

**BONY FISHES**

**MUGILIDAE**

**Loc. names :** Boi, Mori, Chhodi, Pharra, etc. (Sin);  
Murbo, Mundi, etc. (Bal)

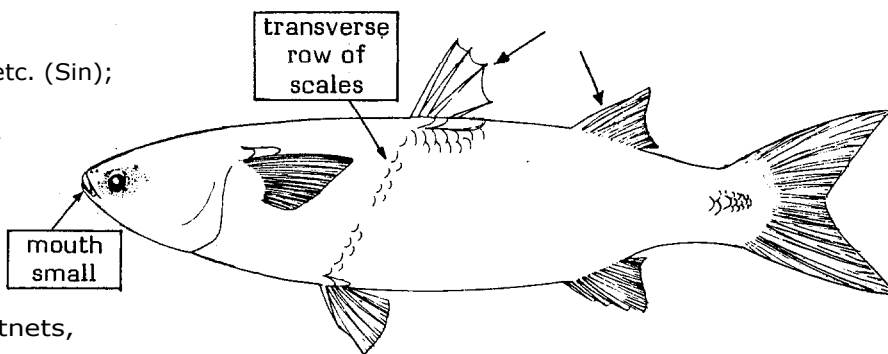
**FAO names :** En - Mulletts  
Fr - Mulets  
Sp - Lisas, pardetes

**Size :** Max.: to 90 cm

**Fishing gear :** Caught with castnets, setnets, liftnets and beach seines

**Habitat and biology :** Inhabit coastal marine waters, estuaries and fresh water. Most species are adaptable to great changes in salinity, from almost fresh water to salinities of 75 ‰. Most species spawn at sea and feed on bottom detritus by taking in sand and mud and rejecting the most indigestible parts. Due to their rapid growth and hardiness, they are often used in fish pond culture

**Interest to fisheries :** These have been important foodfishes since ancient times. They are appreciated as food and usually marketed fresh or dry-salted. Some species also used for bait for handline and longline. The Handbook of Fisheries Statistics of Pakistan (1973-83) reports catches of mullets ranging from 1 018 t (1981) to 8 768 t (1978), with an average of 4 575 t



Liza abu (Heckel, 1846)

**Synonyms** Muqil (Liza) abu zarondnyi Berg, 1949  
Muqil hashni Misra, 1943

**Loc. names :** Boi, Mori (Sin); Anjara (Bal)

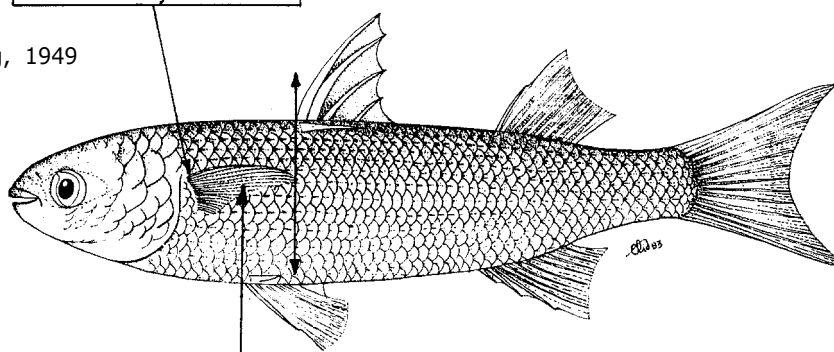
**FAO names :** En - Abu mullet  
Fr - Mulet abu  
Sp - Lisa abu

**Size :** Max.: 20 cm; common to 17 cm

**Fishing gear :** Caught with artisanal gear

**Habitat and biology :** Occurs in small schools, mainly in freshwater, sometimes in estuaries

pectoral axillary scale rudimentary or absent



Liza carinata (Valenciennes, 1836)

**Synonyms** : None

**Loc. names** : Boi, Mori (Sin); Murbo (Bal)

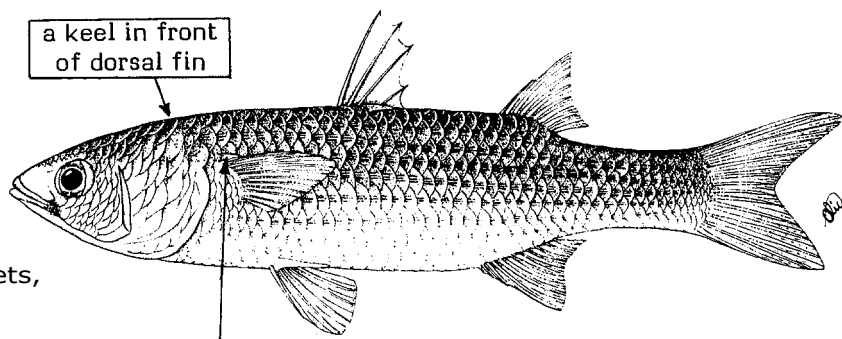
**FAO names** : En - Keeled mullet  
Fr - Mulet caréné  
Sp - Lisa de carena

**Size :** Max.:

**Fishing gear :** Caught with castnets, setnets, liftnets and beach seines

**Habitat and biology :** Lives mainly in marine coastal waters

a keel in front of dorsal fin



pectoral axillary scale rudimentary or absent

**BONY FISHES**

**MUGILIDAE**

Liza macrolepis (Smith, 1849)

