

Inland Fishes of  
**Myanmar**



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# INLAND FISHES OF MYANMAR

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## Message from Secretary-General of SEAFDEC

Myanmar is considered to have some of the richest fisheries resources in the world. However, a lack of record and study on aquatic animals' taxonomy has caused difficulties for the management and planning of these fisheries, especially on issues related to biodiversity and fish habitat. SEAFDEC has, therefore, initiated the study on inland fishes of Myanmar in collaboration with the Department of Fisheries, Myanmar and with technical assistance from the Department of Fisheries, Thailand. The outcome of the study was also considered to help a better understanding of the existence and distribution of fish species in inland water bodies.

The activity was successfully implemented as a part of the project on *Information Gathering for Capture Inland Fisheries in ASEAN Region*, under the framework of the Special 5-year Program, addressing the importance of inland fishery resources and the need to establish effective data and information to support the fisheries. On behalf of SEAFDEC, I should like to express my deepest appreciation to the Department of Fisheries, Myanmar and Thailand that have collaborated with SEAFDEC in production of this publication, and to relevant officials for their efforts in exploration, specimen collection, species identification, and gathering of related information of the species.

Throughout the years, SEAFDEC has put our best efforts to improve the quality of the information to assure benefits to users and to serve as a common reference. I truly wish you would find this publication useful; and hope that this book could contribute to the management and development of fishery sectors in the region and beyond.



Dr. Siri Ekmaharaj  
Secretary-General

Southeast Asian Fisheries Development Center

## PREFACE

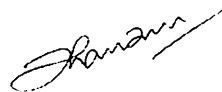
It is the great pleasure for me for having issued successfully the publication of the '*Inland Fishes of Myanmar*'. This is the first and foremost of this type of publication for Myanmar as a result of good collaboration of SEAFDEC and Department of Fisheries, Myanmar. Fishery Sector is not only significantly important for nutritional requirement as a major source of animal protein in the diet of the people but also plays a major role in earning foreign exchange for the country. Most of our ASEAN-SEAFDEC Member Countries' nutrition and livelihoods are depending on fish and fishery products, which are staple diet of its people.

The Department of Fisheries is a sole responsible institution for fishery development of the country and pursuing to increase fish production through sustainable fishery management and aquaculture practices. It will contribute to an increase of domestic consumption and sharing surplus with other countries as well.

For the Department of Fisheries, Myanmar and on my own behalf, I would like to take this opportunity to express my sincere appreciation and thanks to SEAFDEC for providing financial and technical assistance for this valuable publication.

I would like to thank SEAFDEC responsible officials who have actively involved in making this publication. I am also much obliged to taxonomists, Dr. Apichart Termvidchakorn and Dr. Chavalit Vidthayanon, and also to U Myint Pe former WGRFP member for Myanmar, who rendered valuable contributions of technical expertise to this publication without which this publication would not be possible. Last but not the least, I would like to thank to U Ant Kyi, Kachin State Fishery Officer, U Paw Lwin, Kayin State Fishery Officer, U Win Oo, Shan State Fishery Officer, U Win Myint Maung, Ayeyarwaddy Divisional Fishery Officer, U Tin Maung Kyi, Madalay Divisional Fishery Officer, U Tint Swe, Bago Divisional Fishery Officer and all DOF officials who provided assistance during the survey trips in Myanmar.

This '*Inland Fishes of Myanmar*' will serve as a valuable information and reference to researchers, departmental officials and university students. I strongly believed that this publication would be of benefit for not only to Myanmar but also ASEAN-SEAFDEC Member Countries.



Mr. Than Tun  
Director-General  
and SEAFDEC Council Director for Myanmar

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## **Introduction**

This handbook of some inland fishes in Myanmar was based on rapid field survey of SEAFDEC supported team and long term observation of the authors on common species and some taxa, obtained from aquarium trade. We provided brief diagnostic characters and size attain, some known biology and distribution in river basin base, including its fisheries. The species account is order by systematic classification.

The rapid survey was carried out during December 2002 visit to 3 fishing grounds, 4 landing places and markets, including ornamental species courtesies from dealers. Over 280 species encountered, but use selected for 150 well-known and important species herein.

The inland fishes in Myanmar legal meaning to all species occurred in the rivers, including estuarine forms. Up to 300 species were reported an enlisted in Myanmar waters, but possibly over 50% underestimated, due to limit of geographic condition and human resource.

Myanmar inland waters are one of important area for freshwater fish fauna both diversity and endemism. The country situated on intermediate zone of Indian subcontinent and mainland Southeast Asia, then share taxa of both bio-subregion. All river basins

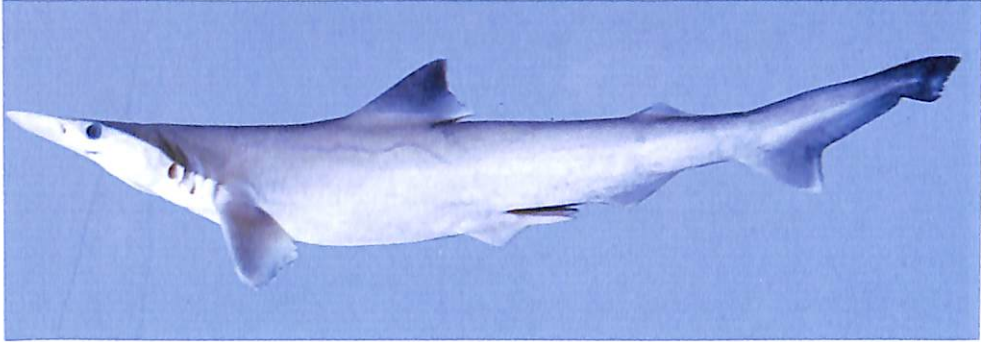
were separated by two great mountainous ranges; Arakan and Tennasserim by mean of tectonic activity. Created high affinity of generic level to both subregions, but very particular in specific level (so call endemic species). In the near future, if more scientific collaboration and more area accessed, numerous more species may found and reported.

The important river basins in Myanmar consists of; the Irrawaddy Sittuang, Salween, Tennasserim and Mekong basins including two important natural lakes: Inle and Indowgi. In this survey, we visit Yangon, Bago, Ba-U-Min, Mandalay and Lake Inle including Shwe Nyaun markets. This handbook also includes some species from the Salween and Tennasserim basin, which obtained from the previous survey of Thai DOF (NIFI) and from aquarium dealer sources.



## Species Account

### Family Carcharhinidae



#### *Scoliodon laticaudata*

A small shark with compressed body. Head and snout strongly depressed; snout long narrowly rounded; labial furrow very short; eyes moderately large; spiracle absent. First dorsal fin moderately large, behind middle of pelvic fin bases; second dorsal fin very small.

Colour: bronze gray above, white below, fins darker than body.

Maximum total length about 74 cm.

Habitat and biology: Common in coastal waters and estuaries. Feeds on shrimps and small fishes. Seasonally common in Yangon markets.

Distribution: Indo-West Pacific region.

## Family Osteoglossidae



### *Scleropages formosus*

A primitive fish with oblong-compressed body; scales large; large superior mouth with a pair of cirri on mandible tips. Paired fin falcate, caudal fin rounded.

Colour: in Myanmarese population; metallic gray with greenish and yellowish tints, fins darker.

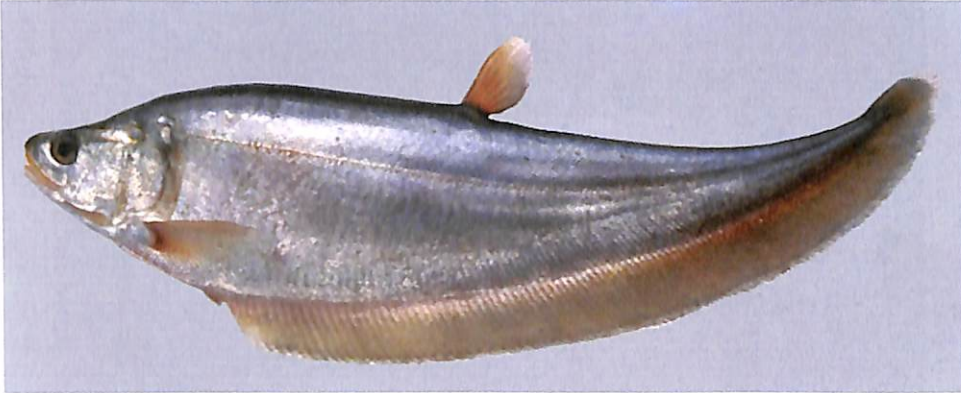
Maximum body length 70 cm.

Habitat and biology: Uncommon in forested lowland streams. Feeds on larger insects and small animal. Enlisted as endangered species.

Distribution: Southeast Asia from Tennasserrim region of Myanmar to peninsular Thailand and Malaysia, southeast Thailand to Cambodia and southeast Vietnam, including Indonesia.



## Family Notopteridae



### *Notopterus notopterus*

The smallest featherback spars with shorter jaws, extended only posterior border of eye; scoter small, head scales much larger than body scales. Body compressed with long anal fin, confluent to caudal; dorsal fin small; pelvic fin minute.

Colour: plain silvery gray; fins opaque.

Sizes attains 40 cm.

Habitat and biology: Common in all types of wetland, from marshland to rivers. Feeds mainly on small shrimps and insect, including small fishes of highly economic important food fish of the Southeast Asia.

Distribution: Indian sub continent, Southeast Asia to Sundaic Islands.

## Family Anguillidae



### *Anguilla bengalensis* (Gray, 1831)

A large eel with long dorsal fin confluent to caudal and anal fins, dorsal fin origin midway between gill opening and anus; well in advance of anal fin origin. Head slightly compressed; lips thick; lower jaw projecting slightly.

Colour: yellowish or olive, with dark brown mottling; paler ventrally.

Maximum length attains 1.5 m.

Habitat and biology: Catadromous fish which its juveniles nursing ground in estuaries; adults moving upstreams to upper reaches and hillstreams. Locally common in southwestern Myanmar.

Distribution: Coastal areas of Eastern Indian Ocean and rivers of Indian subcontinent to Myanmar including western Peninsula Thailand and Malaysia.



Photograph by Siraprapha Premchareoun

### *Anguilla bicolor*

A moderate size eel with long dorsal fin, origin above vent and just anterior to anal fin origin. Angle of mouth slightly posterior to eye.

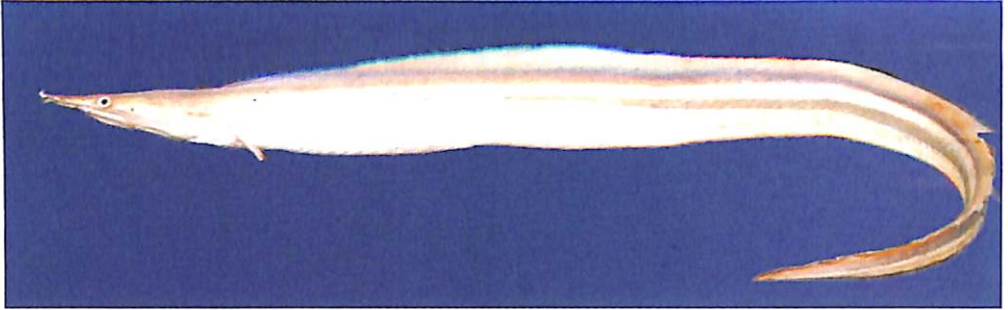
Colour: plain olive to bluish brown or yellowish brown; abdomen pales; pectoral fin darker.

Maximum length about 1 m

Habitats and biology: Catadromous species which breed only once for life (same as salmons). Adults inhabit upper reaches and main streams. Seasonally common in Yangon Markets.

Distribution: Throughout Indo-West Pacific; an Indian Ocean species is considered as subspecies *bicolor* (*A..b. bicolor*).

## Family Muraenisocidae



### *Muraenesox cinereus*

The small pike conger with a stout body; well developed median fins; pectoral rays 16-17, Scaleless; lateral line completed. Long snout with sharp canine teeth; mouth wide.

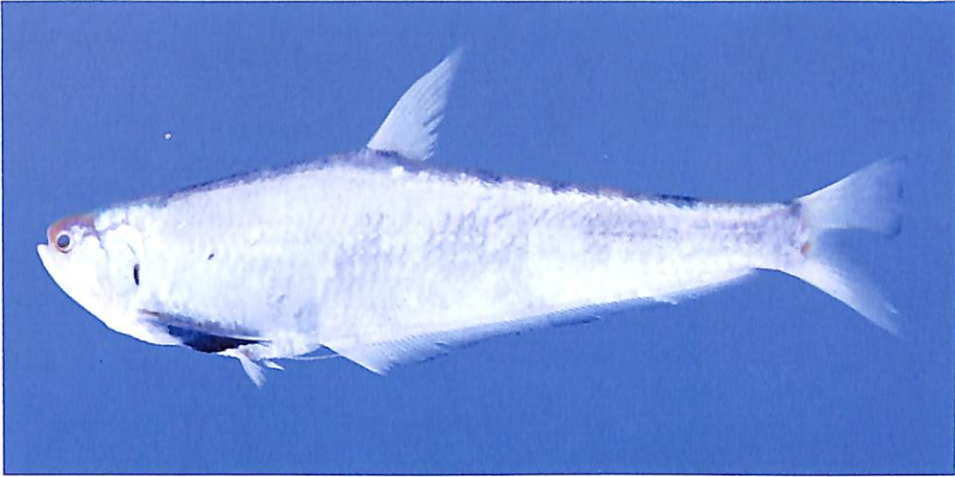
Colour: grayish brown dorsally, pale ventrally, with a black border on median fins; pectoral fin dark.

Maximum total length about 1 m

Habitats and biology: Coastal water to offshore; usually estuarine rivers and coastal waters. Feeds mainly on smaller fishes. Common in Yangon markets and coastal provinces.

Distribution: Throughout Indo-West Pacific.

## Family Engraulididae



### *Setipinna wheeleri*

Body compressed, belly with keel from isthmus to anus. Caudal fin with truncated upper lobe, shorter than lower, pectoral fin with elongated first ray.

Colour: silvery grey body; fins hyaline, pectoral and caudal fins dark margin.

Maximum size attains 30 cm.

Habitats and biology: Estuaries and lower reaches of the large rivers. Feeds mainly on larger zooplankton including small shrimps and fishes. Commonly seen in Yangon markets of Myanmar and Ranong, Thailand.

Distribution: Eastern Indian Ocean coast from Myanmar to southwest Thailand, probably peninsular Malaysia.



*Coilia dussumierri*

Body tapering, belly with keeled scutes from just behind pectoral fin base to anus. Maxilla short, not reaching edge of gill cover. Pectoral fin with 6 filamentous rays. Flank and belly with pearly spots in row, so call light organ.

Colour: opaque silver with pearly light organ spots; fins hyaline. Sometimes yellowish silver.

Sizes attains 20 cm total length.

Habitats and biology; Coastal water to estuaries. Feeds on zooplankton and smaller shrimps. Found in large number for baget or trawl fisheries, locally important as small food fish. Common in Yangon markets.

Distribution: Central Indo-West Pacific, from India to South China Sea.



*Coilia ramcerati*

Body tapering, belly with 13-16 keeled scutes. Maxilla short; gillrakers 9-30. Pectoral fin with 6 long filamentous rays. Pelvic fin with 9-10 fin rays (other species of *Coilia* have only 7).

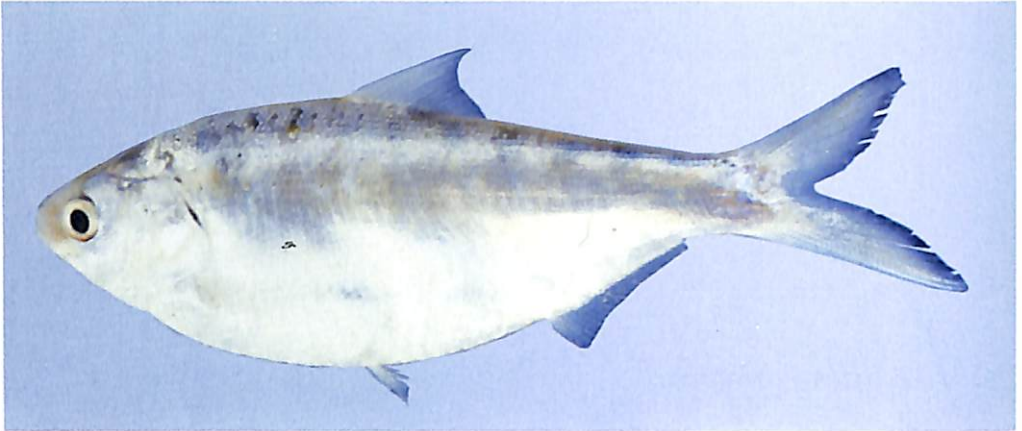
Colour: yellowish silver with hyaline fins, pectoral fin sometime dark.

Maximum size attains 25 cm.

Habitats and biology: Coastal and estuarine waters. Feed mainly on larger zooplankton. Locally common in markets of Yangon to Ranong of Thailand.

Distribution: Ganges delta to Andaman Sea coasts.

## Family Clupeidae



### *Gudusia variegata*

Body deep; 20-30 scuts along belly. Dorsal fin short, not really to vertical from anus fin origin. Hind margin of scales toothed.

