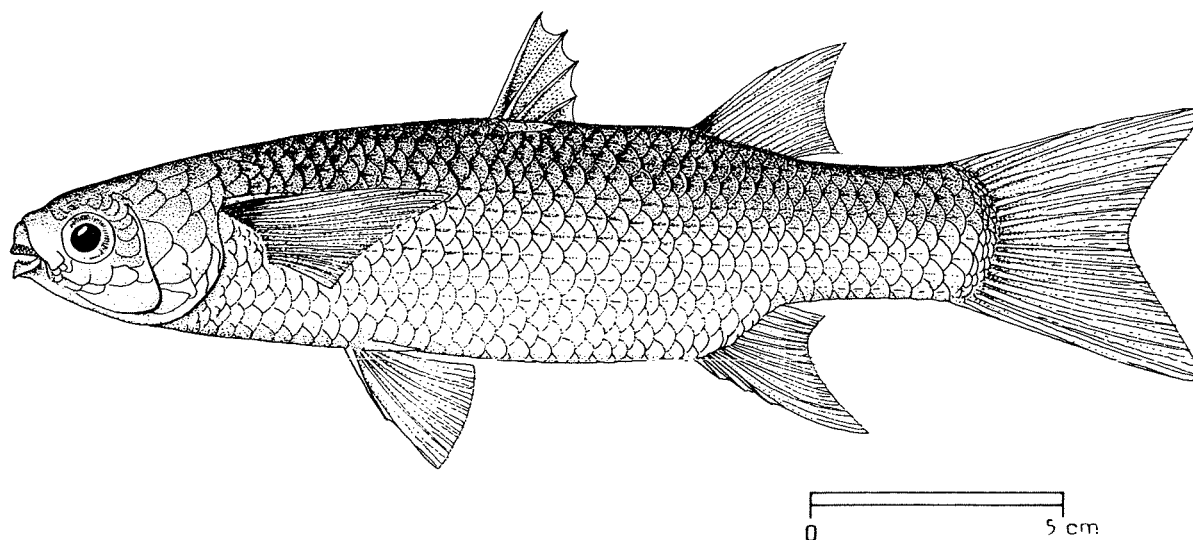


FAO SPECIES IDENTIFICATION SHEETS

FAMILY: MUGILIDAE

FISHING AREA 51
(W. Indian Ocean)Crenimugil crenilabis (Forsskål, 1775)OTHER SCIENTIFIC NAMES STILL IN USE: Mugil macrocheilus Bleeker, 1854

VERNACULAR NAMES:

FAO : En - Fringelip mullet
 Fr - Mulet boxeur
 Sp - Lisa labiada

NATIONAL:

DISTINCTIVE CHARACTERS:

Body robust. head wide, dorsally flattered. Head length 21.5 to 24% of standard length; fatty (adipose) tissue a rim around eye; lips thick, with 1 to 10 rows of papillae (the first appearing at about 7 cm standard length), flask-shaped when fully developed; lower lip with a high symphysial knob; hind end of upper jaw reaching the vertical between posterior nostril and eye; lips toothless, but teeth present on roof of mouth and on tongue; preorbital bone narrow, filling the space between the lip and the eye, slightly notched anteriorly in young, unnotched in adults. First dorsal fin origin nearer to caudal fin base than to snout tip; second dorsal fin origin on vertical slightly behind anal fin origin; pectoral axillary scale long, 33 to 39% of pectoral fin length; pectoral fin 76 to 102%, of the head length (increasing with size); anal fin with 3 spines and 9 soft rays; second dorsal and anal fins densely scaled. Scales in the lateral series 38 to 40.

