics, ranging from the surfline down to at least 50 m depth, and occurring near the surface, as well as near the bottom. Viviparous, with 2 to 8 fetuses in a litter, gestation period about one year. Size at birth about 30 to 35 cm.

Feeds on small bony fishes and small crustaceans; harmless to people. Probably the most common or one of the most common small inshore sharks in the area.

PRESENT FISHING GROUNDS:

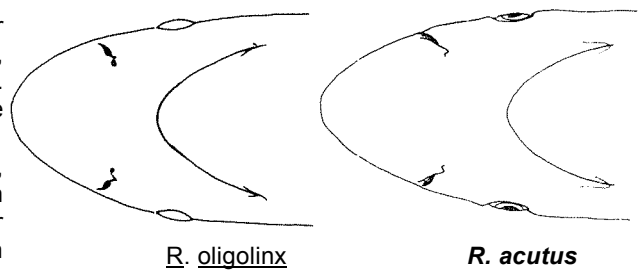
In the area, off Pakistan, India and Sri Lanka, but probably more widely taken in the region. Very common in catches.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

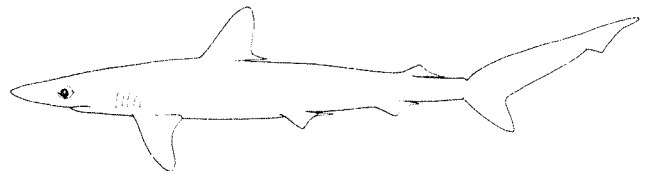
Separate statistics are not reported for this species.

Caught on line gear (including floating longlines set near the coasts), and especially floating and bottom gillnets.

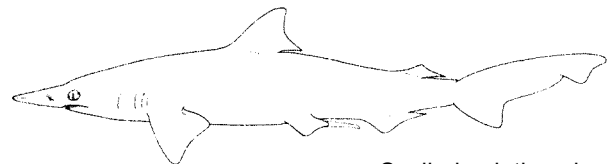
Utilized fresh for human consumption; also for fishmeal.



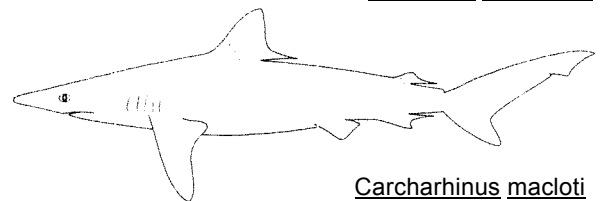
underside of head



Loxodon macrorhinus



Scoliodon laticaudus



Carcharhinus macroti