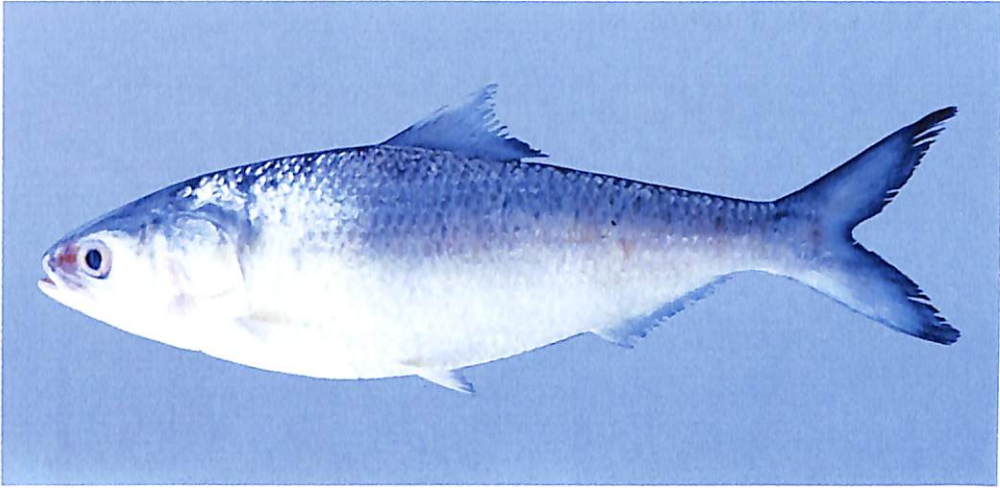
Colour: body grayish silver with dark blotches along upper flanks.

Maximum size attains 20 cm.

Habitats and biology: Middle to lower reaches of the rivers, including floodplain. Locally common in the markets of central Myanmar.

Distribution: Endemic to Irrawaddy basin.





*Tenualosa illisha*

Body moderately deep, compressed, belly with 30-33 scutes. Upper jaw with distinct median notch; gill raker fine and numerous, 100-250 on lower arch. Caudal fin deeply forked.

Colour: silvery with gray back; a dark blotch behind to gill opening, followed by 6-7 small spots along flank. Fins hyaline or yellowish.

Maximum size attains 60 cm.

Habitats and biology: Lower to middle reaches of the rivers, including coastal waters. Commonly seen in the markets, highly common important foodfish. Benthic feeder, including plankton.

Distribution: Arabian Gulf to Ganges and Irrawaddy basins.

## Family Cyprinidae



### *Cyprinus intha*

Similar to Common carp (*C. caprio*) but more slender body; lateral line scales 20-25. Head conical with protrusible mouth.

Color: body grayish bronzes above, paler below; fins dusky hyaline.

Size attains to 30 cm.

Habitats and biology: River and marshland of upper reaches. Commonly landed in the markets of shane area.

Distribution: Endemic to upper Irrawaddy basin including Lake Inle.



*Amblypharyngodon mola*

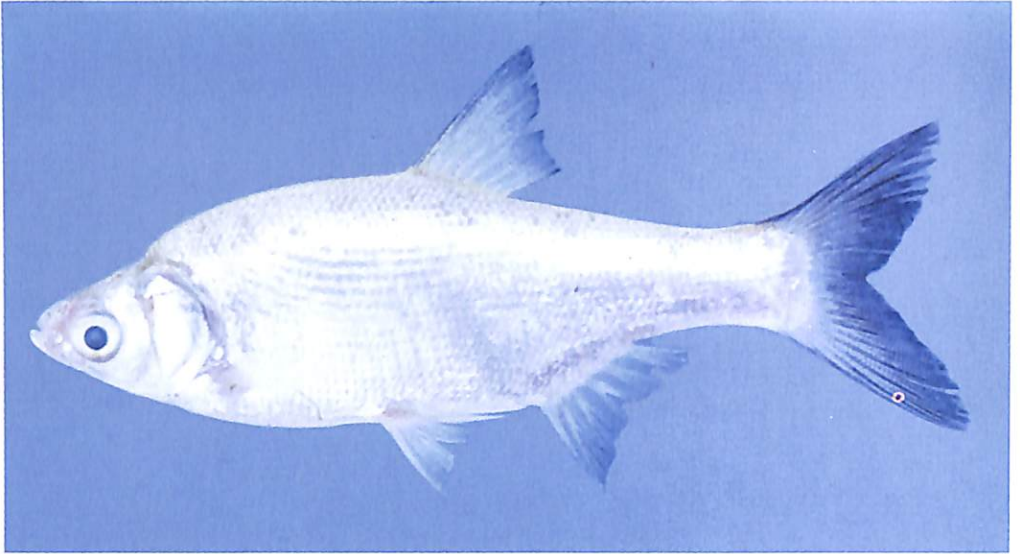
Small carp-like fish with large head; body compressed, depth less than 1/3 standard length. Scales small, lateral line scales 65-79. Upper lip protrusible.

Colour: body yellowish with pearly scales and silver midlateral stripe. Fins hyaline, unpaired ones dusky.

Size attains 10 cm.

Habitats and biology: Inhabits marshland and flood plains. Common in the markets of central Myanmar. Feeds on plankton and detritus.

Distribution: Indian subcontinent to central Myanmar.



*Amblypharyngodon atkinsoni*

Body and head compressed; body depth more than one third of standard length. Scales small, 55-75 in lateral line with 19 perforated scales.

Colour: silvery body without lateral stripe; fins dusky hyaline.

Maximum length attains 10 cm.

Habitats and biology: Inhabits marshland and flood plain. Seasonally common in the markets of Myanmar. Feeds many on plankton and detritus.

Distribution: Restricted to inland of central to southern Myanmar.



*Danio erythromicron*

A small minnow with large eyes, short snout; dorsal fin origin anterior to anal fin base, caudal fin forked.

Colour: rosy or red with several slender dark vertical bands; caudal base with dark ocellus.

Size attains 3 cm.

Habitats and biology: Endemic to Lake Inle in clear waters with dense vegetation. Uncommonly seen in aquarium trade, but very famous.



*Danio albolineatus*

Small danio with long maxillary barbels; body slightly compressed; anal fin base longer than dorsal fin base.

Colour: dark blue or greens body with orange or red mid lateral stripe; in breeding season become pearly pink or red; fins orange with bluish submarginal stripe.

Size attains 5 cm.

Habitats and biology: Inhabits small streams with sandy and gravel beds in dense riparian vegetation. Uncommon in aquarium markets.

Distribution: Salween to Tennasserrim basins, including western Thailand.



Photograph by Kamphol Udomritiruj

*Danio dangila*

Large danio with compressed body; dark humeral spot and bluish reticulate patterns and rosy blotches on flank. Body reddish brown dorsally, belly rosy. Fins hyaline with blue submarginal stripe.

Size attains 5 cm.

Habitats and biology: Inhabits forested streams; rarely seen in the aquarium trade, mainly in Thailand.

Distribution: Lower tributaries of the Salween and Tennasserrim basins.



*Danio nigrolineata*

Body slender, translucent olive with dark lateral stripe and dashes on flank: fin hyaline with dark striper.

Size attains 3 cm.

Habitats and biology: Inhabits forested streams, rarely seen in the markets.

Distribution: Myithina state of Myanmar.





Photograph by Kamphol Udomrittiruj

*Danio kyathit*

Body slendered; fins large; reddish brown, translucent, with a rosy midlateral stripe; flank with rosy irregular lines on bluish base, and forming lateral stripes reaching to caudal fin; fins hyaline with blue and rosy submargeral stripes, caudal fin with rosy orange margin.

Size attains 3 cm.

Habitats and biology: Forested streams and marshland.  
Uncommon seen in aquarium trade.

Distribution: Myithina State and central Myanmar.



*Devario browni*

Body compressed; barbel absent. Body reddish brown with dark blue irregular stripes; fins yellowish green, dorsal fin with orange margin.

Size attains 8 cm.

Habitats and biology: Inhabits hillstreams with gravels and dense riparian forests. Feed mainly on small aquatic insect.

Distribution: Salween to Tennasserrim basins.



Photograph by Kamphol Udomrittiruj

*Microrasbora rubescens*

The small minnows which compressed body, large eyes. Dorsal fin origin well behind vertical of pelvic origin. Scales deciduous.

Colour: body rosy pink with pearly iridescent, Slender mid lateral dark strip; fins hyaline pink; black spot at vent.

Size attains 3 cm.

Habitats and biology: Riparian areas of the lake and adjacent streams. Consumed as small food fish in the Lake area.

Distribution: Endemic to Lake Inle.



Photograph by Kamphol Udomrittiruj

*Chela laubuca*

A small cyprinid with highly compressed body; abdomen keeled from pelvic to anal fin base. Dorsal fin above anal fin; pelvic fin small, with elongated tip in males.

Colour: silvery blue with dark humoral spots; fins hyaline, caudal fin yellow with dark margin.

Size attains 7 cm.

Habitats and biology: Hill to lowland streams, with dense vegetation. Locally uncommon seen in the markets and aquarium trade.

Distribution: Irrawaddy to Tennasserrim basins.



*Inlecypris auropurpurea*

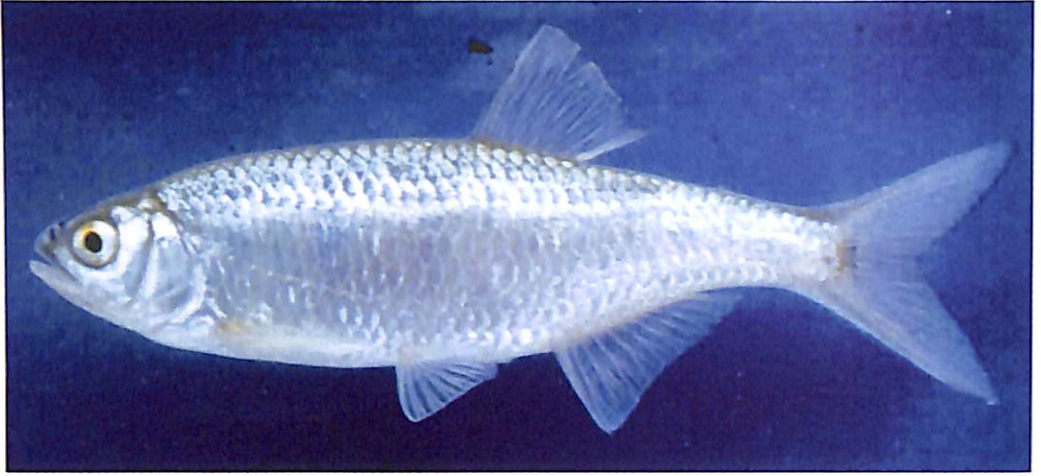
Body very slender; dorsal fin situated directly above anal fin, Caudal fin deeply forked.

Colour: silvery or goldish body with dark vertical bars along flank, 13-14 bars. Fins hyaline.

Size attains 10 cm, commonly 5 cm.

Habitats and biology: Restricted to pelagic zone of lake, with dense aquatic vegetation. Mixed with other small fishes in the markets, but well known in aquarium trade.

Distribution: Endemic to Lake Inle.



*Opsarius barnoides*

Body fusiform, compressed; mouth large, upper jaw reaching to eye. Breeding males with tubercles on scales and snout, fins become more obvious color.

Colour: silvery blue with 12-14 slender vertical bars on flank. Fin hyaline yellow.

Size attains 10 cm.

Habitats and biology: Inhabits forested and hillstreams with rocky or sandy bottoms. Mixed with other small fishes in the local markets, uncommon.

Distribution: Irrawaddy to Salween basins.



*Raiamas guttatus*

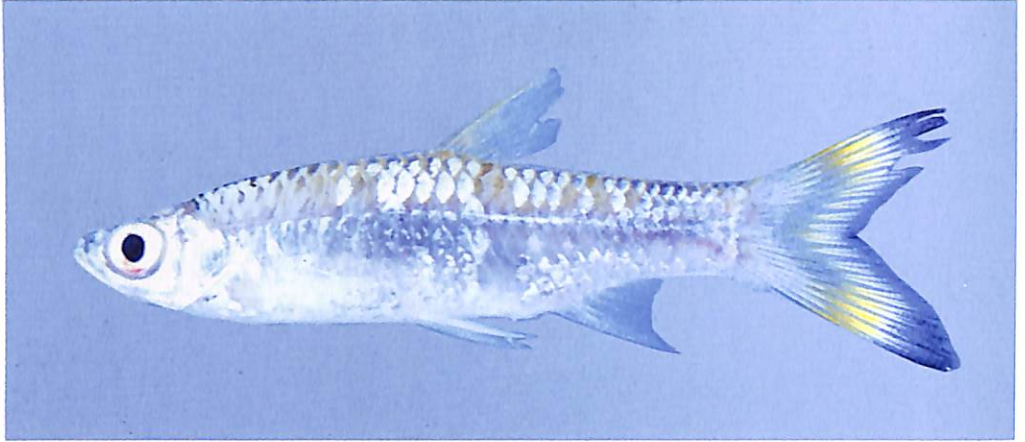
Body fusiform, slightly compressed; head long with large mouth. Snout compressed and pointed. Scales small, lateral line low on body.

Colour: silvery with one or two rows of dusky blue spots on dorsal half; fins dusky, caudal fin with black stripe dorsally, yellow below. Breeding males with pearly tubercles on body and snout, rosy or orange body and fins.

Size attains 20 cm.

Habitats and biology: Inhabit hillstream to lowland main stream. Predatory feeding on small fishes.

Distribution: Ganges basin throughout the mainland Southeast Asia.



*Rasbora rasbora*

Body slender, slightly compressed; eyes large, barbels absent. Body pearly yellow with slender midlateral stripe, paler ventrally; fins hyaline yellow, caudal fin bright yellow with dark margin.

Size attains 13 cm.

Habitats and biology: Inhabit rivers to marshlands. Mixed with smaller foodfishes into the markets.

Distribution: Ganges to Irrawaddy basins.





Photograph by Kamphol Udomritiruj

*Rasbora daniconius*

Body elongated with slender dark midlateral stripe from snout to caudal fin base. Lateral line below midline of caudal peduncle.

Colour :body olive or yellowish silver, paler ventrally. Fins hyaline yellow, caudal fin bright yellow.

Size attains 10 cm.

Habitats and biology: Some habits of the preceded species. Considered as small foodfishes.

Distribution: Ganges to Salween basins.



*Salmostoma sardiniella*

Body elongated, compressed with low lateral line. Scales small, 47-53 on lateral line. Mouth terminal, small. Colour: silvery body with yellowish hyaline fins.

Size attains 15 cm.

Habitats and biology: Inhabits large rivers with sandy or muddy bottom, in large schools. Uncommonly seen in the markets.

Distribution: Irrawaddy to Salween basins.



Photograph by Kamphol Udomrittiruj

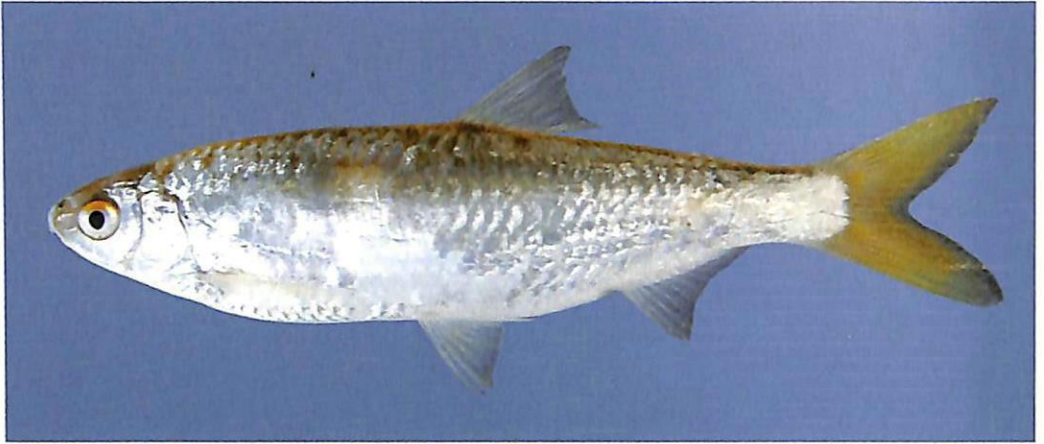
*Sawbwa resplendens*

A small minnow-like fish with naked body; dorsal fin origin are anterior to anal fin origin.

Colour: translucent body with pearly iridescence; fins hyaline, caudal fin with bright red tips.

Size attains 3 cm.

Habitats and biology: Swanky and lakes with dense vegetations on marginal areas. Endemic to the Lake Inle. Famous aquarium fish, but rarely available.



*Cyprinus carpio*

Body slendered, compressed with blunt snout. Scales large deciduous; fins small.

Colour: silvery gray with dusky above flank; fin hyaline or pale yellow.

Size attains 20 cm.

Habitats and biology: Mainstream of the large rivers. Occasionally seen in the markets, mixed with other small fishes.

Distribution: Irrawaddy to Salween and Tennasserrim basins.



*Cyclocheilichthys apogon*

Body deeply compressed; the largest dorsal spine serrated, high. Barbels absent, cheek with rows of fine papillae.

Colour: silvery or yellowish silver with dark lateral stripes, caudal fin base with large dark spot; fins yellowish hyaline.

Size attains 20 cm.

Habitats and biology: Inhabits rivers and marshlands, usually midwater. Feeds on plankton and benthic organism. Uncommon in Myanmar but very common elsewhere, possibly different species from Myanmar.