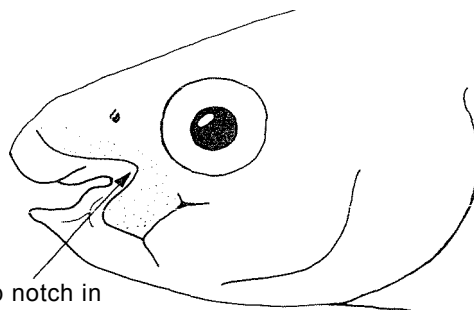
Colour: olive-green on back, white on sides and belly; a black spot at the base of the yellowish pectoral fin; other fins off-white.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA :

Oedalechilus labiosus: has lip ornamentation in the form of a single row of horny projection on the upper lip and a single, horny crenulated edge on lower lip; preorbital bone deeply notched anteriorly; scales in lateral series 34 to 36 (38 to 40 in C. crenilabis).

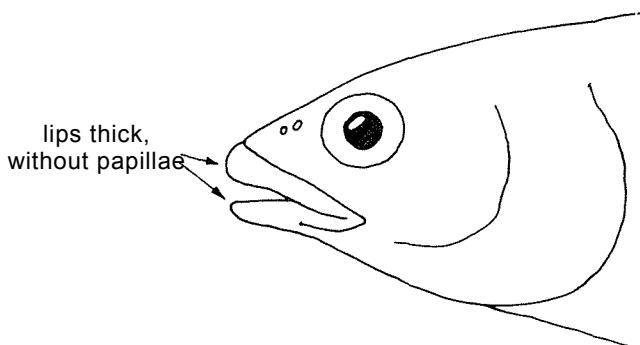
Agonostomus species: lips thick, without ornamentation; interorbital space convex; 2 anal fin spines (3 in C. crenilabis).

Other species of Mugilidae: lacking any ornamentation on lips.



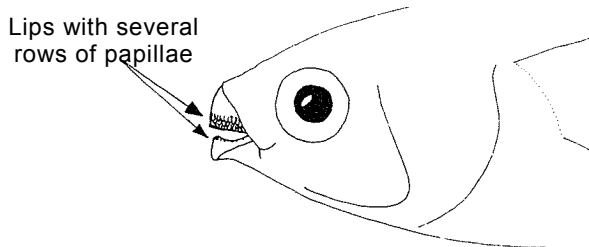
deep notch in preorbital bone

Oedalechilus labiosus



lips thick, without papillae

Agonostomus species



Lips with several rows of papillae

Crenimugil crenilabis

SIZE:

Maximum: 40 cm; common to 26 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

In the area, known to occur from Natal to the Red Sea and in the Laccadive Islands. Elsewhere, extending eastward to the Western Pacific, including Hawaii.

Inhabits shallow waters, especially coral reef areas.

PRESENT FISHING GROUNDS:

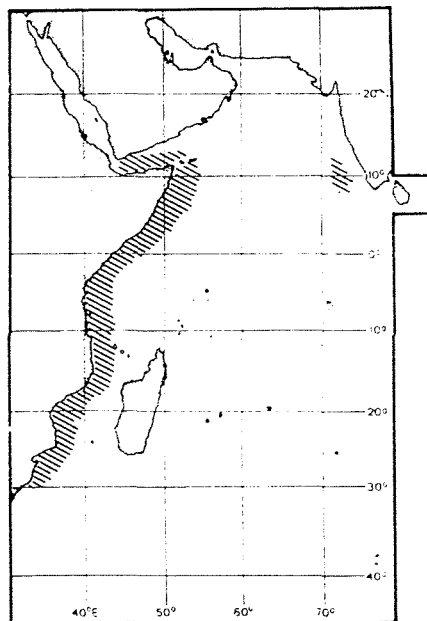
Coastal waters, especially coral reef areas, but nowhere abundant.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