**Synonyms** : Mugil borneensis Bleeker, 1851  
Mugil troschelii Bleeker, 1858  
Liza akame Tanaka, 1916

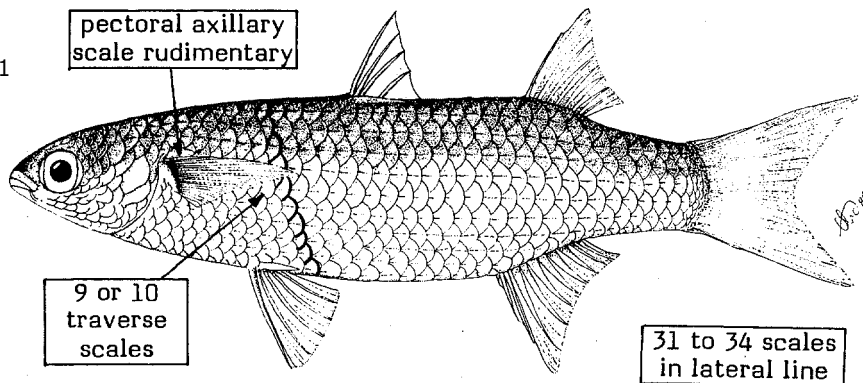
**Loc. names** : Boi, Chhodi (Sin);  
Mundi, Murbo (Bal)

**FAO names** : En - Largescale mullet  
Fr - Mulet à grandes écailles  
Sp - Lisa godeya

**Size** : Max.: 60 cm; common to 25 cm

**Fishing gear** : Caught with gillnets, castnets, stakenets, barrier nets, liftnets and beach seines

**Habitat and biology** : Inhabits shallow coastal, waters estuaries and backwaters, forming large schools during the spawning season. Able to survive 87‰ salinity. Feeds on detritus small algae, diatoms, etc. taken in with sand or mud. This is one of the most common species of mullet in the Indian Ocean



Liza melinoptera (Valenciennes, 1836)

**Synonyms** Mugil ceramensis Bleeker, 1852  
Mugil oligolepis Day, 1876; Smith, 1935, 1948, 1949,  
non-Bleeker, 1859  
Mugil anpinensis Oshima, 1922

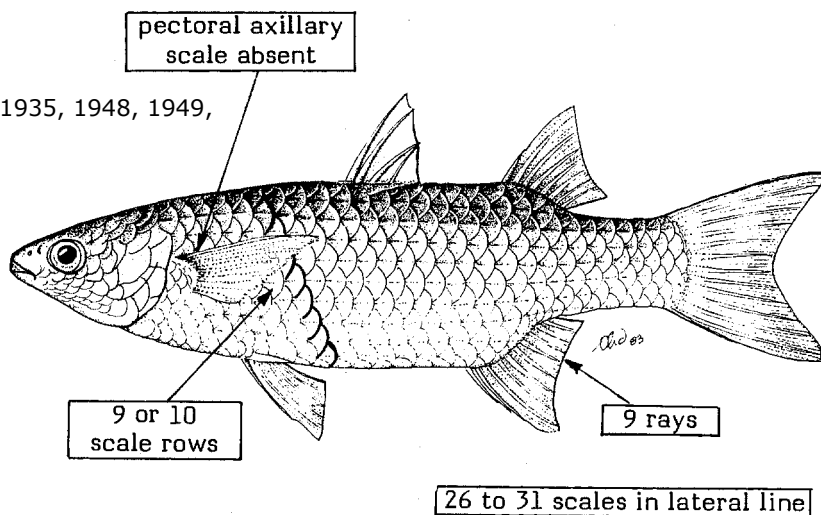
**Loc. names** : Boi, Mori (Sin); Murbo (Bal)  
Large-scale grey mullet (En)

**FAO names** : En - Otomebora mullet  
Fr - Mulet otomebora  
Sp - Lisa otomebora

**Size** : Max.: 22 cm; common to 18 cm

**Fishing gear** : Caught with gillnets, castnets,  
stakenets and beach seines

**Habitat and biology** : Inhabits coastal waters and estuaries. Spawning takes place at sea. Feeds on algae, diatoms, minute bottom-living organisms and organic material found in mud or sand



Liza parsia (Hamilton & Buchanan, 1822)

**PLATE XXI, 122**

**Synonyms** : None

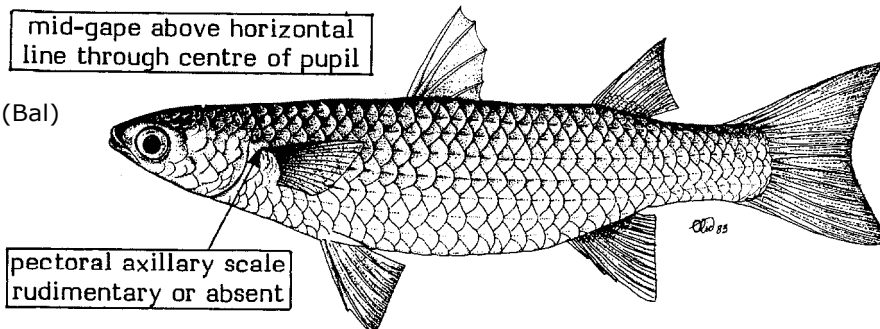
**Loc. names** : Boi, Parse (Sin); Polat, Murba (Bal)

**FAO names** : En - Gold-spot mullet  
Fr - Mulet joue d'or  
Sp - Lisa mejilla dorada

**Size** : Max.: 16 cm; common to 15 cm

**Fishing gear** : Caught with gillnets, castnets,  
stakenets, liftnets and beach seines

**Habitat and biology** : A schooling species, found in shallow coastal waters including brackish waters. Capable to survive in waters with salinity up to 87 ‰. Spawning takes place at sea. Feeds on small bottom invertebrates and detritus found in sand or mud



**BONY FISHES**

**MUGILIDAE**

Liza subviridis (Valenciennes, 1836)