Distribution: Tennasserrim basin to southwest Thailand population have yellowish color, whereas mainland Southeast Asia and Peninsular Malaysia have reddish colour.



*Osteobrama belangeri*

Body deep, compressed with keeled belly. Anal fin base short, 17-18 branched rays. Dorsal fin high with serrated spine.

Colour: body silvery, olive dorsally, iris red.

Size attains 30 cm.

Habitats and biology: Mainstreams and marshlands including floodplains. Common in the Markets of central Myanmar.

Distribution: Irrawaddy to Sittoung basins.



*Osteobrama feae*

Body deep, compressed with slendered caudal pedicle. Anal fin base long more than 20 brachial rays. Dorsal fin with smooth spinout ray.

Colour: yellowish silver body with yellowish hyaline fins.

Size attains 23 cm.

Habitats and biology: Inhabits large rivers and its branches, with sandy mud bottom. Rarely seen in the markets.

Distribution: Irrawaddy to Salween basins.



*Oreichthys cosuatis*

A small barb with incomplete lateral line, 6-7 scales. Snout and cheek with numeral scale ; barbel absent. Fins large., dorsal and anal fins high; scales large.

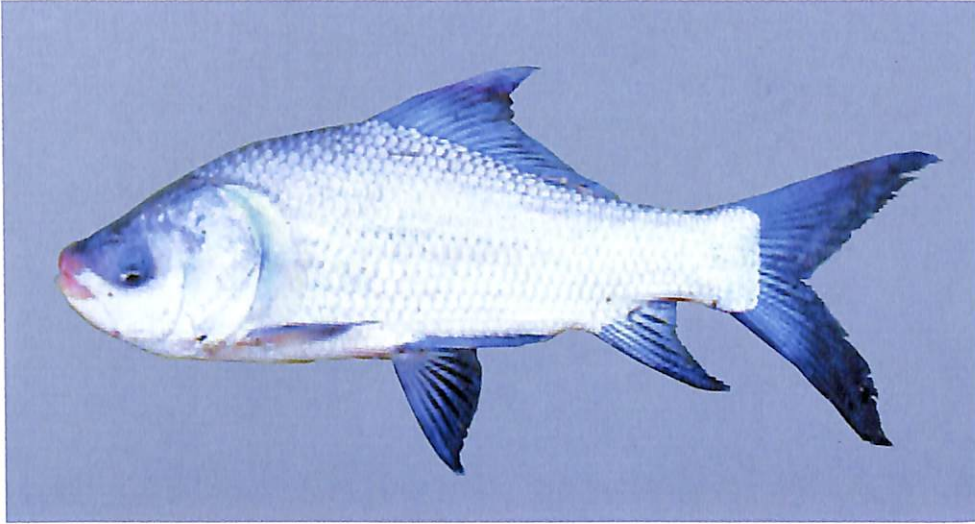
Colour: translucent body with dark margin on each scale; dorsal fin hyaline yellow with dark spot on tip.

Size attains 4 cm.

Habitats and biology: Inhabits lowland stream and rivers with riparian regulations. Rarely seen in aquarium markets.

Distribution: Common in Ganges basin but rare in central Myanmar.





*Gibelion catla*

Head very large with large, superior mouth, free upper lip absent; body deep, robust; scales large, 40-43 in lateral line.

Colour: grayish silver, paler below; fins dark.

Size attains 1 m.

Habitats and biology: Inhabits large rivers and marshlands; adaptable to ponds. Widely cultured throughout India and Myanmar; one of important major carps.

Distribution: Ganges to Irrawaddy basins.



*Hampala macrolepidota*

Body fusiform- like, slightly compressed. Mouth large, terminal with short maxillary barbels. Scales large, 25-26 in lateral line.

Colour: silvery body with vertical black bar below dorsal fin origin; fins reddish orange, caudal fin with dark marginal stripe.

Size attains 60 cm.

Habitats and biology: Inhabits rivers and various type of wetlands. Commonly seen in the markets of Southeast Asia, but rare in Myanmar.

Distribution: Known only from Tennasserrim basin of Myanmar, but common in Mainland Southeast Asia to Sundaic Islands.



Photograph by Kamphol Udomrittiruj

*Hampala salweenensis*

Body and colour very similar to preceded species but body with two vertical dark blotches, from dorsal fin origin and on the caudal peduncle. Fins red or pink, caudal fin with dusky marginal stripe.

Size at attains 30 cm.

Habitats and biology: Inhabits rivers and streams with sandy and rocky bottom. Rarely seen in the markets.

Distribution: Known only from the Salween basin.



*Hypsibarbus salweenensis*

Body deep, compressed with high dorsal fin. Scales larges 30-33 in lateral line. Dorsal spine serrated posteriorly, caudal fin deeply forked.

Colour: silvery gray body with pale rosy or yellow fins, caudal fin with rosy hull; gill cover with rosy blotch.

Size at attains 35 cm.

Habitats and biology: Inhabits large rivers and streams. Locally consumed in Thai-Myanmar border areas.

Distribution: Restricted to Salween basins.



*Chagunius baileyi*

Head large with thick upper lip, and 2 pair of barbels, cheeks wide. Body oblong; scales small. Dorsal spine strong, serrated posteriorly.

Color: pale silver with some dusky spots a long flank; fins pale with red paired and caudal fins.

Size attains 30 cm

Habitats and biology: Inhabits mainstreams and upper tributaries including hillstreams. Uncommonly seen in the markets of eastern Myanmar and north-west Thailand.

Distribution: Known from Salween and Tennasserrim basins.



*Poropuntius chondrorhynchus*

Body fusiform with lays head; 2 pairs of barbels on snout. Dorsal fin with stray, serrated spine.

Colour: silvery gray body with dusky margin on each scale. Fins pale rosy, caudal fin with dusky marginal stripes.

Size attains 30 cm.

Habitats and biology: inhabits hillstream to large rivers. Compressed locally in highland village of Myanmar and Thai border.

Distribution: Salween to Mekong basins, firstly know from Keng Tung.



***Poropuntius scapanognathus***

Body fusiform with conical head; snout small, subterminal mouth with horny sheath on lower lip.

Colour: body silvery gray; fins dusky, anal fin with red hue, caudal fin with black edge. Juveniles body colour with dark millaterd stripe.

Habitats and biology: Inhabits hillstream to large rivers. Rarely seen in the market, communed locally.

Distribution: endemic to Salween basins.



*Poropuntius genyognathus*

Body more robust, mouth small with large hamy sheath on lower jaw.

Colour : body yellowish to olive silver with dark patch on millateral line; paler belly. Fins reddish or rosy, caudal fin with dusky margin.

Habitats and biology: Inhabits some niches of the preceded species. Consumed locally in highland areas.

Distribution: Tennasserrim basins to Kraburi River of Thailand.





*Mystacoleucus argenteus*

Body compressed; dorsal fin with procumbent spine at anterior fin base. Scales small, 27-28 in lateral line. barbel absent.

Colour: silvery body; all scale bases with dusky pattern; fins yellow, dorsal fin rosy and caudal fin bright yellow or orange.

Size attains 15 cm.

Habitats and biology: Inhabits rivers and streams. Feed mainly on algae.

Distribution: Salween to Tennasserrim basins.



*Neolissochilus stracheyi*

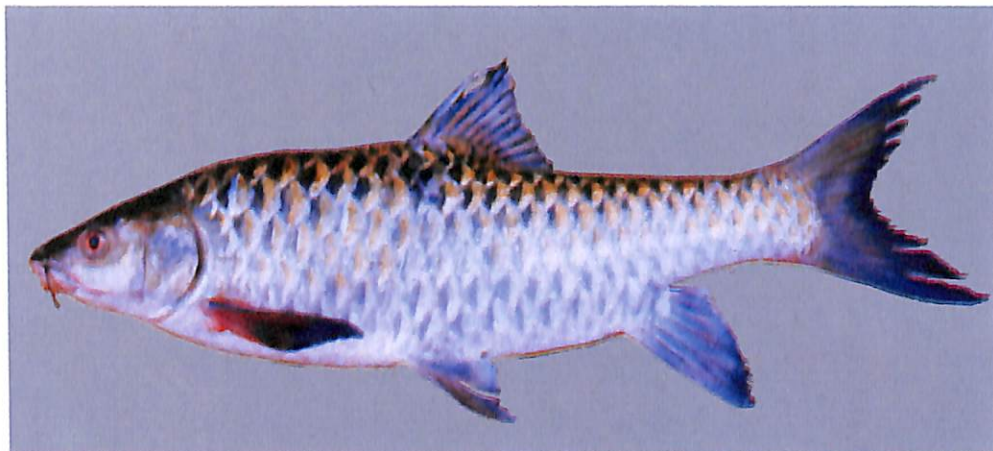
A large, cylindrical body carp with large scales. Head conical with blunt snout, tubercles on cheek in males, 2 pair of barbels.

Colour: body bluish to olive gray dorsally, silvery gray ventrally; broad midlateral dark stripe on flank. Fins dusky blue or gray.

Size attains 50 cm.

Habitats and biology: Inhabits hillstreams and forested streams with, sandy and rocky bottom. Feed mainly on plant matters including elephants droppings. Rarely seen in the markets, but important to upland villagers.

Distribution: Salween, Tennasserrim basins to Mekong and western Thailand.



*Tor tambroides*

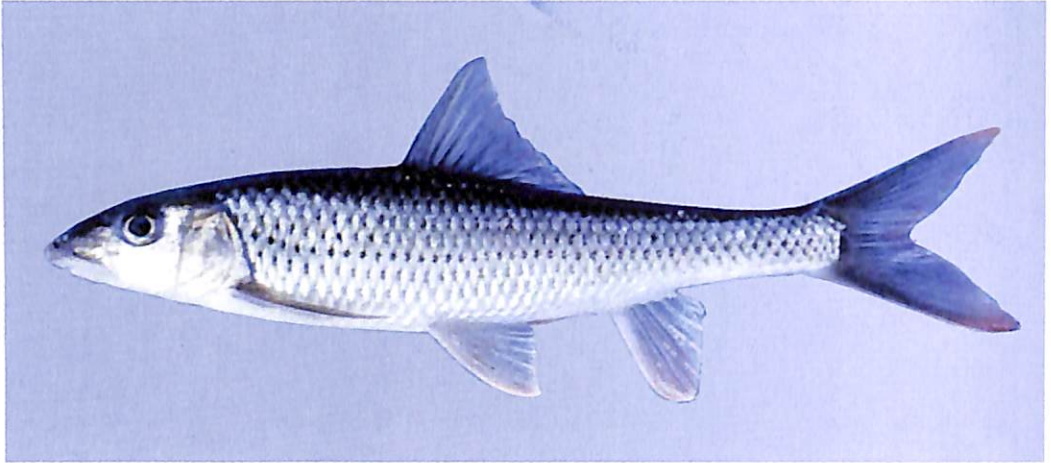
Body robust fusiform with large scales; dorsal spines smooth. Head conical, somewhat pointed snout; lips thick, lower lip with small median lobe, barbels longer than eyes, 2 pairs.

Colour: body olive to bluish gray, silvery flank; fins dusky.

Size attains 80 m.

Habitats and biology: Inhabits forested streams and rivers, Feed mainly on plant matter including fruits, leaves and benthic organism. Locally landed in the markets.

Distribution: Salween to Mekong and western Thailand.



*Folifer brevifilis*

Body cylindrical, snout pointed with large tubercles. Mouth inferior, lips thick with long median lobe. Dorsal fin spine serrated; scales small 44-43 in lateral line.

Colour: silvery gray body, darker dorsally; fins hyaline with red hue on pelvic to caudal fins.

Size attains 30 cm.

Habitats and biology: Inhabits forest streams, clear water with rocky bottom and riparian forests. Uncommon in the local markets.

Distribution: Salween , Tennasserrim basins to Mekong.



*Scaphiodonichthys burmanicus*

Body fusiform with large head, slendered caudal peduncle. Mouth terminal with upper lip, lower lip with shark edge. Snout covered with tubercles in adults.

Colour: greenish or blue silver with pink tints on cheek and flank; fins yellowish hyaline.

Size attains 22 cm.

Habitats and biology: Inhabits torrent streams with rocky bottom. Feeds on algae from rock and substrates. Locally consumed in highland villages.

Distribution: Irrawaddy to Salween basins.



*Systomus chola*

Body somewhat deep, compressed; scales large, 29-30 in lateral line. Dorsal spine smooth. Snout with 2 pair of barbels.

Colour: silvery body with dark spot on caudal peduncle; fins hyaline, dorsal fin with two oblique dark stripes, pelvic and anal fins rosy.

Size attains 10 cm.

Habitats and biology: Inhabits marshland and floodplains. Common in the markets, mixed with several small food fishes.

Distribution: Ganges to Irrawaddy basins.



*Systomus sopher*

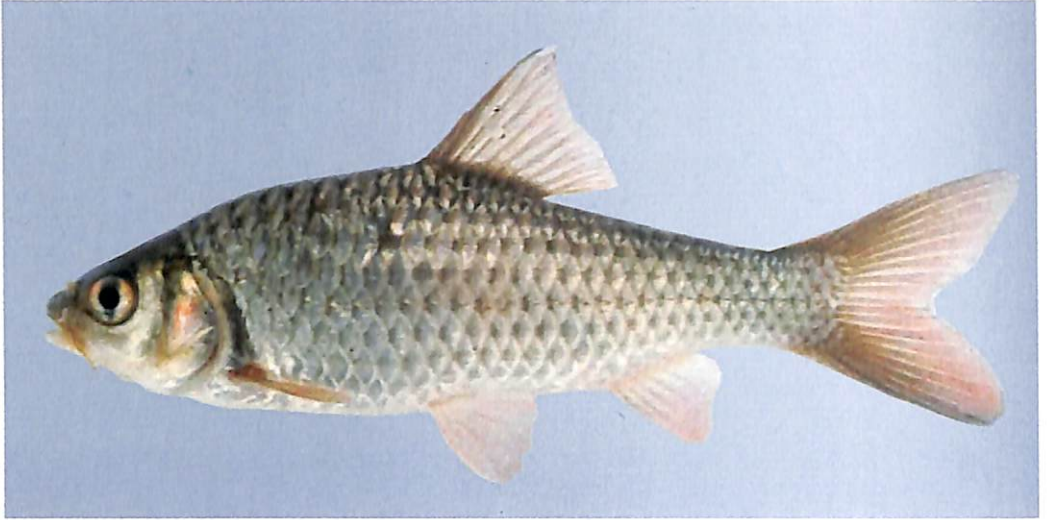
Body moderately deep compressed; scales large, 28-32 in lateral line. Dorsal fin with a strong, serrated spine. Mouth terminal, with 2 pairs of barbels.

Colour: silvery gray body, pink on rosy cheek; fishy olive, Caudal and anal fins with rosy or red margin.

Size attains 20 cm.

Habitats and biology: Inhabits lowland rivers and marshlands. Common in the markets and local consumption.

Distribution: Ganges to Irrawaddy basins. The known *S. orphiods* from elsewhere in southeast Asia is possibly different species, and need more study.



*Systomus caudimarginatus*

Similar to previous species but body more stout, caudal fin with dusky edge and body goldish or yellowish, fins orange or rosy.

Size attains 15 cm.

Habitats and biology: Inhabits hillstreams to lowland rivers. With riparian vegetation. Locally consumed in Myanmar-Thai border areas.

Distribution: Known from the Salween to Tennasserim basins, and northern Thailand.





*Systomus stoliczkaenus*

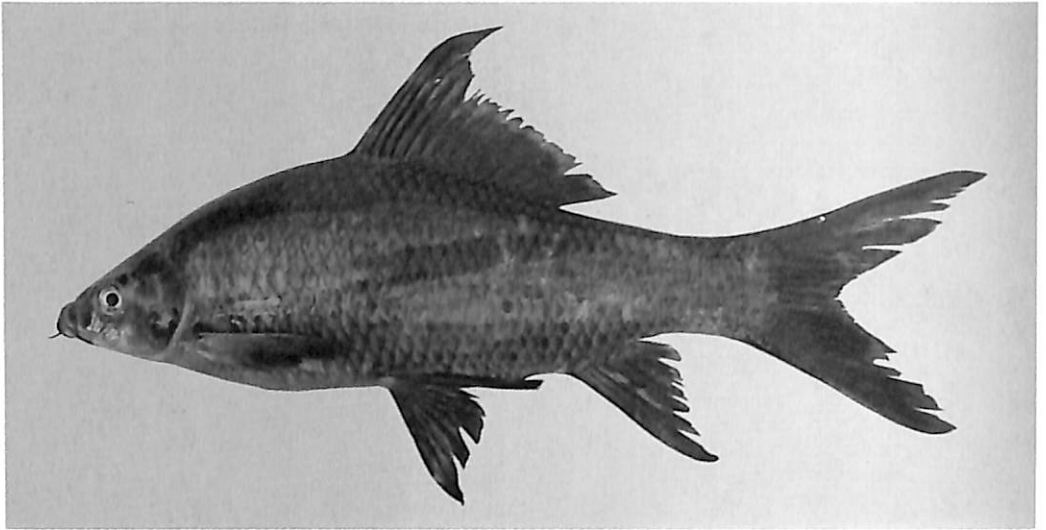
A small barb with slightly, compressed; mouth small, barbels absent. Dorsal spine serrated posteriorly; caudal fin forked. Scales rays, 22-23 in lateral line.