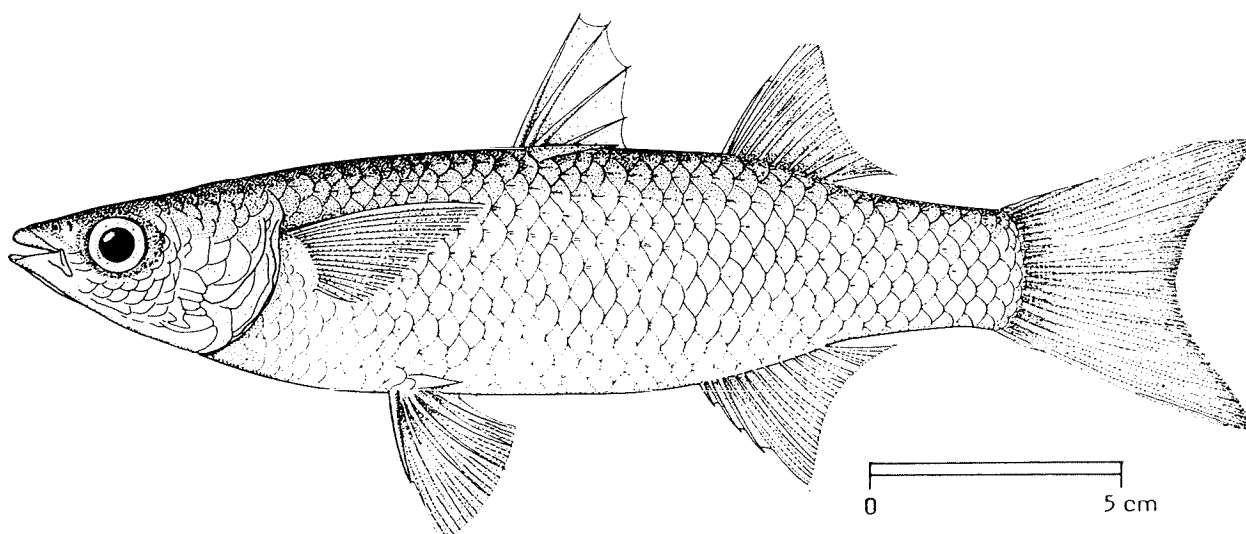
Caught, as bycatch, with seines.

Marketed mostly fresh, also used as live bait in the pole and line tuna fishing.



FAO SPECIES IDENTIFICATION SHEETS

FAMILY: MUGILIDAE

FISHING AREA 51
(W. Indian Ocean)Liza dumerili (Steindachner, 1870)OTHER SCIENTIFIC NAMES STILL IN USE: Mugil hoefleri Steindachner, 1892
Mugil canaliculatus Smith, 1935

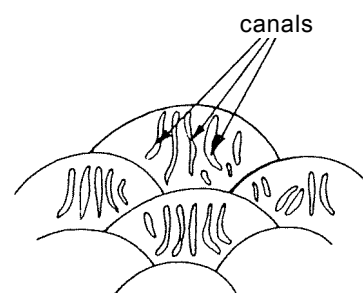
VERNACULAR NAMES:

FAO: En - Grooved mullet
Fr - Mulet bouri
Sp - Lisa acanalada

NATIONAL:

DISTINCTIVE CHARACTERS:

Body slender, elongate; head wide, dorsally flattened. Head length 24 to 25% of standard length; fatty (adipose) tissue a rim around eye; lips thin, the lower with a high symphysial knob; hind end of upper jaw reaching to vertical between posterior nostril and anterior rim of eye; teeth labial, 1 to 3 rows of sparse short teeth in upper lip, cilliiform teeth in lower lip of young, absent in adults; preorbital bone moderately wide, filling the space between lip and eye, notched anteriorly. First dorsal fin origin equidistant from snout tip and caudal fin base; second dorsal fin origin slightly behind vertical from anal fin origin; pectoral axillary scale absent; pectoral fin length 90 to 96% of head length; anal fin with 3 spines and 9 (rarely 8) soft rays; second dorsal and anal fins lightly scaled anteriorly and along base. Scales in lateral series 34 to 39; 5 to 8 mucus canals on dorsal scales.



scales on top of head

Colour: overall silvery, darker above.