**Synonyms** : Mugil dussumieri Valenciennes, 1836  
Mugil jerdoni Day, 1876

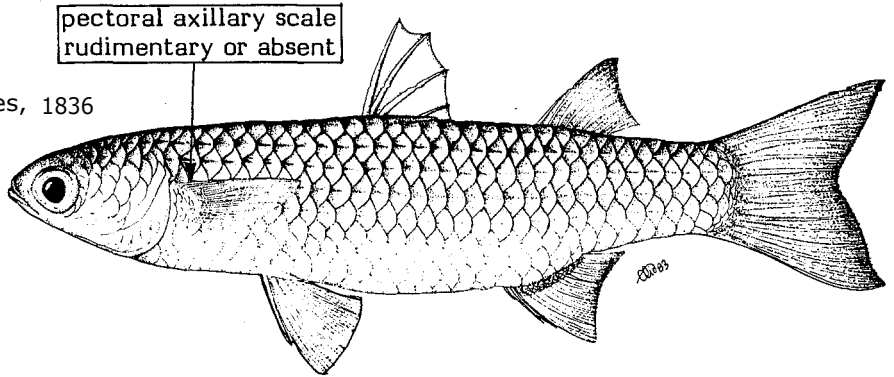
**Loc. names** : Boi, Chhodi (Sin);  
Maing, Murbo (BAL)

**FAO names** : En - Greenback mullet  
Fr - Mulet dos vert  
Sp - Lisa lomo verde

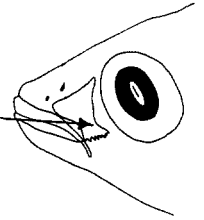
**Size** : Max.: 30 cm; common to 25 cm

**Fishing gear** : Caught with gillnets, castnets, stakenets, liftnets and beach seines

**Habitat and biology** : Inhabits coastal waters, including estuarine areas. Spawning takes place at sea. Feeds on detritus and small bottom organisms, taken in with sand or mud



preorbital bone narrow, not filling space between mouth and eye



Liza tade (Forsskål, 1775)

**Synonyms** : Mugil planiceps Valenciennes, 1836

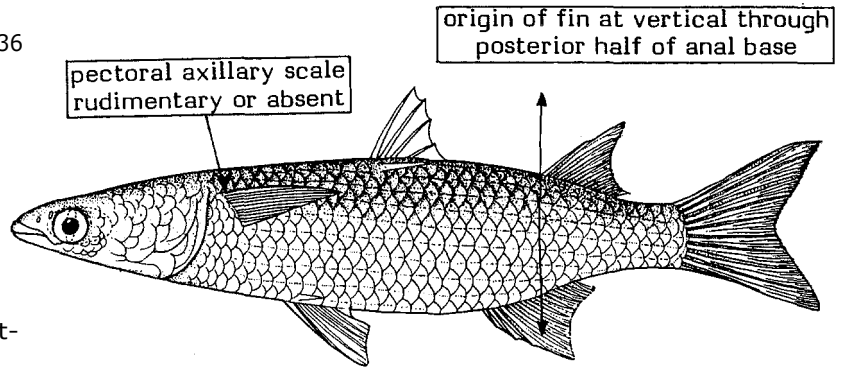
**Loc. names** : Boi, Chhodi (Sin); Mundi (Bal)

**FAO names** : En - Tade mullet  
Fr - Mulet tade  
Sp - Lisa tade

**Size** : Max.: 70 cm; common to 33 cm

**Fishing gear** : Caught mainly with gillnets, castnets, stakenets and beach seines

**Habitat and biology** : Mainly a marine species, often entering estuaries and backwaters. Feeds on small algae, diatoms and other organic matter taken in with sand and mud



origin of fin at vertical through posterior half of anal base

Liza vaiqiensis (Quoy & Gaimard, 1824)

**Synonyms** : None

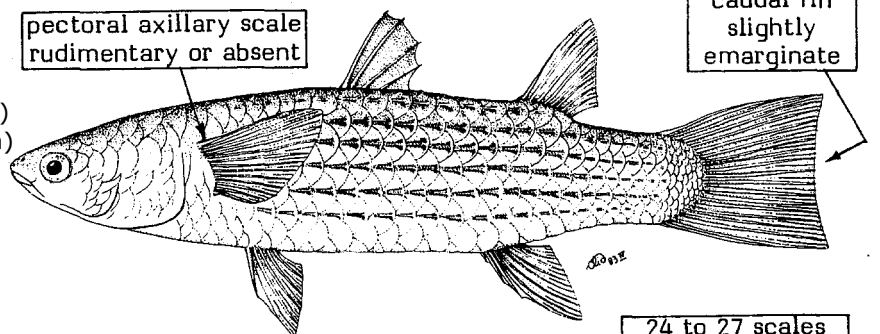
**Loc. names** : Mangan (Sin);  
Murbo, Gid, Pee-ant (juv.)(Bal)  
Diamond-scale grey mullet (En)

**FAO names** : En - Square-tail mullet  
Fr - Mulet mopiro  
Sp - Lisa mopiro

**Size** : Max.: 55 cm; common to 35 cm

**Fishing gear** : Caught mainly with castnets, stakenets and beach seines

**Habitat and biology** : A coastal species, entering rivers during the rainy season. Feeds on small bottom organisms, algae, diatoms and detritus, taken in with mud and sand. Sexually ripe specimens common in March and July along the Baluchistan coast



caudal fin slightly emarginate

24 to 27 scales in lateral line

BONY FISHES

MUGILIDAE

Mugil cephalus Linnaeus, 1758

PLATE XXI, 123

**Synonyms :** Mugil oür Forsskål, 1775  
Mugil japonicus Schlegel, 1845

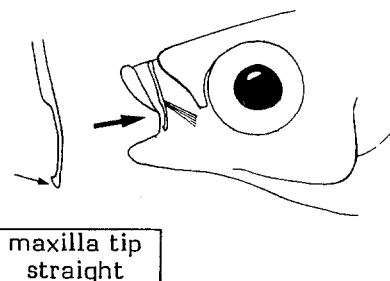
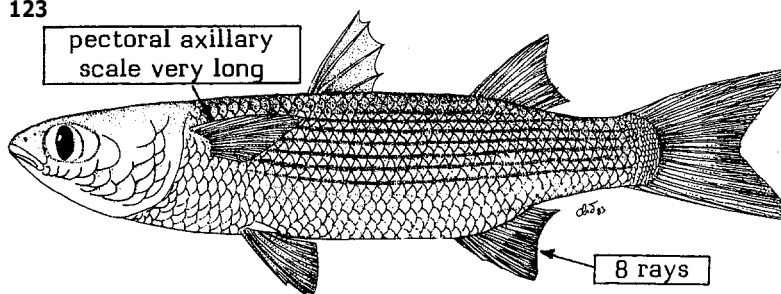
**Loc. names :** Boi, Meengh (Sin);  
Murbo, Tagan (Bal)  
Grey mullet; Springer (En)