Colour: silvery gray body with dark funeral spot, and dark blotch above the end of anal fin, dorsal fin with dark or dusky blotch, fins rosy hyaline. Adult males with red or rosy colour enter body in breeding season, fins brilliant red.

Size attains 6 cm.

Habitats and biology: Inhabits hillstream and lakes. Uncommon in aquarium trade.

Distribution: Ganges, Irrawaddy to Salween basins, including northern Thailand and middle reaches of the Mekong.



*Morulius calbasu*

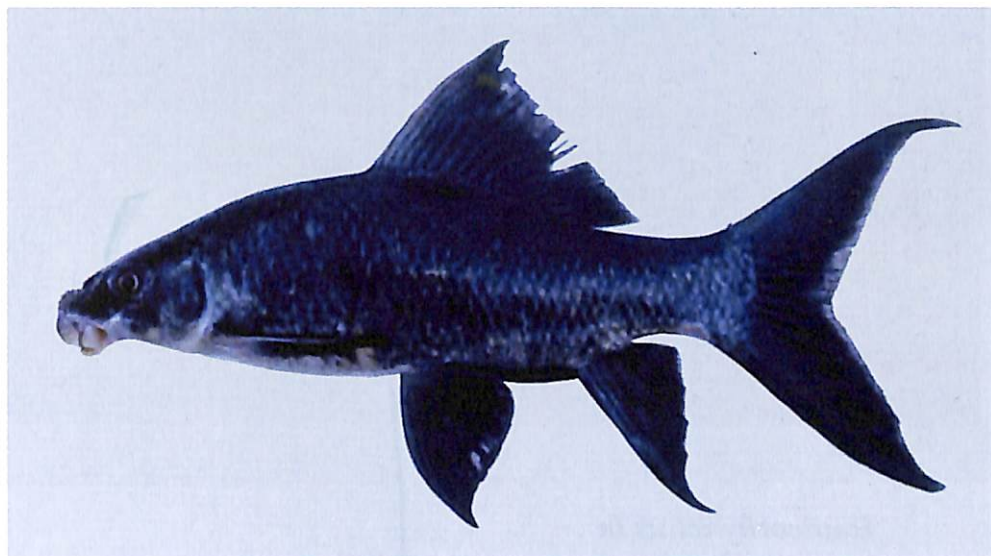
Body robust with conical head; lips inferior with fringe, 2 pairs of barbels. Dorsal fin without spinous ray, large.

Colour: body dark or bluish gray with pearly spots on flanks; fins dark.

Size attains 1 m.

Habitats and biology: Inhabits large rivers but juveniles nurse in flood plain and marshland, adaptable to impoundments and ponds.

Distribution: Ganges to Irrawaddy basins; introduce elsewhere in Myanmar.



*Morulius chrysophekadian*

Similar to previous species but snout smaller; fin much larger and concaved.

Colour : Body dark with yellow or reddish brown spots along flank; fins dark.

Size attains to 60 cm.

Habitats and biology: Mainstreams and its branches, especially rapids and turbid zones. Juveniles nursing in floodplain; adaptable to impoundment Commonly seen in markets of the mainland Southeast Asia, but uncommon in Myanmar. Well known as “sail fin shark” in aquarium trade.

Distribution: Salween, Tennasserrim basins through Mekong up to Sundaic Islands.



*Henicorhynchus lu*

Body slender, with small head, lip small, smooth, subterminal, rostral barbels present. Dorsal fin small, scales large, 39-41 in lateral line.

Colour: body bluish or olive gray above, silvery flank and belly; fins yellowish or pink hue, dorsal fin yellow.

Size attains 16 cm.

Habitats and biology: Inhabit large lakes and adjacent rivers, streams. Pelagic Inhabits; feed on periphyton algae. Commonly seen in markets around Lake Inle.

Distribution: Endemic to Lake Inle.



*Cirrhinus rubirostris*

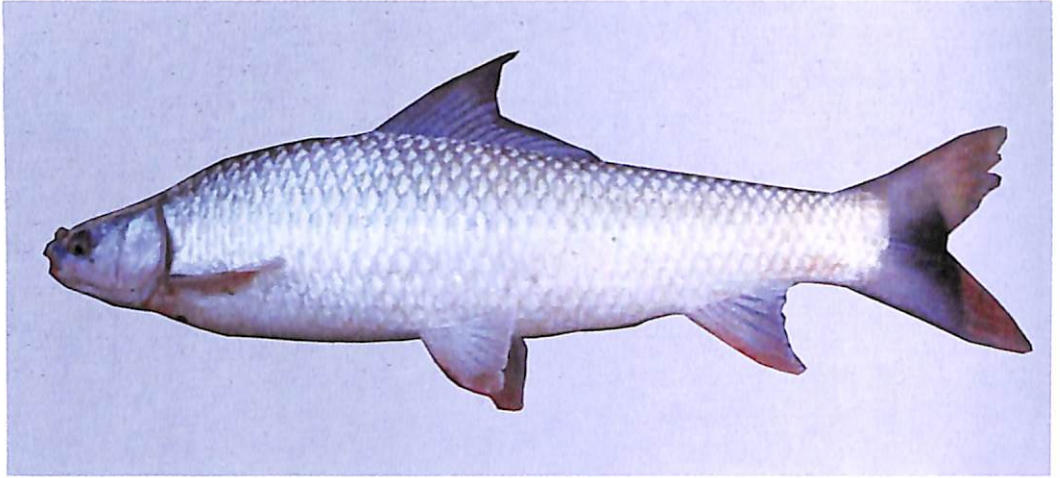
Body robust; head large, with subterminal mouth. Snout with well developed rostral tubercles; only maxillary barbels presents. Scales in lateral line 37; dorsal fin with 10 branched rays.

Colour: bluish or greenish dorsally, yellowish silver ventrally; snout reddish or rosy; fins reddish or pale rose.

Maximum sizes attain 30 cm.

Habitats and biology: Inhabits large rivers and streams with rocky rapids and sandy bottom. Locally consume in remote areas.

Distribution: Known from the Tennasserrim basin of southeast Myanmar.



*Cirrhinus cirrhosus*

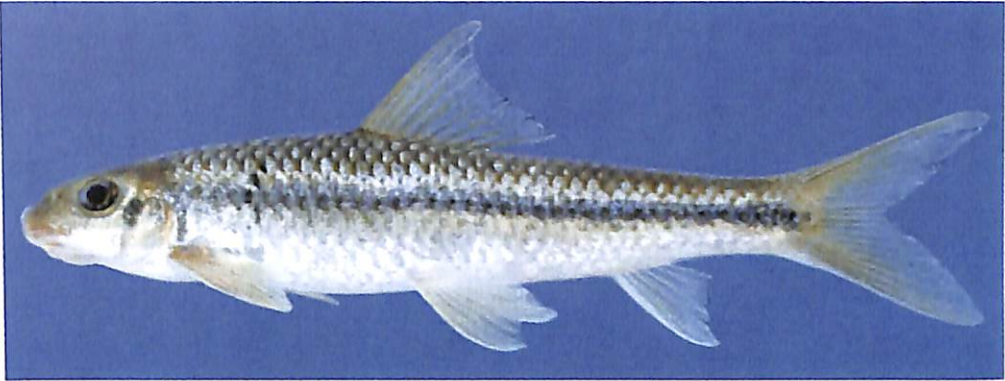
Body cylindrical or robust; scales large, 39-46 in lateral line. Mouth subterminal with rostrum and maxillary barbels. Upper lip absent or weakly developed.

Colour: silvery gray body; fin pale pink.

Size attains 1 m.

Habitats and biology: Inhabits rivers and floodplains, adaptable to ponds and impoundments. Widely cultured and introduced throughout the Southeast Asia.

Distribution: Originally known from Ganges to Irrawaddy basins, introduced elsewhere.



*Crossocheilus burmanicus*

Body elongate, slender; head small, depressed ventrally with inferior mouth, upper lip with series of finger-like lobes; 2 pairs of barbels on snout.

Colour: olive gray dorsally, silvery ventrally with dusky or dark mid-lateral body stripe; fins pale yellow or hyaline.

Size attains 15 cm.

Habitats and biology: Inhabits torrent streams with rocky bottom. Locally uncommon in markets of eastern Myanmar to southeastern Thailand.

Distribution: Eastern Irrawaddy to Salween basins.



*Labeo stoliczkaenus*

Robust body with large head; mouth small with fringed lip, small barbels; eyes larger than snout length. Scales small.

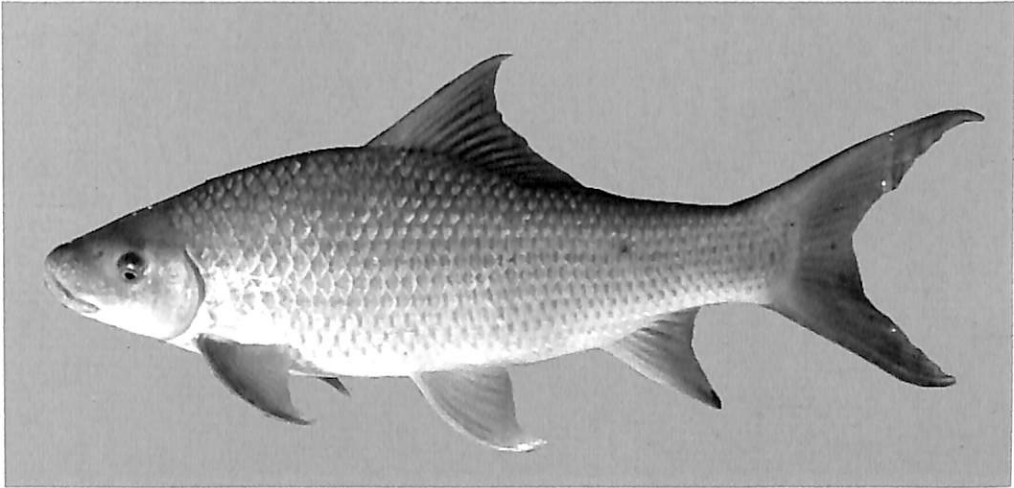
Colour: silvery gray; elongated dark mark marking at gill opening; fins dusky.

Size at attains 30 cm.

Habitats and biology: Found in larges rivers and floodplains. Common in the markets of Mandalay.

Distribution: Irrawaddy basins, may be introduced throughout Myanmar for aquaculture purposes.





*Labeo dyocheilus*

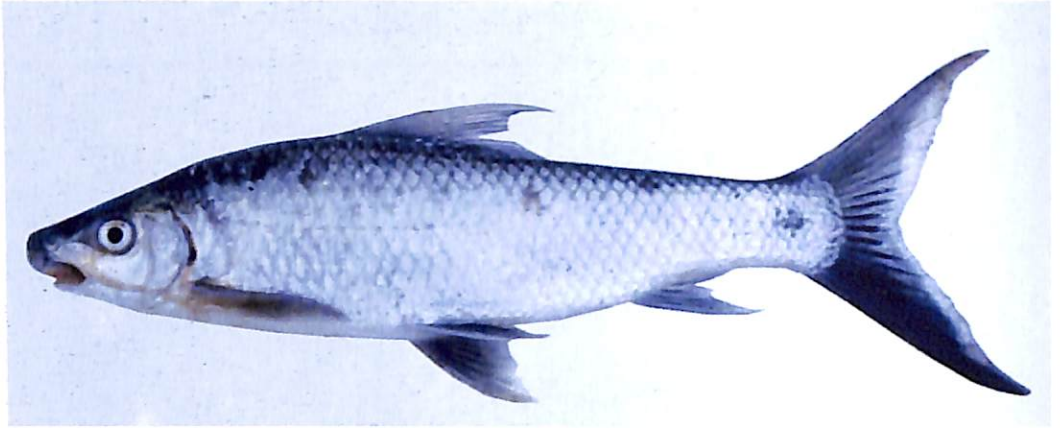
Body robust, slightly compressed; Head conical with blunt snout; lip with thick lower lip and 2 pairs of barbel. Dorsal fin without spinous ray, 10-12 branched rays.

Colour: olive to bluish silver, paler ventrally; fins dusky with pale pink hue. Juveniles with dark caudal spot.

Size at attains 50 cm.

Habitats and biology: Inhabits larges rivers with rocky rapids. Uncommon in the markets.

Distribution: Salween, Tennasserrim basins of Myanmar to the Mekong basins and western Thailand.



*Labeo pierrei*

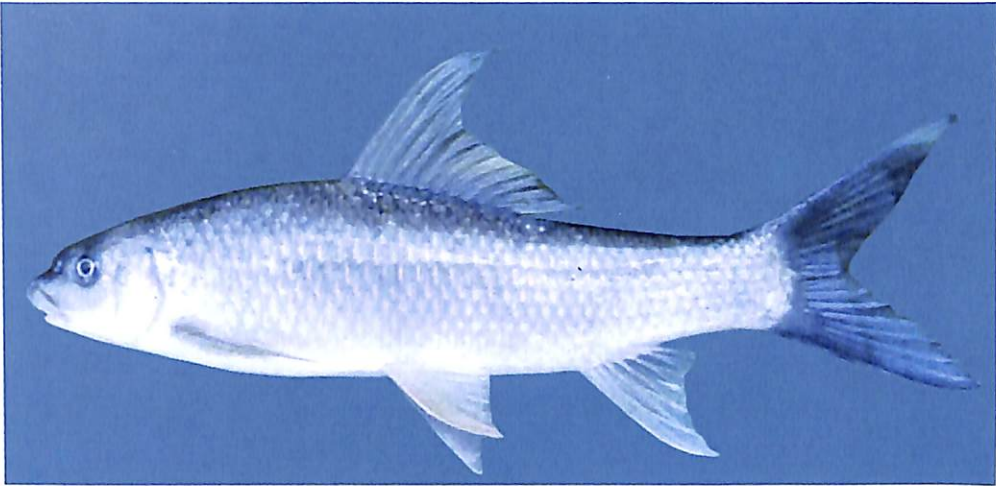
Body elongated with large conical head; mouth small, inferior, lower lip with deep postlabial groove. Dorsal fin convex posteriorly, caudal fin large, deeply forked.

Colour: bluish or greenish silver body; fins dusky.

Size attains 50 cm.

Habitats and biology: Same as preceded species. Feed mainly on periphyton from rocky substrates. Uncommon in the markets.

Distribution: Salween to Tennasserim basins and Mekong.



*Bangana devdevi*

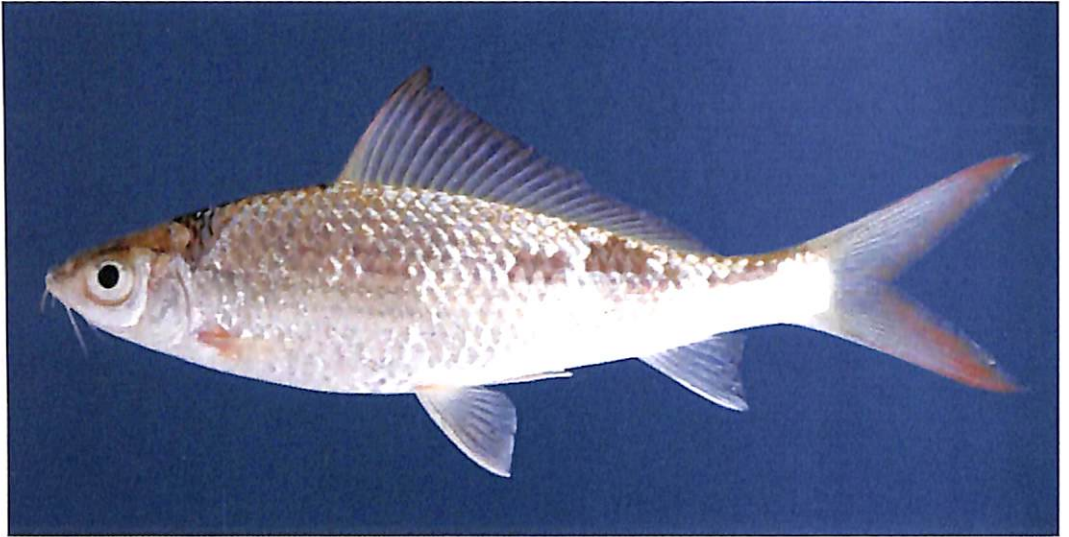
Body oblong, compressed in adults; dorsal fin without serrated spine, 10-13 broached rays. Mouth inferiors with entire, smooth lips. Head with deep transverse groove across top of snout.

Colour: olive gray above, silvery gray ventrally; dark humeral spot above pectoral fin.

Size attains 50 cm.

Habitats and biology: Inhabits mainstreams with torrent water or rocky rapids; juveniles nursing in sandy bed. Feeds mainly on periphyton and algae from rocky substrates. Seasonally landed in the markets of eastern and northern Myanmar.

Distribution: Northern and eastern rivers of Myanmar; from Irrawaddy to Salween basins and western Thailand.



*Labiobarbus burmanicus*

Body elongated; dorsal fin base long, with 28 branched rays. Mouth subterminal with fringed lips; 2 pairs of barbels.

Colour: silvery body with pink or yellow hue; fins hyaline with rosy margin, especially the caudal fin.

Size attains 20 cm.

Habitats and biology: Inhabits rivers and its branches, with muddy bottom. Rarely seen in the market of Ranong, Thailand and southern Myanmar.

Distribution: Tennasserim basins to western rivers of Peninsular Thailand.