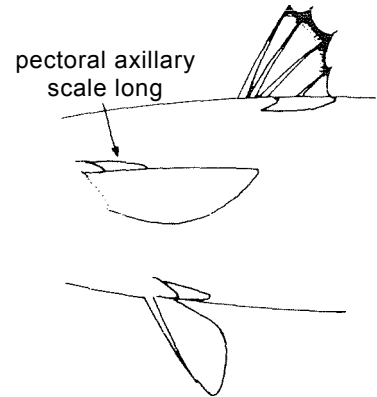
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Other *liza* species: less than 4 mucus canals on dorsal scales (5 to 8 in *L. dumerili*).

Agonostomus species: lips thick, interorbital space convex; 2 anal fin spines (3 in *L. dumerili*).

Myxus capensis: 43 to 45 scales in lateral series (34 to 39 in *L. dumerili*).

Other species of Mugilidae: possess an elongate pectoral axillary scale.



Other species of Mugilidae

SIZE:

Maximum: 23 cm; common to 22 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Found only in the southern part of the area, from Delagoa Bay to Durban. Elsewhere extending in the eastern Atlantic up to Senegal.

A marine species, usually found in shallow coastal waters.

PRESENT FISHING GROUNDS:

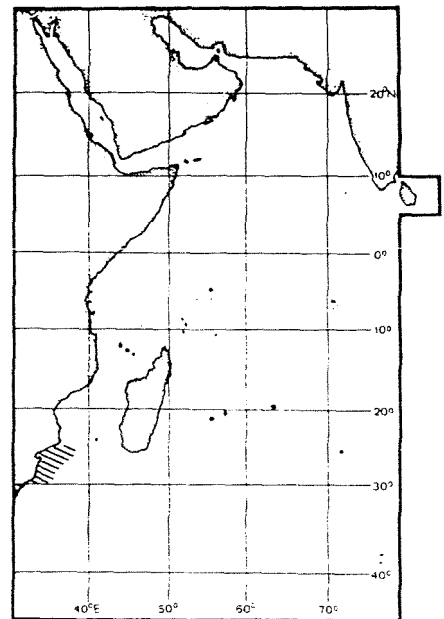
Coastal waters throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

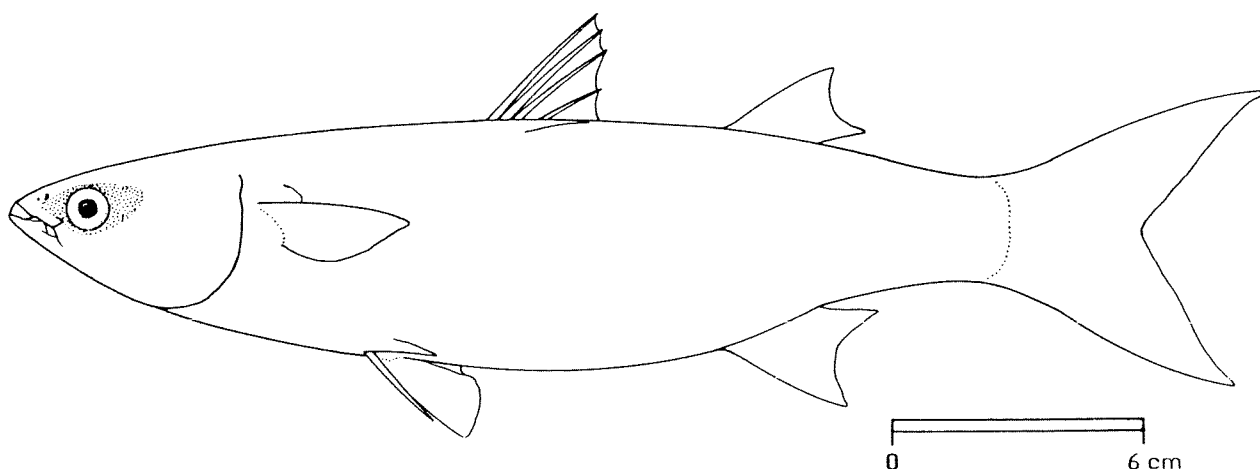
Caught with beach seines, bottom trawls and trammel nets.