**FAO names :** En - Flathead mullet  
Fr - Mulet cabot  
Sp - Pardete

**Size :** Max.: 90 cm; common to 35 cm

**Fishing gear :** Caught with gillnets, castnets, stakenets, barrier nets, liftnets and beach seines

**Habitat and biology :** A coastal species, found also in estuaries and freshwater, capable of standing salinities up to 87 ‰ and temperatures between 12 and 25 C. Feeds on detritus, algae and small bottom organisms, taken in with sand and mud and rejecting the indigestible parts. During the spawning migration the feeding is reduced or completely interrupted. For further information see CSIRO Fisheries Synopsis No.1



Valamugil cunnesius (Valenciennes, 1836)

**Synonyms** Mugil amarulus Valenciennes, 1836  
Mugil strongylocephalus Richardson, 1846  
Mugil ophuysenii Bleeker, 1859  
Mugil longimanus Günther, 1861  
Mugil kelaartii Günther, 1861

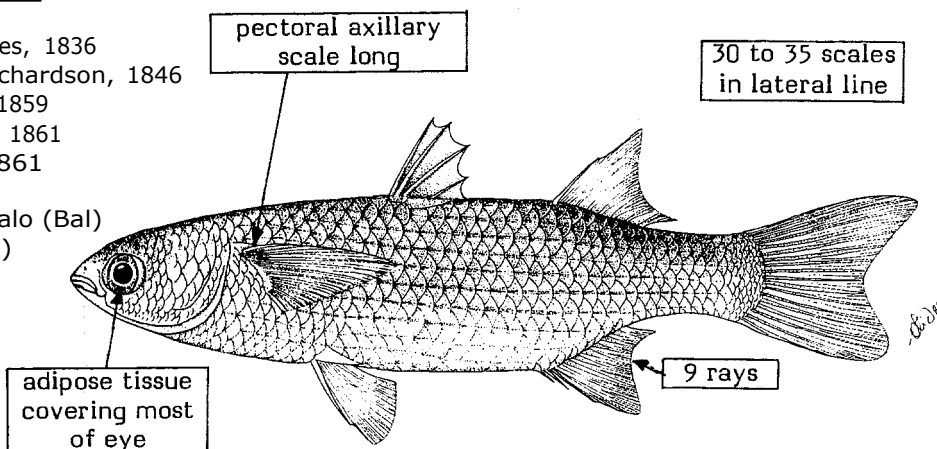
**Loc. names :** Pharra, Boi (Sin); Murbo, Palo (Bal)  
Roundhead grey mullet (En)

**FAO names :** En - Longarm mullet  
Fr - Mulet longue aile  
Sp - Lisa de aleta larga

**Size :** Max.: 41 cm; common to 25 cm

**Fishing gear :** Caught with gillnets, castnets, stakenets, barrier nets, beach seines and occasionally in trawls

**Habitat and biology :** A schooling species, found in coastal waters, estuaries and backwaters. Forms large aggregations when spawning takes place. Feeds on algae, diatoms, small bottom organisms and detritus taken in with sand and mud



Valamugil seheli (Forsskål, 1775)

**Synonyms** : Mugil axillaris Valenciennes, 1836  
Mugil caeruleomaculatus Lacepède, 1803

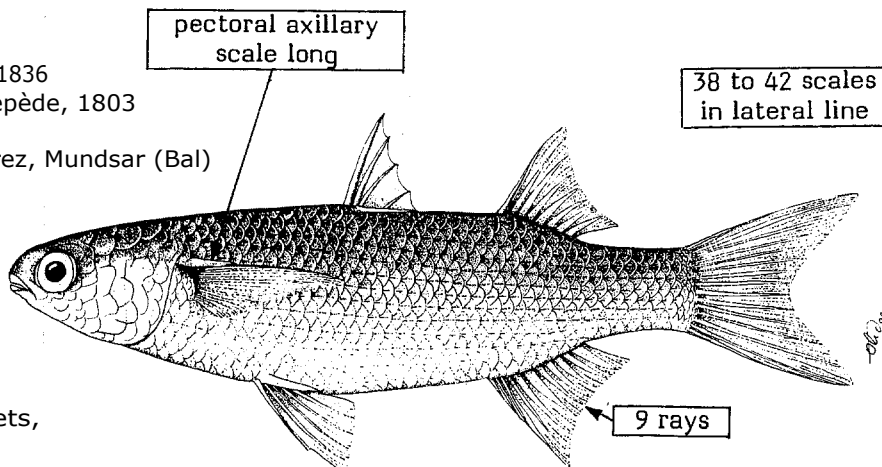
**Loc. names :** Boi, Pharra (Sin); Murbo, Guarez, Mundsar (Bal)  
Bluespot grey mullet (En)

**FAO names :** En - Blue-spot mullet  
Fr - Mulet à tache bleue  
Sp - Lisa de mancha azul

**Size :** Max.: 50 cm; common to 24 cm

**Fishing gear :** Caught with gillnets, stakenets, barrier nets and beach seines

**Habitat and biology :** A schooling species, found in estuaries and backwaters; spawning takes place at sea. Feeds on algae, diatoms, small bottom organisms and detritus taken in with sand and mud