*Garra nasuta*

Cylindrical body with ventrally depressed head, mouth inferior with a large semicircular disc. Snout with transverse groove and conical projections, in mature males with rostral process.

Colour: reddish brown or dark olive body; fins dusky. Cheek with red or rosy patch.

Size attains 20 cm.

Habitats and biology: Torrent rivers and streams with rocky and gravel bottoms. Feeds on periphyton from rock. Locally fished by cast net in highland areas.

Distribution: Salween to Tennasserrim basins.



*Garra notata*

Similar to preceded species but dorsal fin with dark spots on base of fin rays. Accompanies with other Garra species in the same habitats.

Distribution: Salween basins.



Photograph by Kamphol Udomrittiruj

*Osteochilus hasselti*

Body robust with long dorsal fin base. Mouth small subterminal with fringed lips.

Colour: greenish brown with 5-6 taints of dark stripes and a dark blotch on caudal base.

Size attains 30 cm.

Habitats and biology: inhabits various types of wetlands, adaptable to impoundments. Rarely seen in markets of Myanmar but common in southeast Asia.

Distribution: Salween to markets of Tennasserim basin in Myanmar, throughout the mainland southeast Asia to Greater Sunda.



*Rohita rohita*

Body robust with large head; small terminal lips, fringed and markedly folded. Dorsal fin without spinous ray.

Colour: body bluish gray or silver, paler ventrally; flank with reddish brown hue, including fins.

Size attains 1 m. commonly 40 cm.

Habitats and biology: Inhabit large rivers and flood plains. Widely cultured in the southeast Asian countries, one of important food fish.

Distribution: Ganges to Irrawaddy basins, introduced elsewhere.



## Family Balitoridae



### *Yunnanilus brevis*

Body elongated, stout; scales small; caudal fin slightly forked. Mouth small; with 2 pairs of barbel.

Colour: reddish brawn with irregular dark blotches over the body, paler ventrally; males with broad dark midlateral stripe. Fins hyaline yellow.

Size attains 6 cm.

Habitats and biology: Inhabits lake and adjacent streams with dense vegetations. Locally landed in the markets around the Lake Inle, where this fish is endemic.



Photograph by Kamphol Udomrittiruj

*Acanthocobitis rubidipinnis*

Body slendered, slightly compressed. Mouth inferior with 2 pairs of barbels. Dorsal fin base long, 14-15 branched rays, caudal fin emarginate.

Colour: reddish brawn body, with 12-16 vertically rows of dark spots mid laterally; fins rosy hyaline with dusky stripe.

Size attains 10 cm.

Habitats and biology: Inhabits hillstreams and rapids with gravel. Occasionally seen in aquarium markets in Bangkok.

Distribution: Irrawaddy to Salween basins.



*Balitora burmanica*

Head very depress; body slender, tapering posteriorly. Mouth small with a deep groove around the corner. Pectoral and pelvic fins large, Extended horizontally; caudal fin with larger lower lobe. Scales small.

Colour: brown to olive body with dusky blotches; fins paler with dusky spots; belly pale.

Size attains 10 cm.

Habitats and biology: Inhabits torrent streams and rocky rapids. Locally consumed by highland villagers.

Distribution: Salween to Tennasserrim basins.



*Homaloptera bilineata*

Body slender with large, falcate pectoral and pelvic fins. Snout slightly pointed with very short barbels.

Colour: reddish or olive brown body with dark brown saddle mark and blotches; fin hyaline brown with blotcher.

Size attains 10 cm.

Habitats and biology: Inhabits small streams and rapids with riparian forests. Locally uncommon in its range.

Distribution: Salween basins, probably up to the Tennasserrim.



*Physoschistura pseudobrunneana*

Body elongate, loach-like form; lower lip thick with triangular pads on each side.

Colour: body brown or olive with 14-15 dusky stripes; fin hyaline with dark spots.

Size attains 10 cm.

Habitats and biology: Inhabits rocky rapids and hillstreams. Uncommon species.

Distribution: Salween basin to upper Chaophraya and Mekong basins.



*Neonoemacheilus labeosus*

Body elongate, slightly compress, mouth subterminal, upper lip thick and fringed. Males with suborbital flap.

Colour: pale brown body with 18-19 dark, irregular bars; fins hyaline.

Size attains 10 cm.

Habitats and biology: Inhabits rocky rapids and hillstreams, uncommonly encountered.

Distribution: Restricted to Salween basin.



*Schistura alticrista*

Body loach- like form with upper keel on caudal peduncle, higher in males. Body olive green or brown with reddish or rosy bands; fins hyaline.

Size attains 6 cm.

Habitats and biology: Inhabits hillstreams and rocky rapids. Known from the Salween basin.



Photograph by Kamphol Udomrittiruj

*Schistura cincticauda*

A small loach which body elongate; lateral line incomplete. Suborbital flap absent; eyes large. Body pale brown or olive with dusky bands, more on post dorsal fin; caudal fin base with black band. Fins hyaline.

Size attains 5 cm.

Habitats and biology: Inhabits rivers and hillstreams with gravel bottom. Known from Salween to Tennasserrim basins.





*Schistura paucicincta*

A small loach which slender body; lateral line up to pelvic fin position. Body pale brown with dusky or brown bands and much wider on caudal peduncle, 2-3 bands; caudal base band interrupted.

Size attains 5 cm.

Habitats and biology: Same as preceded species. Known from the Salween basin.



Photograph by Kamphol Udomrittiruj

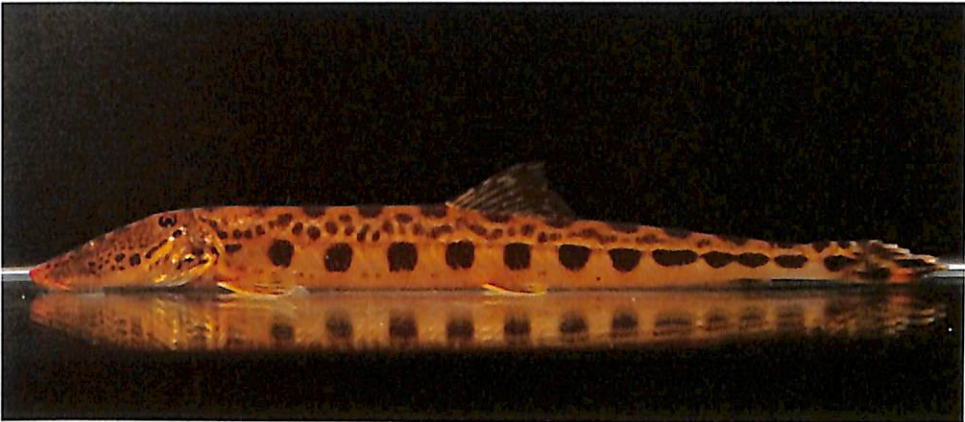
*Schistura vinciguerrae*

Body slender with 17 vertical banded caudal fin rays. Body pale brown with dark or dusky bands, the bands much slender on pre dorsal area. Fins hyaline with dark spots.

Size attains 8 cm.

Habitats and biology: Inhabits hillstreams and rapids. Known from the Salween basin.

## Family Cobitidae



Photograph by Kamphol Udomrittiruj

### *Acanthopsis spectabilis*

The elongated loach with pointed snout, large head and small spines under orbits. Mouth small, fringed with short barbels.

Colour: body buff or pale brown, with goldish hue, polar ventrally, dark irregular blotches or spots on dorsal half and head, Fins hyaline with dark blotch on yellow caudal fin.

Size attains 30 cm.

Habitats and biology: Inhabits torrent rivers with sandy or sandy mud bottom, uncommon and locally landed in the markets.

Distribution: Salween to Tennasserrim basins.



Photograph by Kamphol Udomrittiruj

*Botia berdmorei*

Body oblong, slightly compressed snout pointed with 2 pairs of barbels, lower lip without papillae, suborbital spine not perpendicular to snout when river from above.

Colour: olive brown body with vertical bars and black speckles on body; fins reddish with dusky stripes, dorsal fin with dark blotch.

Size attains 15 cm.

Habitats and biology: Inhabits rapids and hillstreams. Diets consist aquatic insect and smaller shellfishes. Occasionally seen in aquarium trade in Thailand.

Distribution: Known only from the Salween and Tennasserrim basins.



*Botia rostrata*

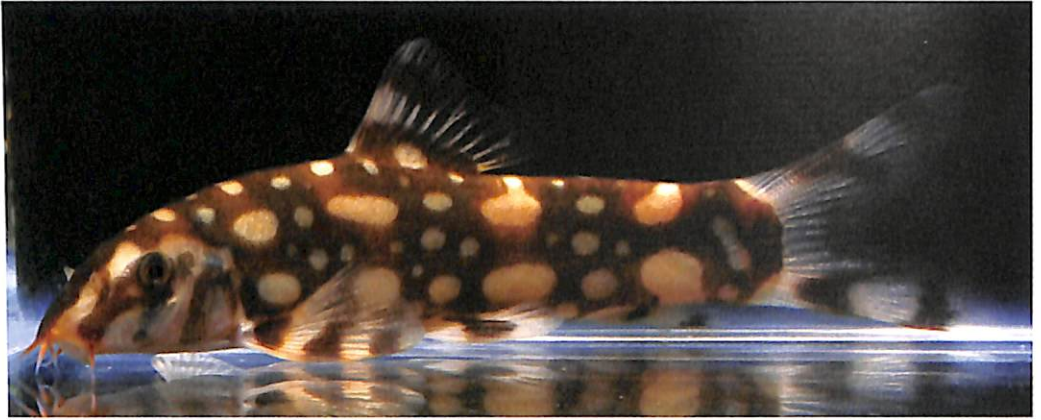
A started, compressed body botia with pointed snout; lower lip with a pair of papillae. Suborbital spine perpendicular to snout when view from above. Caudal fin deeply forked.

Colour: olive to bright yellow with black irregular stripes and spots ; fin yellow with dark bars.

Size attains 25 cm.

Habitats and biology: Inhabits mainstreams with rocky rapids. Occasionally seen in aquarium markets in Thailand.

Distribution: Known from Salween and Tennasserrim basians.



Photograph by Kamphol Udomrittiruj

*Botia kubotai*

Body shape similar to *B. rostrata* but more slender; snout shorter. Body dark brown or black with yellowish spots and oval blotches pattern, ventral paler; fins yellow with dark bars.

Size attains 15 cm.

Habitats and biology: Inhabits rocky rapids and sandy bottom of hillstreams and rivers.

Distribution: Known from lower Salween basin.



*Botia histrionica*

Body and snout short, compressed.

Colour: body olive or yellow with 5-6 dark bands over head and body; fins with transverse dark bands.

Size attains 10 cm.

Habitats and biology: Inhabits mainstreams and floodplains. Always mixed with smaller food fishes in the markets of central Myanmar.

Distribution: Known from Irrawaddy basin.



*Lepidocephalichthys berdmorei*

Body slightly compressed, depth uniform for entire length. Snout short, with small barbels. Caudal fin truncate.

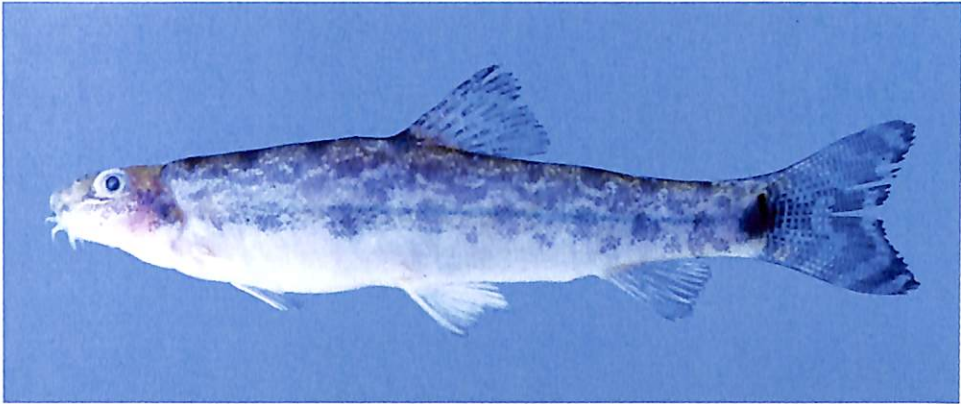
Colour: body reddish brown with mid lateral row of dark blotches; upper caudal base with black spot. Fins hyaline with dark bars.

Size attains 8 cm.

Habitats and biology: Inhabits streams from hills to lowlands. Seasonally landed in the markets of central to northern Myanmar.

Distribution: Known from Irrawaddy to Salween basins and southern Thailand.





*Lepidocephalichthys micropogon*

Body and head compressed; head small and caudal peduncle slender. caudal fin emarginated.

Colour: body pale brown with five dark midlateral stripes and dusky blotches; caudal fin with oblique lines.

Size attains 6 cm.

Habitats and biology: Inhabits lowland rivers and flood plains. Seasonally landed in the markets of central Myanmar.

Distribution: Known from the Irrawaddy basin.

## Family Siluridae



### *Ompok bimaculatus*

The tapering compressed body catfish with small dorsal fin, long anal fin base and small pelvic fin. Maxillary barbels short.

Colour: dark olive body or pale prawn with large dusky numeral blotch.

Size attains 40 cm.

Habitats and biology: Inhabits rivers and wetlands. Commonly seen in the markets; one of important foodfish.

Distribution: Known from Ganges to Salween basins.



Photograph by Kamphol Udomrittiruj

### *Ompok pabo*

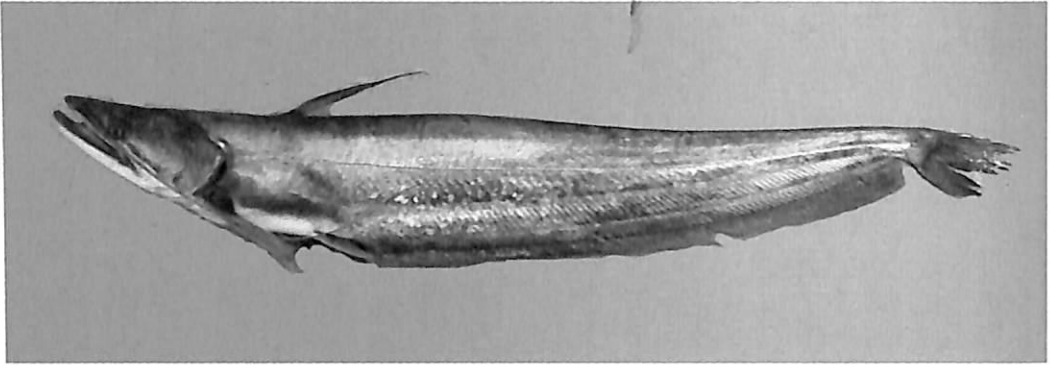
Similar to *O.bimaculatus* but much shorter barbels, caudal fin smaller and longer anal fin base.

Colour: drab gray, olive dorsally with dusky haemeral spot.

Size attains 25 cm.

Habitats and biology: Inhabits mainstreams and floodplains. Occasionally seen in the markets mixed with other *Ompok spp.*

Distribution: Ganges to Salween basins.



*Wallago attu*

A large pointed head catfish with large mouth, jaw extended beyond eye; maxillary barbels long. Pectoral fin large, dorsal fin small, pointed.

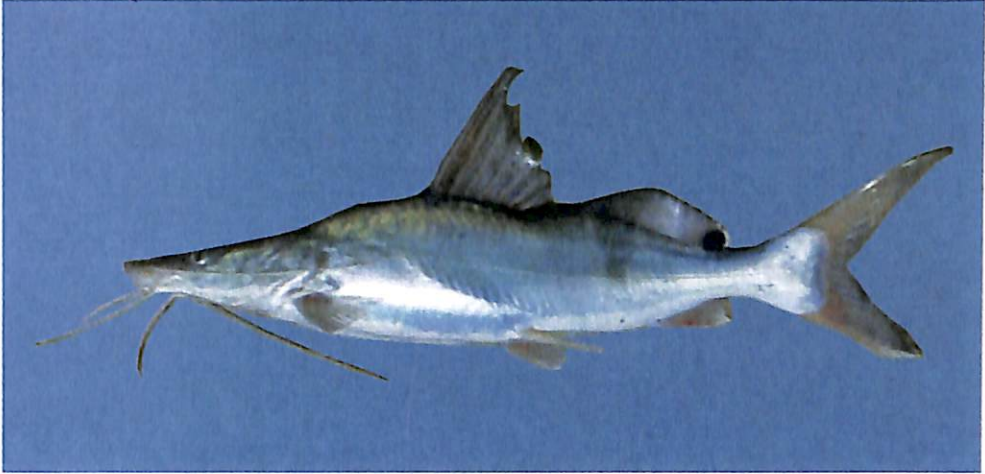
Colour: body silvery gray, olive dorsally ventral pale.

Size attains 1.5 m.

Habitats and biology: Inhabits rivers and wetlands. Important foodfish, landed throughout the Myanmarese markets including of the southeast Asian mainland.

Distribution: Known from Ganges to Mekong basins.

## Family Bagridae



Photograph by Jaranthada Karnasuta

### *Sperata acicularis*

Body elongate; snout pointed and slender caudal peduncle. Head depressed; mouth terminal with 4 pairs of barbels; maxillary barbels long reaching to anal fin. Adipose fin base very long, caudal fin deeply fork and falcated upper lobe.