Marketed mostly fresh.



FAO SPECIES IDENTIFICATION SHEETS

FAMILY: MUGILIDAE

FISHING AREA 51
(W. Indian Ocean)*Liza richardsoni* (A. Smith, 1849)OTHER SCIENTIFIC NAMES STILL IN USE : *Liza ramada* J.L.B. Smith, 1948 (non-Risso, 1826)

VERNACULAR NAMES:

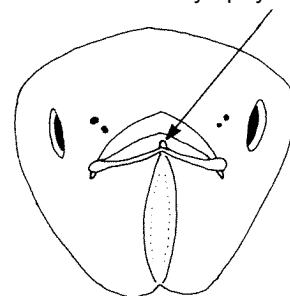
FAO : En - South African mullet
 Fr - Mulet sudafricain
 Sp - Lisa sudafricana

NATIONAL:

DISTINCTIVE CHARACTERS:

Body slender, elongate, head moderately wide, dorsally flattened. Head length 25 to 28% of standard length; fatty (adipose) tissue only a rim around eye; lips thin, lower lip with a high symphysial knob, folding up at hind end to obscure the upper lip; hind end of upper jaw at vertical midway between posterior nostril and anterior rim of eye; teeth labial, long teeth on edge of upper lip with scattered smaller teeth behind, lower lip toothless; preorbital bone wide, filling the space between lip and eye, notched anteriorly. First dorsal fin origin slightly nearer to snout tip than to caudal fin base; second dorsal fin origin on vertical from anal fin base; pectoral axillary scale rudimentary or absent; pectoral fin length 57 to 68% of head length; anal fin with 3 spines and 9 soft rays; second dorsal and anal fins lightly scaled anteriorly and along base. Scales in lateral series 43 to 48; 15 scales in a transverse series.

symphysial knob



anterior view of head

Colour: back bluish-grey, belly silvery.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

All other species of Mugilidae: lack the upward fold of the posterior end of the upper lip.

SIZE:

Maximum: 40 cm; common to 30 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

In the area. found only from Natal southward to the west coast of South Africa.

PRESENT FISHING GROUNDS:

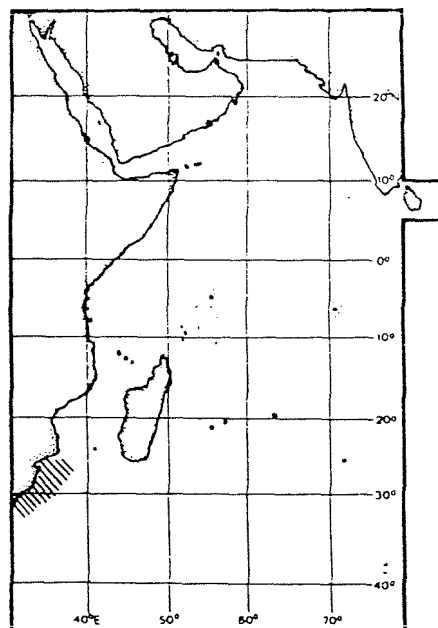
Coastal waters throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