**BONY FISHES**

**MUGILIDAE**

Valamugil speigleri (Bleeker, 1858)

**Synonyms** None **PLATE XXI, 124**

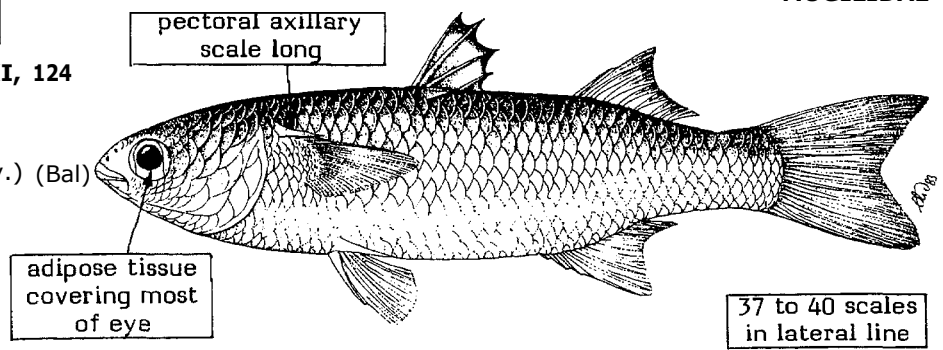
**Loc. names** : Boi, Pharra (Sin);  
Anjara, Murbo, Badli (juv.) (Bal)

**FAO names** : En - Speigler's mullet  
Fr - Mulet chiraya  
Sp - Lisa chiraya

**Size** : Max.: 20 cm; common to 14 cm

**Fishing gear** : Caught with gillnets, castnets, stakenets, barrier nets, beach seines and trawls

**Habitat and biology** : A coastal species, also in estuaries, backwaters and often entering fresh water. Feeds on small algae, diatoms, small bottom organisms and detritus taken in with sand or mud



37 to 40 scales in lateral line

**SPHYRAENIDAE**

**Loc. names** : Kund (Sin); Kund (Bal)

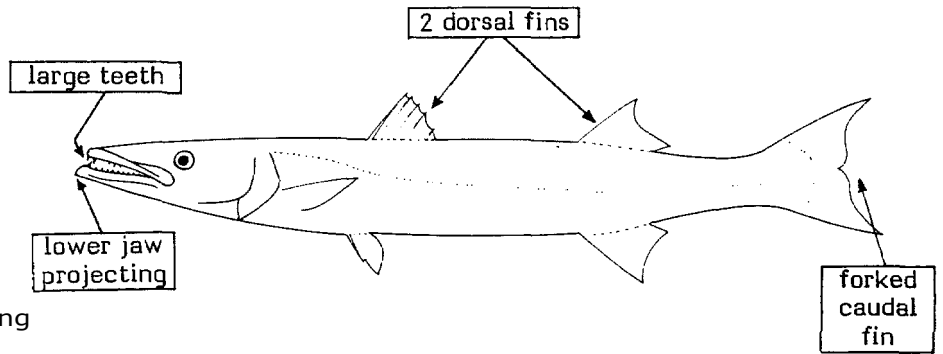
**FAO names** : En - Barracudas  
Fr - Barracudas, bécunes  
Sp - Barracudas, picudas

**Size** : Max.: 180 cm

**Fishing gear** : Caught mainly by trolling but also in trawls and gillnets

**Habitat and biology** : Mostly occurring in coastal waters, from the surface to 100 m depth. The young form large schools, adults are usually solitary. Known to be particularly voracious, the adults of the larger species being dangerous to man. Attacks are most frequent in shallow murky waters

**Interest to fisheries** : The Sphyraenidae are of some importance as food, the flesh being delicate and well flavoured. Usually marketed fresh, but also dry-salted for export to Sri Lanka. The Handbook of Fisheries Statistics of Pakistan (1973-83) reports catches of barracudas ranging from 1 962 t (1980) to 3 606 t (1981)



Sphyraena barracuda (Walbaum, 1792)

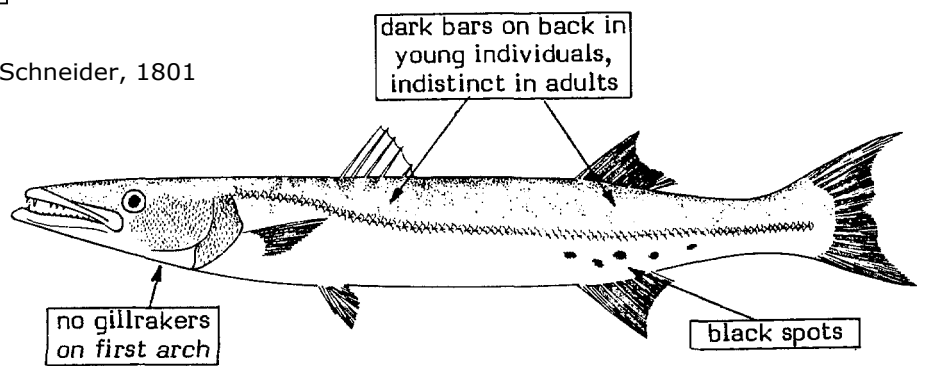
**Synonyms** : Sphyraena picuda Bloch & Schneider, 1801