Colour: silvery blue or gray; posterior of adipose fin with black eye spot.

Size attains 1.8 m.

Habitats and biology: Inhabits rivers and larger hillstreams with sandy or muddy bottom. Spawning by build round crater-like nest on sand and do parental care until its fries become juveniles. Seasonally occurred in the markets of eastern Myanmar border.

Distribution: Known from the Irrawaddy to Tennasserrim basins.



Photograph by Kamphol Udomrittiruj

*Mystus cavasius*

Head small with subterminal mouth; maxillary barbels long. Dorsal spine high; adipose fin base very long, origin just behind dorsal fin.

Colour: olive gray uniform with dark spot on origin of dorsal spine.

Size attains 20 cm.

Habitats and biology: Inhabits mainstreams and its branches with muddy bottom. Commonly seen in markets of central Myanmar.

Distribution: Known from Ganges to Salween basins.



Photograph by Kamphol Udomritiruj

*Mystus pulchra*

A small bagrid which body robust. Dorsal spine short; adipose fin low with long base.

Colour: olive or yellowish; gray with dusky stripes; and dark humeral, caudal eye spots.

Size attains 8 cm.

Habitats and biology: Inhabits lowland rivers and floodplains. Common in central Myanmar markets.

Distribution: Irrawaddy to Sittuang basins.



*Mystus gulio*

Body robust with short adipose fin; dorsal spine short.

Colour: dark olive or gray body; anal fin with black or dusky margin.

Size attains 20 cm.

Habitats and biology: Inhabits lower reaches of the rivers and estuaries. Usually found in large schools. Commonly seen in the markets of central Myanmar.

Distribution: Known from Ganges basin to lower Mekong and Borneo.





*Mystus leucophasis*

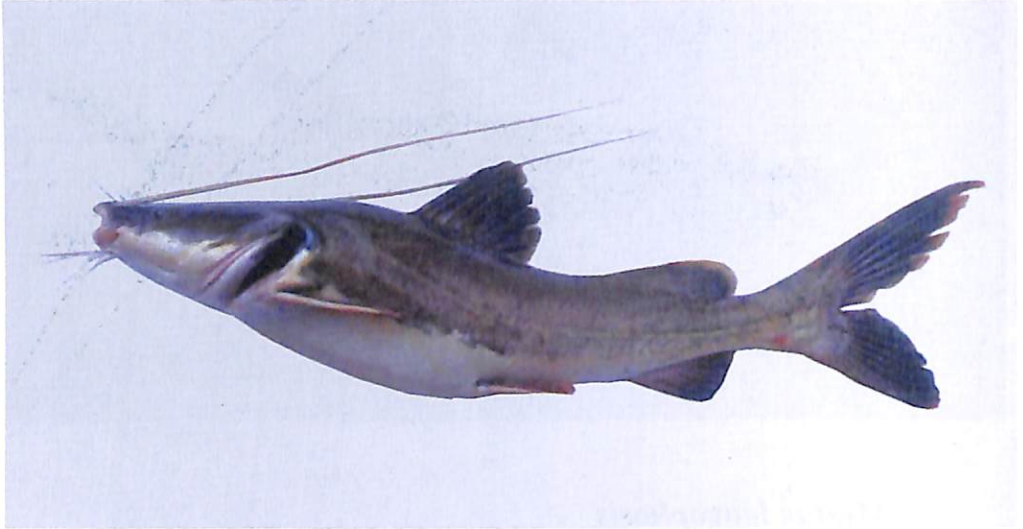
Head large with big eyes; dorsal spine high and long adipose fin base. Mouth subterminal, small with long maxillary barbels.

Colour: uniform black in juveniles and dark with gray or pearly mottles in adult, pale above.

Size attains 25 cm.

Habitats and biology: Inhabits lowland mainstreams. Commonly found in aquarium markets and it is important exported species of Myanmar. Now commonly bred in aquarium farms of Thailand. Wellknown as “Upside- down catfish” from its swimming habit.

Distribution: Restricted to Irrawaddy and Sittuang basins.



*Hemibagrus microphthalmus*

Body oblong, deeper at dorsal fin origin; head depress with subterminal mouth. Adipose fin base short, equal to anal fin base, upper caudal fin lobe filamentously extended.

Colour: bluish to olive gray body, paler ventrally; maxillary barbels white.

Size attains 1.5 m.

Habitats and biology: Inhabits rivers and larger streams. Seasonally occurred in the markets of central Myanmar.

Distribution: Ganges to Salween basins.



Photograph by Kamphol Udomrittiruj

*Hemibagrus variegatus*

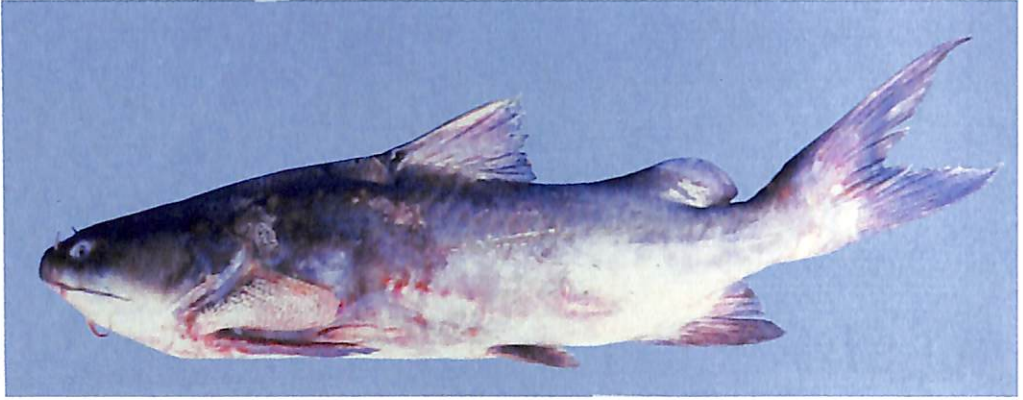
Head depressed and broad, mouth subterminal; body oblong, dorsal profile high; adipose fin base long.

Colour: olive to greenish brown dorsally, paler or yellow ventrally, with gold hue and dark brown marking, forming a variegated pattern.

Size attains 80 cm.

Habitats and biology: Inhabits upper reaches of the rivers with rocky and gravel bottom. Not seen in the markets.

Distribution: Endemic to the Tennasserrim basin.



*Rita sacerdotum*

Head large with blunt snout; mouth terminal; eye small. Craniums and haemeral area with rough bony tubercle in rings pattern. Body very robust; adipose fin base shorter than anal fin.

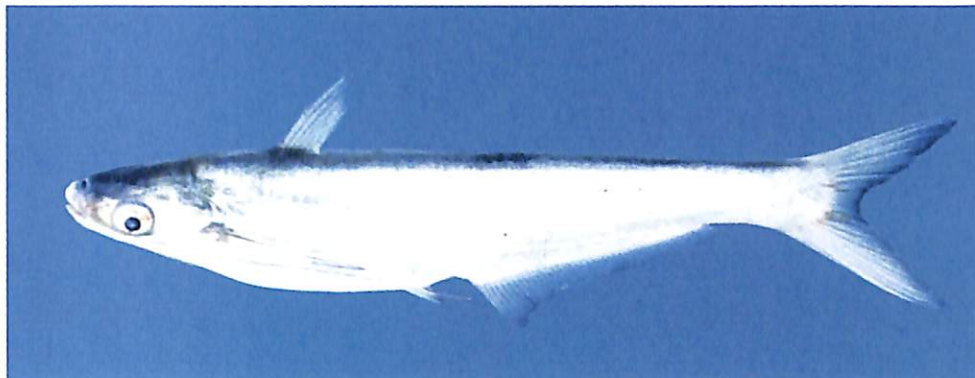
Colour: dark or purple gray dorsally, paler ventrally; fins dusky.

Size attains 2 m.

Habitats and biology: Inhabits lower reaches to estuaries. Seasonally landed in the markets of central and eastern Myanmar including Maesot of Thailand but very uncommon.

Distribution: Known from Irrawaddy to Salween basins.

## Family Schilbeidae



### *Clupisoma pratteri*

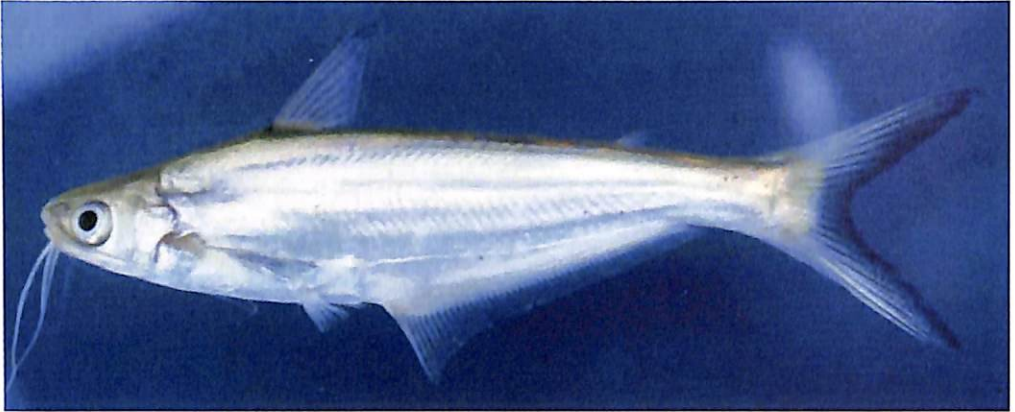
Body elongate, head small with large eyes, blunt snout and 4 pairs of barbels. Maxillary barbels long, reaching anal fin. Abdomen with midventral keel; pectoral fin long reaching pelvic fin.

Colour: silvery gray, olive dorsally.

Size attains 25 cm.

Habitats and biology: Inhabits mainstreams and larger branches. Seasonally occurred in the markets of central Myanmar.

Distribution: Irrawaddy to Salween basins.



*Eutropiichthys burmanicus*

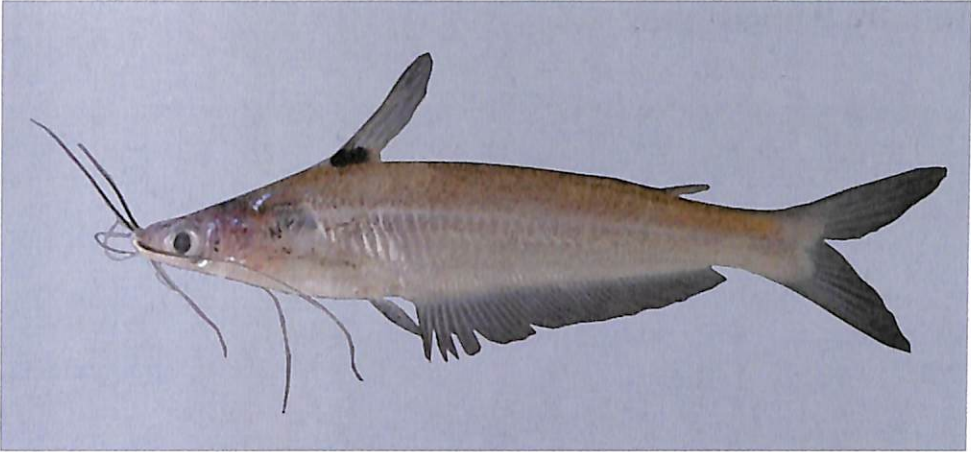
Head and body slightly compressed; snout slightly pointed with wide mouth, reaching below orbit. Abdomen without keel. Anal fin base long, caudal fin deeply fork, adipose fin minute.

Colour: silvery gray body; fin pale yellow, caudal fin with dusky margin.

Size attains 35 cm.

Habitats and biology: Inhabits mainstreams seasonally moving upstreams. Uncommonly seen in the markets.

Distribution: Known from Irrawaddy to Salween basins.



*Proeutropiichthys burmannicus*

Body compress; head small with large eyes; barbels very long. Posterior nasal large; nasal barbels elongate. Pectoral spine slender, not reaching pelvic fin.

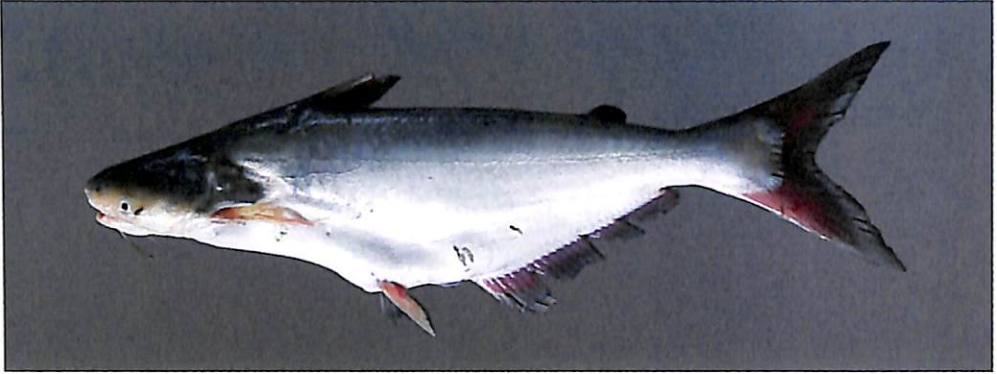
Colour: translucent body with dusky lateral stripes in alive fish. Dorsal fin origin with dark spot. Opaque body when dead.

Size attains 10 cm.

Habitats and biology: Inhabits lower to middle reaches of mainstreams. Mixed with other small catfish in the markets.

Distribution: Known from Irrawaddy to Sittoung basins.

## Family Pangasiidae



*Pangasius pangasius*

Body fusiform; mouth subterminal with 2 pairs of short barbels. Toothpatch forming slender bands with median gap. Adipose fin small; pectoral fin spine long; anal fin base long.

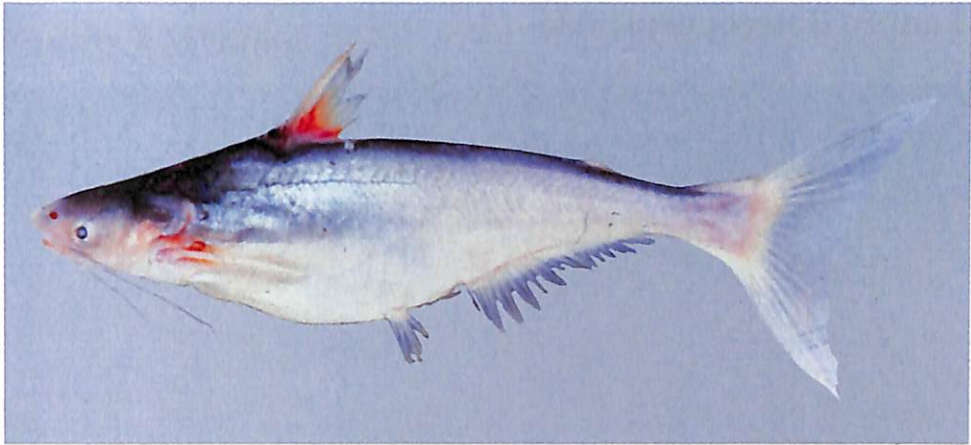
Colour: silvery gray body and fins; caudal fin yellowish with dark margin.

Size attains 1 m.

Habitats and biology: Inhabits larger rivers and estuaries. Commonly seen in Yangon markets; one of important foodfish.

Distribution: Ganges to Irrawaddy basins.





*Pangasius myanmar*

Body fusiform, similar to *P.pangasius* in general appearance. Mouth inferior or subterminal; toothpatch on palate forming a median oval patch and smaller lateral maxillary patches.

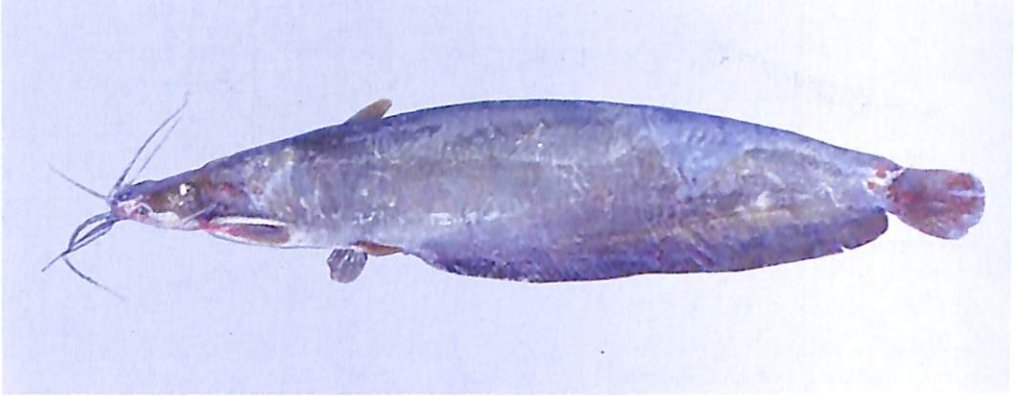
Colour: silvery or dull gray body; caudal fin yellowish.

Size attains 1 m.

Habitats and biology: Inhabits mainstreams and lower reaches. Seasonally seen in the markets.

Distribution: Irrawaddy to Salween basins.

## Family Heteropneustidae



### *Heteropneustes fossilis*

Body tapering, compressed; head depressed. Mouth terminal with 4 pairs of long barbels. Dorsal fin small, anal fin base longer than half of body.

Colour; dark to olive brown, some fish with dark lateral stripes.

Size attains 30 cm.