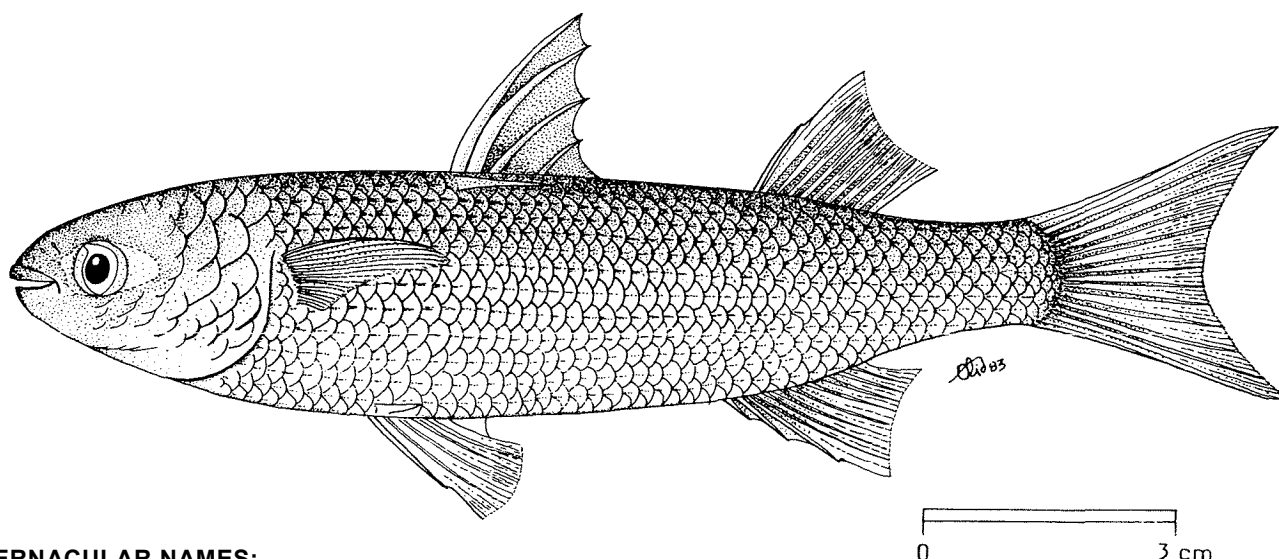
Caught with beach seines and gillnets.

Marketed fresh.



FAO SPECIES IDENTIFICATION SHEETS

FAMILY: MUGILIDAE

FISHING AREA 51
(W. Indian Ocean)Liza abu (Heckel, 1846)OTHER SCIENTIFIC NAMES STILL IN USE: Mugil (Liza) abu zarondnyi Berg, 1949
Mugil hashni Misra, 1943

VERNACULAR NAMES:

FAO: En - Abu mullet
Fr - Mulet abu
Sp - Lisa abú

NATIONAL:

DISTINCTIVE CHARACTERS:

Body moderately robust; head wide, dorsally flattened. Head length 23 to 24.5% of standard length; fatty (adipose) tissue extends partly over iris; lips thin, lower lip with a high symphyseal knob; hind end of upper jaw reaching vertical from anterior rim of eye; teeth labial, peglike, in a single row in upper lip, ciliate in lower lip; teeth absent on roof of mouth; preorbital bone slender, filling the space between lip and eye, slightly notched. First dorsal fin origin nearer to snout tip than to caudal fin base; second dorsal fin origin on vertical through end of anterior third of anal fin base; pectoral axillary scale rudimentary; pectoral fin 75 to 78% of head length reaching vertical through first dorsal fin origin; anal fin with 3 spines and 8 to 10 soft rays; second dorsal and anal fins lightly scaled anteriorly and along base. Scales in lateral series 44 to 50.

Colour: light brown dorsally, silvery on sides and below.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Liza tricuspidens: teeth in upper lip tricuspid.

Other Liza species: pectoral fin not reaching vertical through first dorsal fin origin; scales in lateral series fewer than 45 (44 to 50 in L. abu).

Agonostomus species: lips thick, inter-orbital space convex; 2 anal fin spines (3 in Liza species).

Myxus capensis: teeth present on roof of mouth; pectoral fin not reaching to vertical through first dorsal fin origin.

Other species of Mugilidae: pectoral axillary scale long.

SIZE:

Maximum: 20 cm; common to 17 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Recorded only from the Tigris, Euphrates and Indus rivers.

Occurs in small schools, mainly in freshwater, sometimes found in estuaries.