**Loc. names** : Kund (Sin); Kund (Bal)  
Barracuda (En)

**FAO names** : En - Great barracuda  
Fr - Barracuda  
Sp - Picuda barracuda

**Fishing gear** : Taken by trolling, in trawls and in nets

**Habitat and biology** : In coastal waters, from near the surface to 100 m depth, the juveniles in shallow waters, including mangrove swamps and estuaries. This species is everywhere dreaded for its ferocity, the large individuals attacking man and not uncommonly causing death



dark bars on back in young individuals, indistinct in adults

no gillrakers on first arch

black spots

**BONY FISHES**

**SPHYRAENIDAE**

Sphyraena forsteri Cuvier, 1829

**Synonyms** None

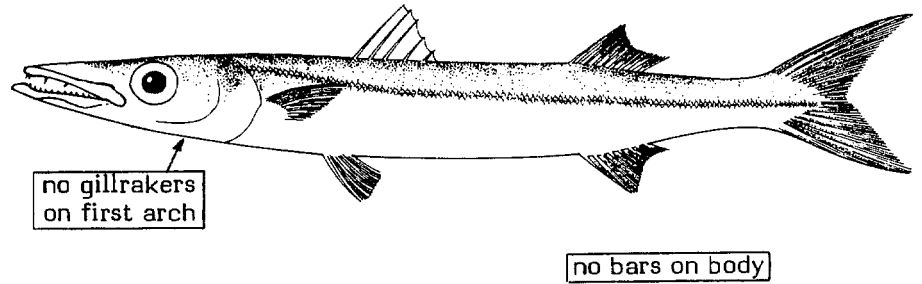
**Loc. names** : Kund (Sin); Kund (Bal)  
Barracuda (En)

**FAO names** : En - Bigeye barracuda  
Fr - Bécune de Forster  
Sp - Picuda de Forster

**Size** : Max.: 64 cm; common to 30 cm

**Fishing gear** : Caught by trolling and in trawls

**Habitat and biology** : In coastal waters over shallow banks, mainly close to the bottom. Feeds on fishes, penaeid shrimps and cephalopods



Sphyraena jello Cuvier, 1829

**Synonyms** : None

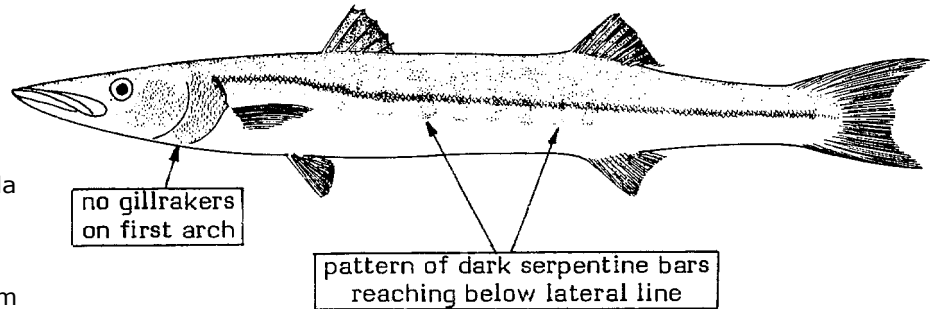
**Loc. names** : Kund (Sin); Kund (Bal)  
Barracuda (En)

**FAO names** : En - Pickhandle barracuda  
Fr - Barracuda jello  
Sp - Picuda serpentina

**Size** : Max.: 150 cm; common to 100 cm

**Fishing gear** : Caught by trolling and in trawls

**Habitat and biology** : In coastal waters, predominantly near the surface. Adults are solitary, young occur in schools and sometimes enter rivers. Feeds on fish and squid



Sphyraena obtusata Cuvier, 1829

**Synonyms** Sphyraena chrysotaenia Klunzinger, 1884  
Sphyraenella chrysotaenia: Dutt & Seshagiri Rao, 1867

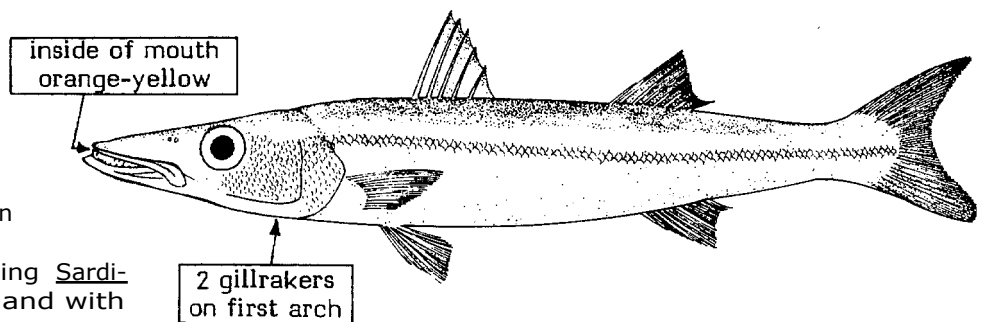
**Loc. names** Kund (Sin); Kund (Bal)  
Barracuda (En)

**FAO names** : En - Obtuse barracuda  
Fr - Bécune obtuse  
Sp - Picuda obtusa

**Size** : Max.: 40 cm; common to 25 cm

**Fishing gear** : Caught by trolling (using Sardinella species as bait), in trawls and with bottom gillnets

**Habitat and biology** : Found in coastal waters from the surface to the bottom, smaller individuals occurring in schools. Feeds mainly on fishes. Sexually ripe specimens found in December and April along the Baluchistan coast



**BONY FISHES**

Sphyraena putnamiae Jordan & Seale, 1905

**SPHYRAENIDAE**

**Synonyms** : Sphyraena bleekeri Williams, 1959

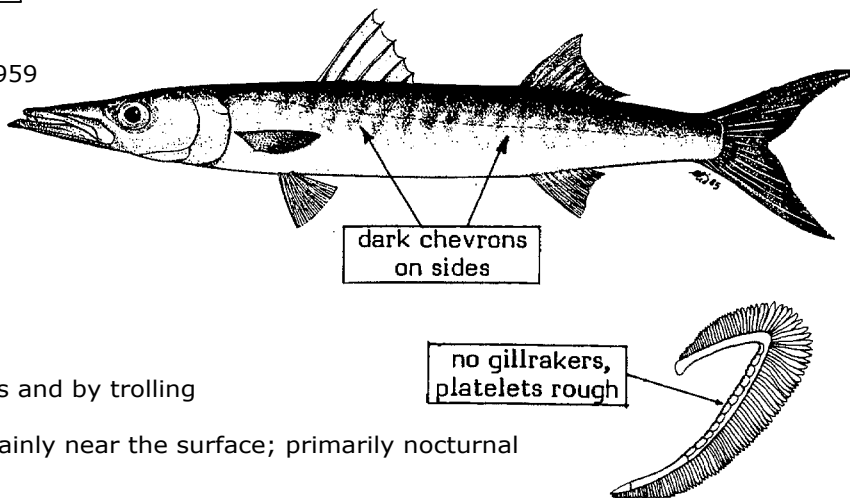
**Loc. names** : Kund (Sin); Kund (Bal)  
Barracuda (En)