Habitats and biology: Inhabits lower reaches and estuaries. Commonly landed in the markets of central Myanmar to Indian subcontinent. One of important foodfish, and also of the most venomous fish, from its pectoral spines.

Distribution: Know from Ganges to Sittuang basins. A species from central Myanmar to peninsular Thailand is *H. kemarattensis*.

## Family Clariidae



### *Clarias batrachus*

Body slightly compress; head depress, rounded snout with 4 pairs of barbels; eye small; occipital edged pointed. Dorsal and anal fin bases very long, pectoral spine strong.

Colour: drab or brownish gray, often with scattered light spots.

Size attains 30 cm.

Habitats and biology: Inhabits rivers and marshlands. Common in the markets throughout the Southeast Asia, usually sold alive.

Distribution: Know from Ganges to Salween basins, and throughout the Southeast Asian inland waters.

## Family Amblycipitidae



### *Amblyiceps platycephalus*

Body elongate, uniform depth; head very depress with terminal mouth. Caudal fin large, deeply fork; adipose fin small; pectoral spine short.

Colour: dark to reddish brawn, pale ventrally.

Size attains 12 cm.

Habitats and biology: Inhabits shallow hillstreams with rocky rapids. Rarely fished and not seen in the market.

Distribution: Endemic to the Salween basin.

## Family Sisoridae



### *Bagarius yarrelli*

Head large depressed with wide mouth and large canine teeth; maxillary barbels with broad fleshy base. Skin rough; adipose fin base equal to anal fin base; caudal fin deeply fork.

Colour: yellowish brown or gray with dark saddle beneath dorsal and adipose fins and scattered spots.

Sizes attain 2 m.

Habitats and biology: Inhabits mainstreams with sandy or muddy bottoms. Strongly carnivorous catfish, taken by long lines, gill nets and seine nets. Commonly seen in the markets.

Distribution: Ganges to Mekong basins and Borneo.



*Exostoma berdmorei*

Body elongate, depressed up to pelvic base. Mouth inferior with fleshy papillae, from pairs of barbels; maxillary barbels with broad fleshy base.

Colour: olive or greenish gray with pale yellow patches; caudal fin darker.

Sizes attains 10 cm.

Habitats and biology: Inhabits torrent streams, rocky rapids on higher elevation.

Distribution: Tennassrin and Salween basins.



*Gagata gasawuyh*

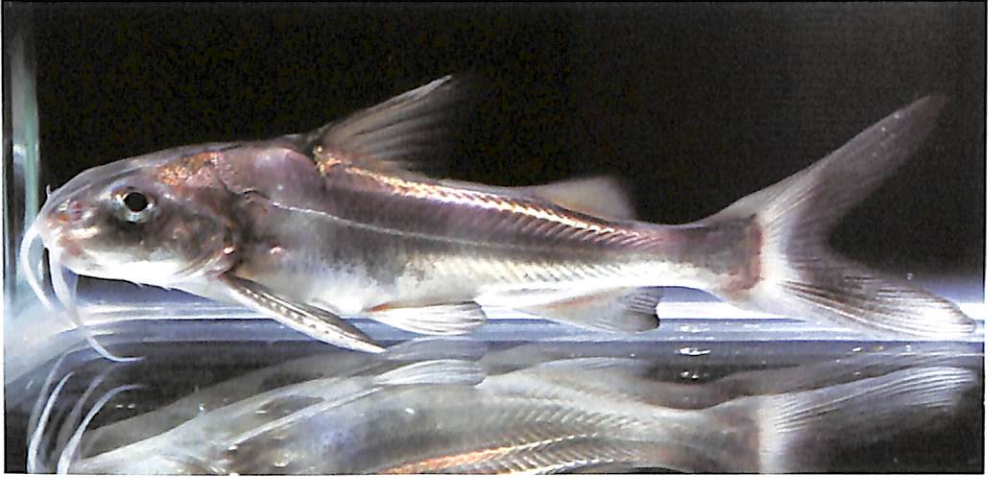
Body elongate, slender; head conical with small inferior mouth; eye large with small pupil or cat like. Skin smooth, without tubercle. Adipose fin small, caudal fin deeply fork.

Colour: golden or yellow above with four dark saddles. Caudal fin with dark morking.

Sizes attains 10 cm

Habitats and biology: Inhabits larger mainstreams with muddy or sandy bottoms. Rarely seen in the markets.

Distribution: Irrawaddy to Salween and Tennassrin basins.



*Gagata melanopterus*

Body stout, head short, triangular with small inferior mouth. Caudal fin deeply forked.

Colour: gray or silver body with faint saddles. Dorsal, anal, pectoral and pelvic fins with dark margin; caudal fin plain.

Size attains 10 cm.

Habitats and biology: Inhabits larger river with muddy bottoms. Common in Yangon markets, mixed with several small fishes.

Distribution: Irrawaddy to lower Salween basin.





*Glyptothorax trilineatus*

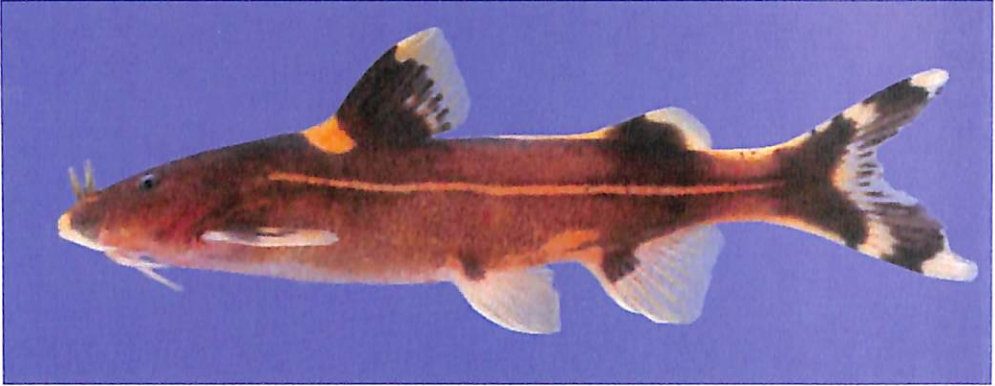
Body elongate, head small with inferior mouth; eye small, directed dorsally. Ventral thorax with patch of pleated skin.

Colour: dark brawn with three yellowish stripes, on middorsal and midlateral on body; caudal fin with yellow tips.

Size attains 15 cm.

Habitats and biology: Inhabits torrent streams with rocky bottoms; feed mainly on insect and shrimps. Rarely seen in the markets.

Distribution: Salween to Tenneserrim basins.



*Glyptothorax dorsalis*

Body less elongate; skin granulated.

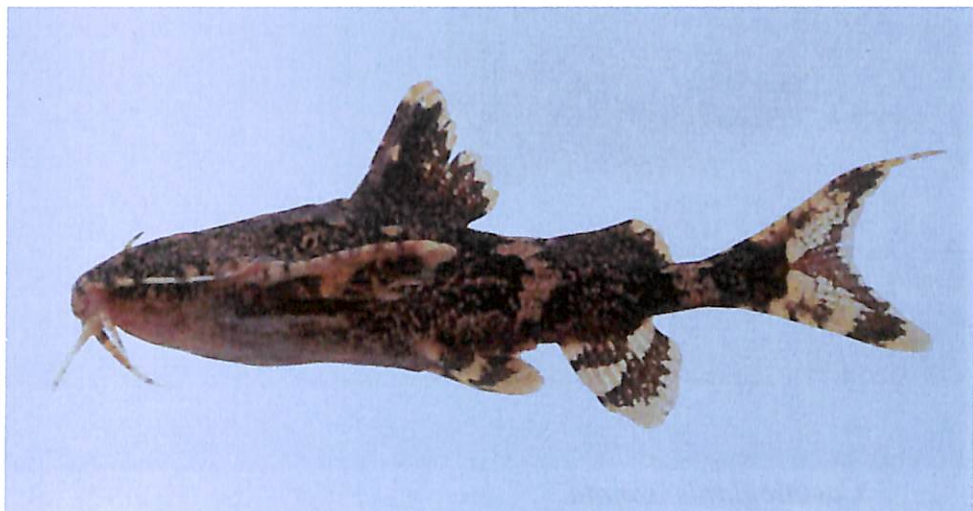
Colour: dark brown body with pale or yellowish brown patches; dorsal spine base and adipose fins with bright yellow patches.

Size attains 15 cm.

Habitats and biology: Inhabits hillstreams and rocky rapids in the rivers. Rarely seen in the Salween basins.

Distribution: Irrawaddy to Salween basins.

## Family Erethistidae



### *Erethistes maesotensis*

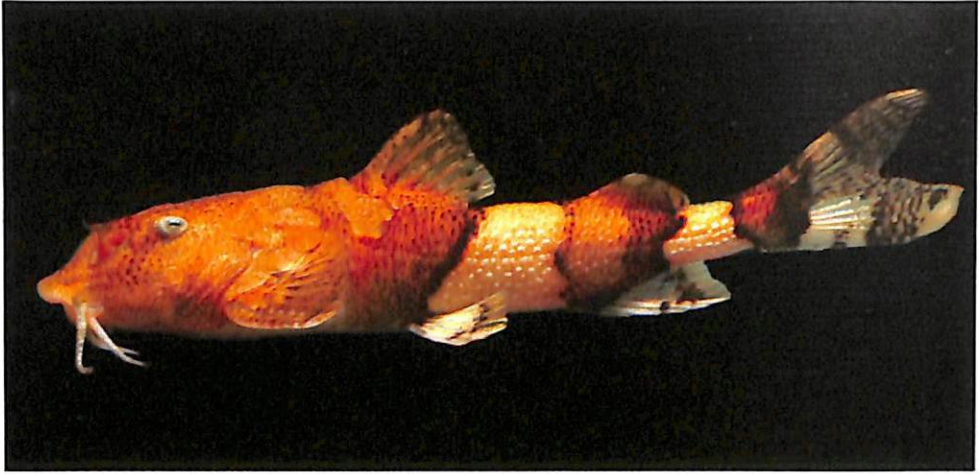
The small catfish which large head; small mouth with 4 pairs of barbals. Pectoral spine long with serrated edge. Skin with small tubercles.

Colour: body brownish or dark brawn with olive and dark mottles; fins hyaline with brawn and dark spots.

Size attains 4 cm.

Habitats and biology: Inhabits rivers and streams with sandy mud and gravel bottoms. Not seen in the markets but uncommonly seen in aquarium trade.

Distribution: Known from the Salween and Tennasserrim basins.



*Caelatoglanis zonata*

Similar to *E. maesotensis* in general appearance but larger head and longer snout. Body cover with rows of tubercles.

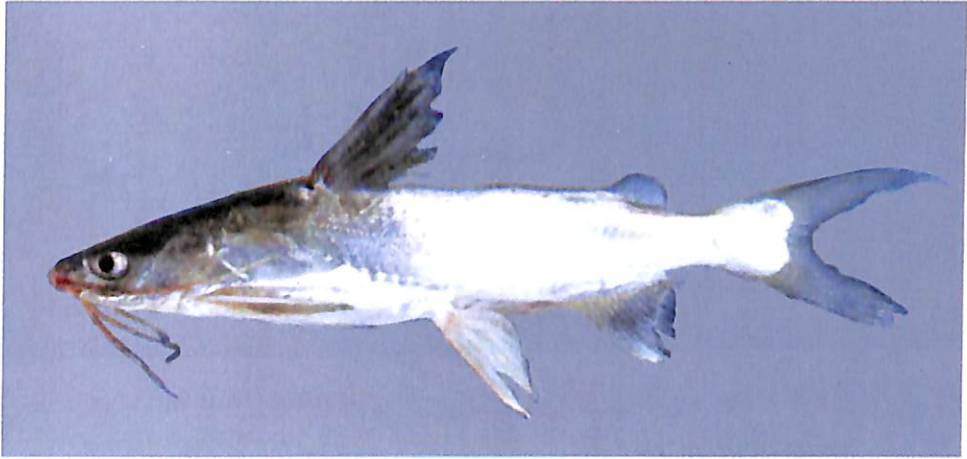
Colour: body goldish brown with dark mottles, paler ventrally; fins hyaline with dark brown blotches.

Size attains 4 cm.

Habitats and biology: Inhabits rivers and hillstreams. Rarely seen in aquarium trade.

Distribution: Known from lower Salween basins.

## Family Ariidae



### *Arius arius*

Body fusiform, similar shape to *Pangasius* but much shorter anal fin base and head with granular skull. First dorsal fin with long filament. Maxillary barbels extend to pectoral fin origin.

Colour: steel gray or blue, paler ventrally; adipose fin with black spot.

Size attains 20 cm.

Habitats and biology: Inhabits estuaries and lower reaches including coastal waters. Commonly seen in markets of coastal area and southwest Myanmar.

Distribution: Ganges to southwest Thailand.



*Arius acutirostris*

Snout pointed; mouth inferior with short barbels skull with rugose surface. Dorsal spine high, pectoral spine long.

Colour: olive gray body, paler ventrally; fins with dark distal parts.

Size attains 40 cm.

Habitats and biology: Inhabits lower reaches and estuaries. Seasonally occurred in the markets of coastal provinces and at Ranong, Thailand

Distribution: Southern Myanmar to Ranong.



*Arius burmanicus*

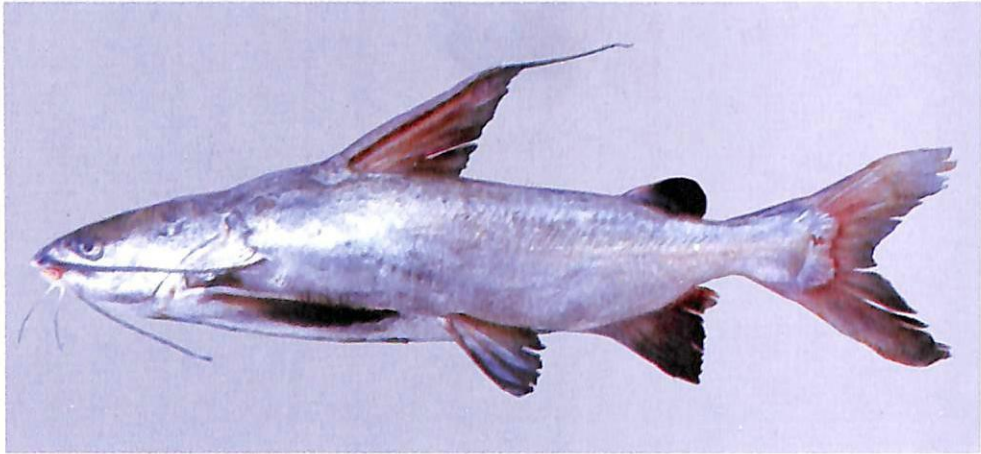
Head and snout depressed, spatulate; mouth subterminal, maxillary barbels reaching pectoral fin. Bodies truncate with high dorsal spine.

Colour: olive or silvery gray body, paler ventrally, with 7-8 vertical rows of pale spots.

Size attains 40 cm.

Habitats and biology: Inhabits estuaries and coastal waters. Commonly seen in the markets of peninsular Thailand and Southern Myanmar.

Distribution: Irrawaddy basin to western Malay Peninsula.



*Hemipimelodus jatus*

Head large, shorter snout with long barbels, reaching pectoral fin base; with filamentous ray, high dorsal spine.

Colour: grayish silver; adipose fin with dark spot; fins yellow.

Size attains 30 cm.

Habitats and biology: Inhabits lower reaches and estuaries. Seasonally common in the Yangon markets and central Myanmar.

Distribution: Known from Irrawaddy basin.



## Family Plotosidae



### *Plotosus canius*

Head large with large mouth, thick lips and 4 pairs of barbels. Eye small, directed dorsally; gill membrane free from isthmus. Dorsal spine short, pectoral spine strong; dorsal fin confluence to caudal and anal fins.

Colour: uniformly dark olive or brown, pale ventral.

Size attains 1.5 m.

Habitats and biology: Inhabits estuaries and coastal waters, frequently entering lower reaches of the rivers. Common in the markets of Southeast Asia; one of economic important catfish. Its spines contain strong venom; need to be head ling with care.

Distribution: Throughout Indo-West Pacific coasts and estuaries, but possibly consist of multiple species which look similar.

## Family Belontiidae



### *Xenentodon cancilla*

Elongated body with pointed, slender beak and villiform (needle-like) teeth. Dorsal and fin close to caudal peduncle; caudal fin truncate.

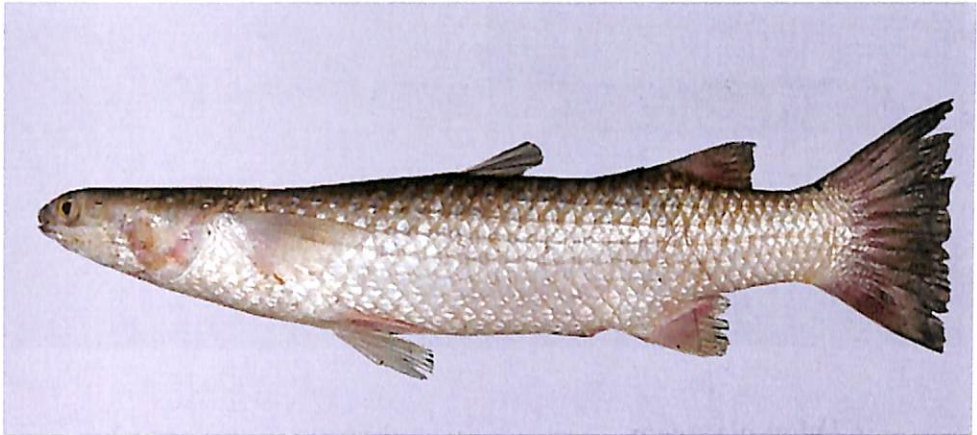
Colour: silvery gray with faint midlateral stripe, fins hyaline.