PRESENT FISHING GROUNDS:

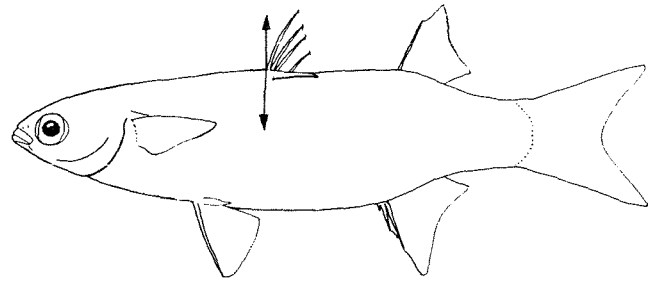
Taken mainly in subsistence fisheries in rivers.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

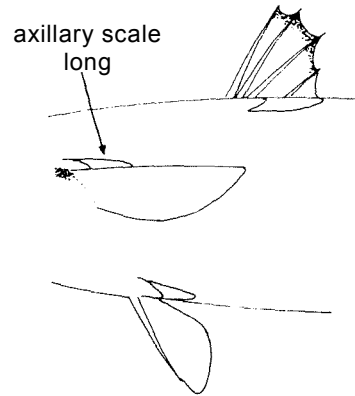
Separate statistics are not reported for this species.

Caught with artisanal gear.

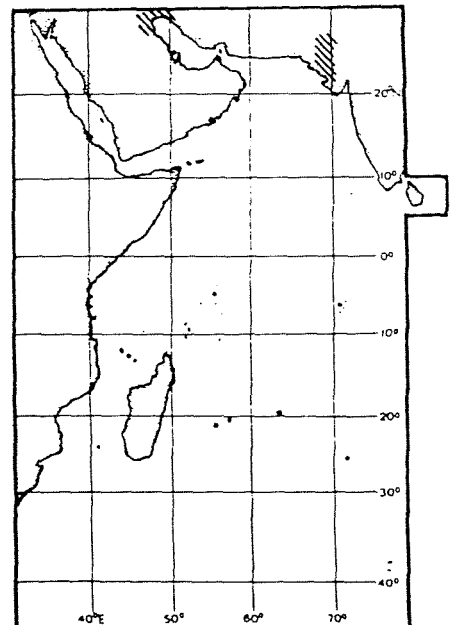
Marketed fresh.