**FAO names** : En - Chevron barracuda  
Fr - Bécune chevronnée  
Sp - Picuda galoneada

**Size** : Max.: 90 cm

**Fishing gear** : Caught in seines, bottom trawls and by trolling

**Habitat and biology** : A schooling species, mainly near the surface; primarily nocturnal



**POLYNEMIDAE**

**Loc. names** : Seeri, Ranwas (Sin); Gwanz (Bal)  
Tasselfishes (En)

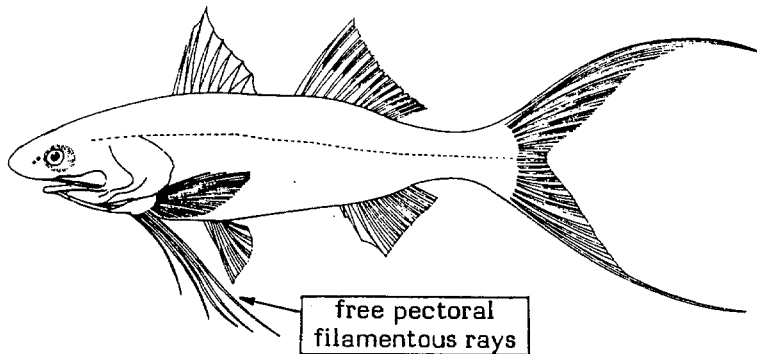
**FAO names** : En - Threadfins  
Fr - Barbures  
Sp - Barbudos

**Size** : Some species may reach 200 cm

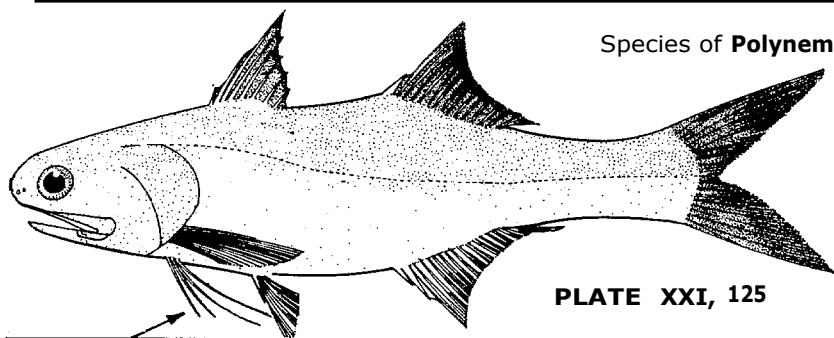
**Fishing gear** : Caught with beach seines, gill-nets, traps and bottom trawls

**Habitat and biology** : Found in shallow coastal waters, over sandy or muddy bottoms, some species in brackish waters and entering river mouths. Feed mainly on crustaceans and small fishes

**Interest to fisheries** : Some species of this family attain a large size and occur in large shoals in shallow coastal waters and creeks. Their flesh is highly appreciated. The air-bladder of Polynemus indicus is used for isinglass. The Handbook of Fisheries Statistics of Pakistan (1973-83) reports catches of threadfins ranging from 276 t (1983) to 3 166 t (1982) with an average of 785 t

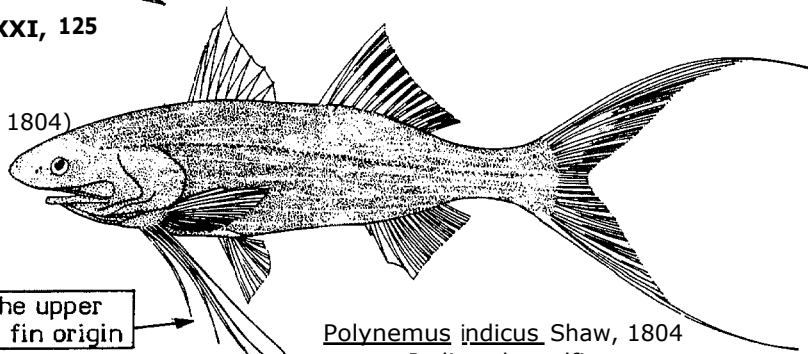


**Species of Polynemidae**



Leuetheronema tetradactylum (Shaw, 1804)  
Four finger threadfin  
size: to 200 cm