other Liza species

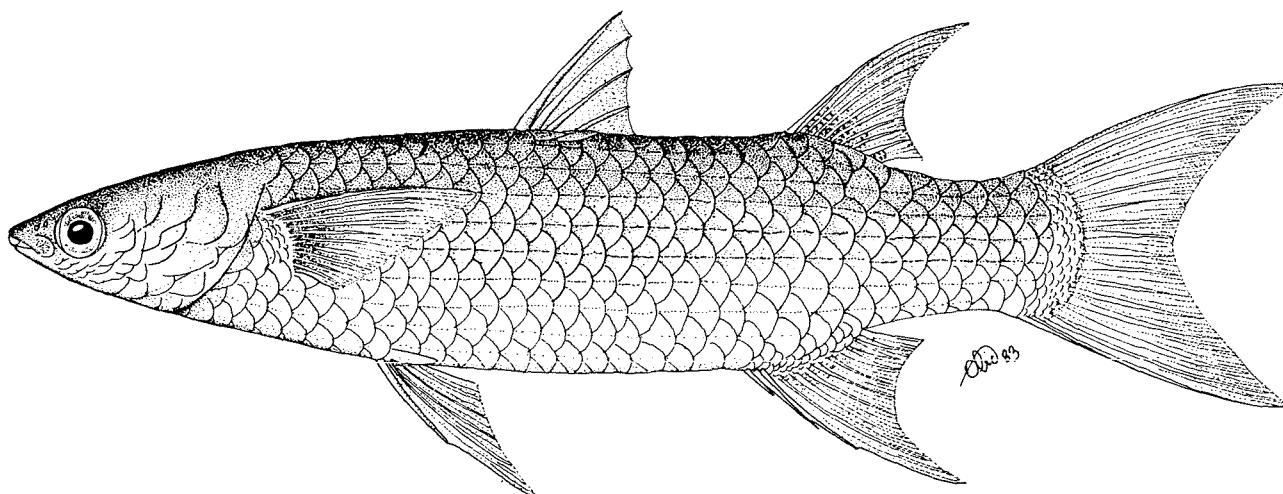


other species of Mugilidae



FAO SPECIES IDENTIFICATION SHEETS

FAMILY: MUGILIDAE

FISHING AREA 51
(W. Indian Ocean)Liza alata (Steindachner, 1892)OTHER SCIENTIFIC NAMES STILL IN USE : Liza diadema (Gilchrist & Thompson, 1911)

VERNACULAR NAMES:

FAO: En - Diamond mullet
Fr - Mulet diamant
Sp - Lisa diamante

NATIONAL:



DISTINCTIVE CHARACTERS:

Body robust, compressed toward tail; head wide, dorsally flattened, somewhat pointed. Head length 22.5 to 25% of standard length; fatty (adipose) tissue a rim around eye; lips thin, lower lip with a high symphyseal knob; hind end of upper jaw reaching the vertical from posterior nostril; teeth labial, 3 to 5 rows of unicuspid teeth in the upper lip, lower lip toothless, teeth on roof of mouth absent; preorbital bone wide, filling the space between lip and eye, slightly notched anteriorly. First dorsal fin origin nearer to snout tip than to caudal fin base; second dorsal fin origin at vertical through anterior third of anal fin base; pectoral axillary scale absent; pectoral fin length 78 to 90% of head length not reaching vertical from first dorsal fin origin; anal fin with 3 spines and 9 soft rays; second dorsal and anal fins falcate and densely scaled; pelvic fin falcate, unusually long, reaching to beyond base of the third spine and 93 to 97% of the pectoral fin length. Scales in lateral series 29 to 31.

Colour: light brown dorsally, silvery on sides and below; a dark streak on upper scales; fins greyish.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

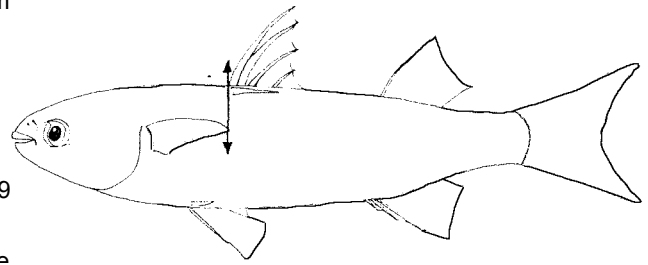
Liza abu: pectoral fin tip reaches vertical from first dorsal fin origin.

Other Liza species: fins not markedly falcate and pelvic fins shorter, less than 93% of pectoral fin length (93 to 97% in L. alata).

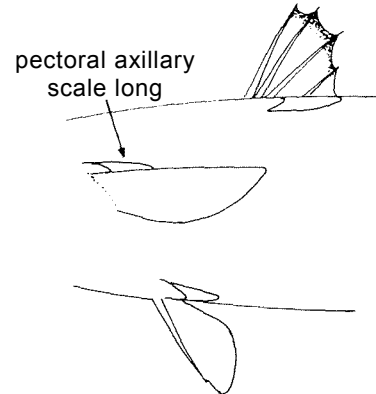
Myxus capensis: 43 to 45 scales in lateral series (29 to 31 in L. alata); teeth present on roof of mouth.

Agonostomus species: lips thick; interorbital space highly convex; 2 anal fin spines (3 in Liza species).

Other species of Mugilidae: possess a long pectoral axillary scale.



Liza abu



SIZE:

Maximum: 46 cm; common to 35 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

South Africa and Madagascar; also northern Australia and Tonga; not recorded from the northern part of the Indian Ocean.

Inhabits shallow waters.

PRESENT FISHING GROUNDS:

Coastal waters throughout its range. Taken in subsistence fisheries.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught with artisanal gear.

Marketed fresh.