**PLATE XXI, 125**

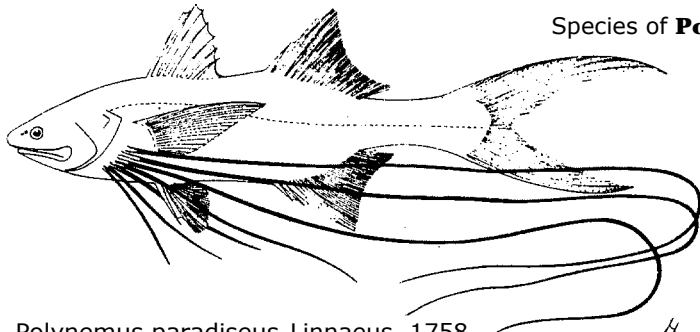


Polynemus indicus Shaw, 1804  
Indian threadfin  
size: to 140 cm

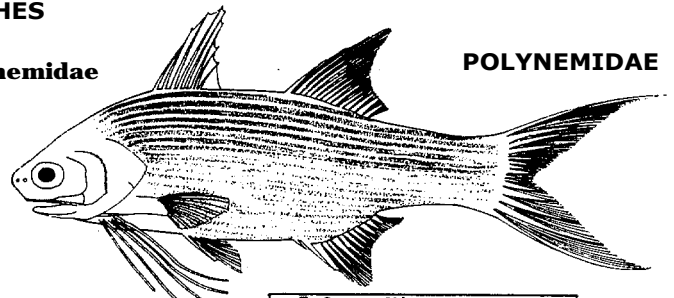
**BONY FISHES**

Species of **Polynemidae**

**POLYNEMIDAE**

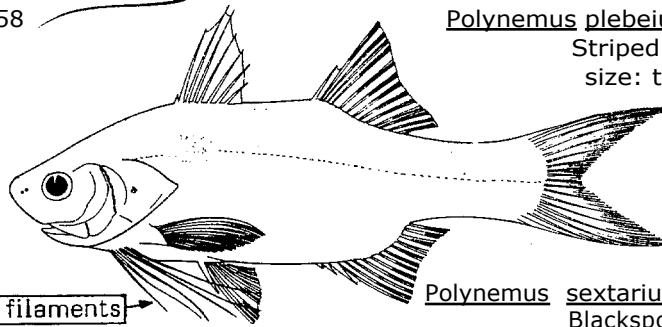


Polynemus paradiseus Linnaeus, 1758  
Paradise threadfin  
size: to 23 cm



Polynemus plebeius Broussonet, 1782  
Striped threadfin  
size: to 45 cm

5 free filaments, not reaching pelvic fin tips



Polynemus sextarius Bloch & Schneider, 1801  
Blackspots threadfin  
size: to 30 cm

6 free filaments

**PLATE XXI, 126**

**LABRIDAE**

**Loc. names**

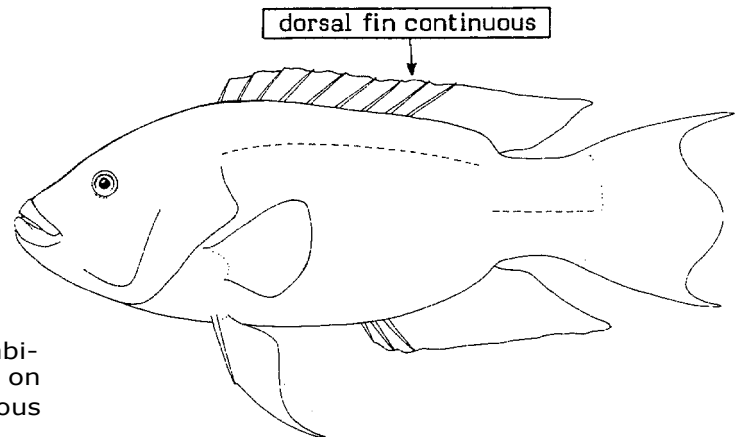
**FAO names :** En - Wrasses  
Fr - Labres, Vieilles  
Sp - Viejas

**Size :** Max.: 200 cm, but most species are less than 20 cm

**Fishing gear :** Bottom trawls, gillnets and traps

**Habitat and biology :** Common in shallow, coastal habitats, but really rare in many areas. Feed mostly on bottom invertebrates. Most species are protogynous hermaphrodites and some are sexual dichromatic

**Interest to fisheries :** Many species are too small to be of commercial importance but the larger ones are excellent foodfishes. Rarely caught



dorsal fin continuous

**SCARIDAE**

**Loc. names**

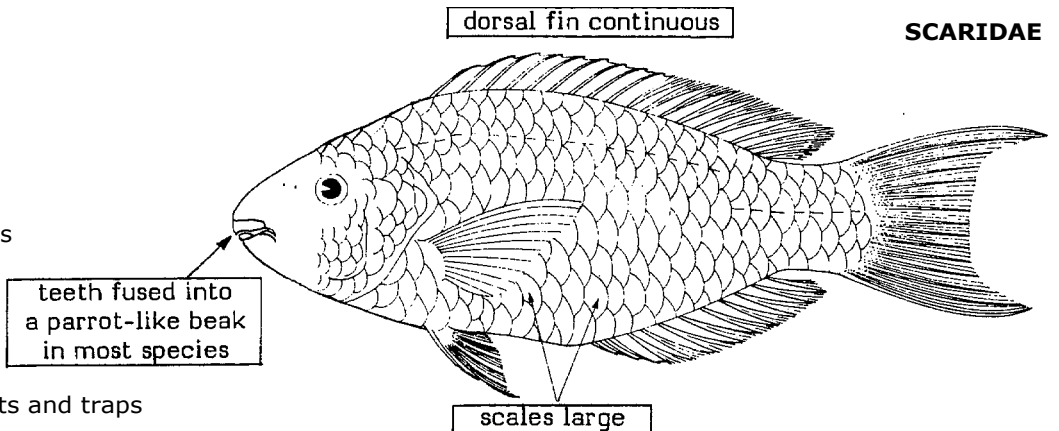
**FAO names :** En - Parrot fishes  
Fr - Perroquets  
Sp - Loros

**Size :** Max.: to about 50 cm

**Fishing gear :** Caught in gillnets and traps

**Habitat and biology :** Most species are very colourful and exhibit striking sexual dichromatism. Many species of the family are protogynous hermaphrodites (individuals mature first as females and then sexually transform into males; this transformation is usually accompanied by changes in colour pattern). Parrotfishes inhabit inshore areas usually associated with rocky bottoms and coral reefs. They are benthic grazers and feed by scraping the algal coating from rocks, dead coral and compacted sand with their beak-like plates

**Interest to fisheries :** Only occasionally caught



dorsal fin continuous

teeth fused into a parrot-like beak in most species

scales large