Size attains 40 cm.

Habitats and biology: Inhabits rivers and several habitat types. Usually swim close to surface. Feed mainly on smaller fishes. Common in the markets.

Distribution: Throughout Southeast Asian wetlands.

## Family Mugilidae



### *Rhinomugil corsula*

Body cylindrical; first dorsal fin beyond half of dorsal length. Eye large, projecting above head margin. Caudal fin emarginate.

Colour: silvery gray, greenish above.

Size attains 30 cm.

Habitats and biology: Inhabits lower reaches and estuaries. Swim just below the surface in large shoals. Seasonally common in the markets of central Myanmar.

Distribution: Ganges to Sittuang basins.



*Chelon planiceps*

Body cylindrical; head flat; mouth terminal. Eye covered with adipose lid. Dorsal spine strong; caudal fin slightly forked.

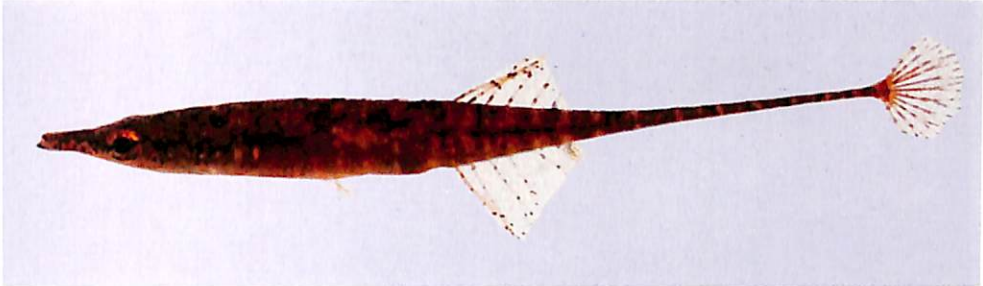
Colour: silvery gray, fins hyaline gray, caudal fin with yellow tint.

Size attains 30 cm.

Habitats and biology: Inhabits esterase and coastal waters. Common in Yangon markets. One of important foodfish.

Distribution: Coasts of Eastern Indian Ocean, common in India to Myanmar, rarer elsewhere.

## Family Indostomidae



### *Indostomus paradoxus*

Small, slender fish; body covered with bony plates. Mouth small at the tip of tubular snout. Dorsal fin preceded by 5 tiny spines, soft dorsal fin is opposite to anal fin. Caudal peduncle very slender with small rounded caudal fin.

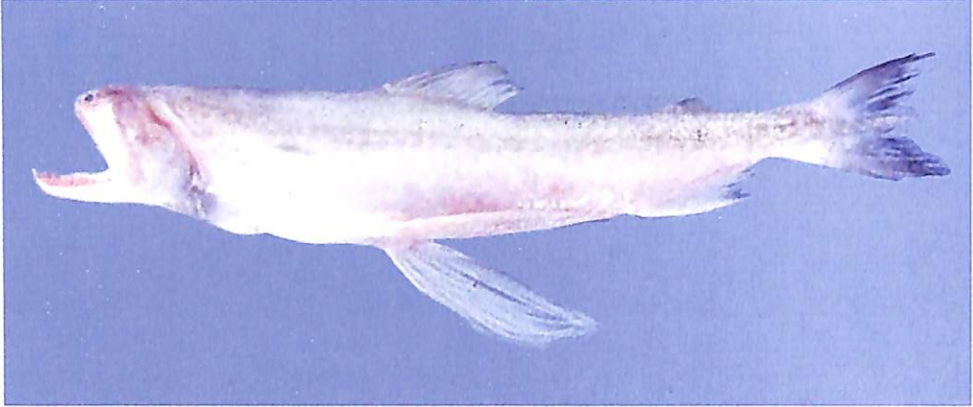
Colour: brown to dark brown with dark spots body; fin hyaline, in mature male with brownish fins.

Size attains 2.5 cm.

Habitats and biology: Inhabits marshlands and streams with dense vegetation. Known from uncommon aquarium specimens. Feeds mainly on zooplankton; breeding by means of parental care.

Distribution: Endemic to Lake Indawgi of western Myanmar. Its related 2 species are uncommonly occurred in mainland southeast Asia to Malay Peninsula.

## Family Harpadontidae



### *Harpadon nahereus*

A deep sea-like looking fish with very wide mouth, small teeth on jaws, tongue; minute eye. Body cylindrical, slightly compress with deciduous scales and intact only on lateral line up to process of mid caudal fork.

Colour: pale white with pearly scales, fins opaque or pale with dusky hue.

Size attains 30 cm.

Habitats and biology: Inhabits estuaries and coastal waters with highly turbid, may be seasonal moving to deeper waters. Piscivorous, taken by small scales net fisheries in estuarine areas. Common in Yangon markets, usually processed as dried fish and exported to southeast Asian markets.

Distribution: Indo-West Pacific but more common in larger river mouth; Ganges, Irrawaddy and Mekong Delta.

## Family Synbranchidae



### *Monopterus albus*

The cylindrical body eel with large head; minute eyes; and absent of paired fins. Caudal part slendered, pointed. Gill membrane with a single midventral opening.

Colour: reddish to dark or olive brown body, paler ventrally with dark, yellow or orange spots.

Size attains 50 cm.

Habitats and biology: Inhabits several types of wetlands from hillstreams to lowland swamps, including paddy field. Common in the markets throughout South and Southeast Asia, one of important foodfish.

Distribution: Widely distributed from Indian subcontinent to southeast China and East Indies.



***Monopterus cuchia***

Similar to *M.albus* but more slender body and more pointed snout. Gill opening broadly round at midline. Body with fine scales except on head.

Colour: reddish or dark with dark spots and dusky scale markings.

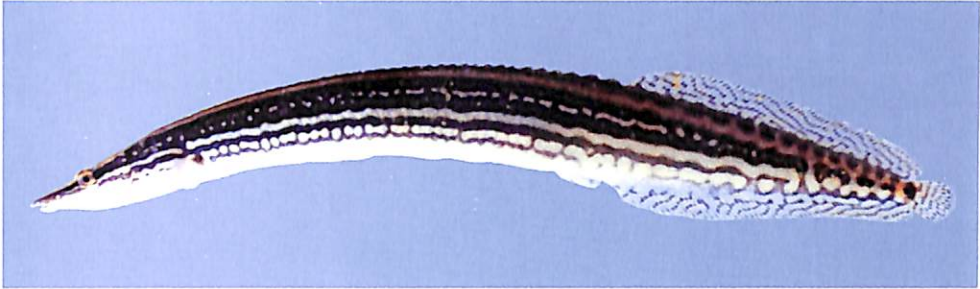
Size attains 40 cm.

Habitats and biology: Inhabits rivers and lakes. Commonly seen in Yangon markets.

Distribution: Ganges to Irrawaddy basins.



## Family Mastacembelidae



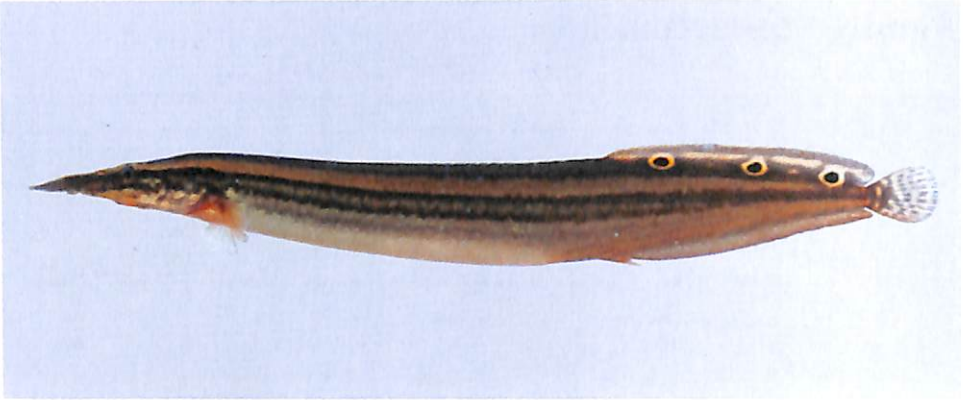
### *Macrognathus radiocellatus*

Body long, slightly compressed with a series of short dorsal spines. Snout pointed, overhangs upper jaw. Dorsal fin confluent with caudal and anal fins with long base.

Colour: yellowish brown body with dark or olive brown fine reticulations, caudal fin with round spots.

Size attains 25 cm.

Habitats and biology: Inhabits lake with dense vegetation and adjacent streams. Common in markets around Lake Inle, where this species is endemic to.



*Macrogathus aral*

Snout pointed with large rostrum and concave ventrally, with 14-28 pairs of toothplates. Caudal fin separated from other fins.

Colour: yellowish brown with pale longitudinal stripe on body, single series of eyespots along base of dorsal fin; caudal fin with fine vertical streaks.

Size attains 40 cm.

Habitats and biology: Inhabits river and marshlands of lowland area. Commonly seen in Yangon and Bago markets.

Distribution: Ganges to Irrawaddy basins.



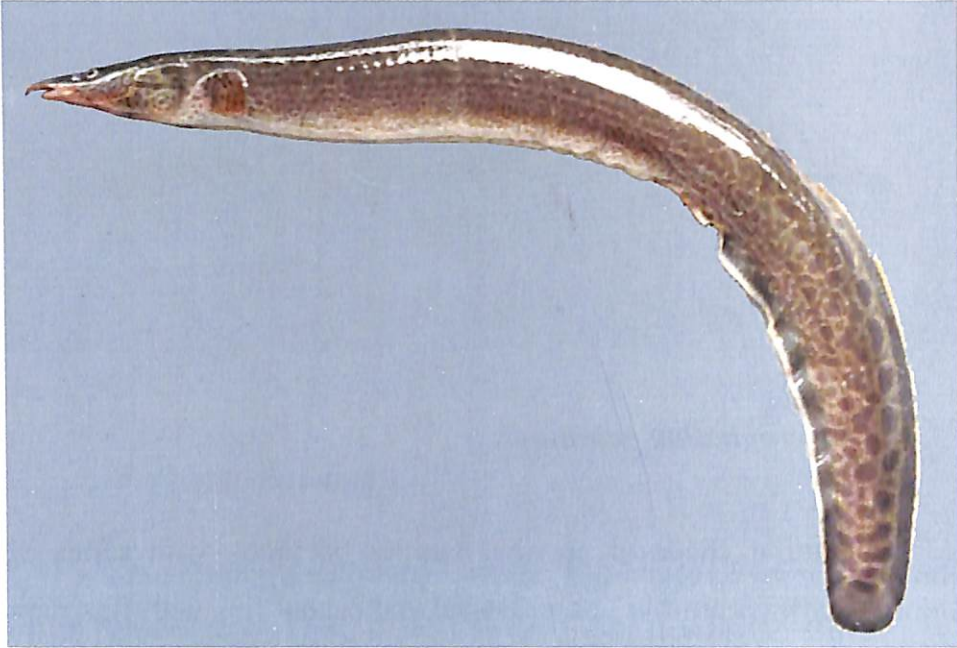
*Macrognathus zebrinus*

Similar shape of previous species but body with series of slender dark (zebra-like) base. Dorsal and caudal fins with fins dark striation.

Size attains 25 cm.

Habitats and biology: Inhabits lowland rivers and marshland including streams. Commonly seen in markets of central Myanmar both in fresh and dried products, frequently imported to Thailand. Also uncommonly seen in aquarium trade.

Distribution: Irrawaddy to Salween basins.



*Mastacembelus armatus*

Body elongate; snout shorter, not protruding much beyond lower jaw. Caudal fin well confluent with dorsal and anal fins.

Colour: olive brown with irregular pattern of dark stripes.

Size attains 60 cm.

Habitats and biology: Inhabits several types of wetlands, from hillstreams to lowland swamps. Common in the markets of Southeast Asia.

Distribution: Ganges to Mekong basins, including Sundaic region. May consists of species complex that look similar.

## Family Ambassidae



### *Parambassis ranga*

Body deep oval, compressed, with slightly concave nape. Mouth wide, extends to middle of eye, terminal. Scales small; caudal fin deeply fork.

Colour: body translucent with pearly scales and yellowish hue; pectoral fin base with dark vertical spot; fins hyaline, dorsal fin with dusky tip.

Size attains 7 cm.

Habitats and biology: Inhabits rivers and marshlands. Common in the markets of central Myanmar, mixed with several small foodfishes.

Distribution: Indian subcontinent to Irrawaddy basin



Photograph by Kamphol Udomrittiruj

*Parambassis vollmeri*

Body deep with concave nape, high dorsal profile, and short snout; caudal peduncle slender. Eye large; mouth terminal.

Colour: yellowish translucent body with dark band above pectoral fin base to dorsal profile; fin hyaline with dusky marking.

Size attains 8 cm.

Habitats and biology: Inhabits mainstreams and branches with sandy and muddy bottoms. Uncommonly seen in aquarium trade of Thailand.

Distribution: Salween to Tennasserrim basins.



*Parambassis lala*

A small grassperch with deep, highly compressed body; dorsal spine high at the second spinous ray. Head small; cheek without spine.

Colour: translucent body with iridescent yellow hue and 3 dusky bands; fins orange or reddish, with dark margin.

Size attains 3 cm.

Habitats and biology: rivers and marshlands. Commonly seen in markets, mixed with small foodfish. Occasionally seen in aquarium trade.

Distribution: Endemic to Irrawaddy basins, but introduced to Lake Inle and adjacent areas.

## Family Centropomidae



### *Lates calcarifer*

Body oblong, slightly compress, dorsal fin notched nearly to base with 8 spinous rays. Mouth large, extending beyond eye; preopercular margin serrated ventrally. Caudal fin rounded. Body gray silvery with olive hue dorsally, paler ventrally. Young and some alive fish have pale striped across snout and head.

Size attains 1 m.

Habitats and biology: Inhabits lower reaches and estuaries, including coastal waters. Commonly seen in the markets, one of important foodfish and in aquaculture of the Southeast Asia.

Distribution: Common throughout central Indo-Pacific coasts.



## Family Badidae



Photograph by Kamphol Udomrittiruj

### *Badis ruber*

Body oblong, compressed; dorsal fin base long, continuous. Eye large; snout short with small, terminal mouth. Lateral line incomplete; scales small.

Colour: dark brown with purple hue and dark mottled.

Size attains 5 cm.

Habitats and biology: Inhabits streams and marshlands with dense vegetation. Uncommonly seen in the markets, mixed with other small food fishes, but wellknown in aquarium trade.

Distribution: Known from Salween to Mekong basins.



Photograph by Kamphol Udomrittiruj

*Dario hysginon*

Body oblong, compressed; dorsal fin base long, continuous. Eye large; snout short with small, terminal mouth. Lateral line incomplete; scales small. Anal fin base short, caudal fin truncate.

Colour: body brick red or reddish brown with dusky scale markings; fins reddish brown, dorsal fin with dark marking on anterior margin; eyes with red pupil. Females with grayish dark body.

Size attains 3 cm.

Habitats and biology: Inhabits streams and creeks with dense riparian vegetation. Occasionally seen in aquarium trade.

Distribution: Known from Myithina, Mandalay and Lake Indawgi.

## Family Toxotidae



### *Toxotes chatareus*

Body compressed, oval with large, pointed head; snout to dorsal profile nearly straight. Mouth oblique superior, wide. Dorsal fin origin over vent.

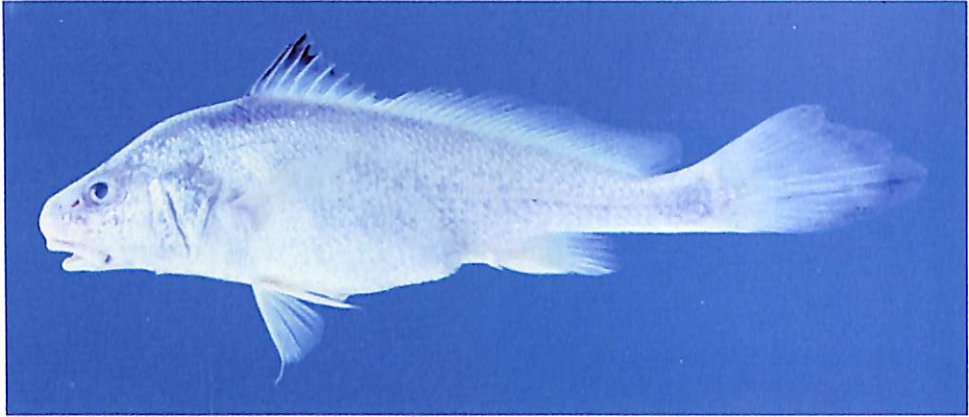
Colour: pale or yellowish white with dark, black large blotches; fin yellowish with dark marking.

Size attains 30 cm.

Habitats and biology: inhabit river and estuaries, usually swim close to surface. Feed mainly on insect by well known water shooting behaviors. Uncommonly seen in the markets of Yangon and southern Myanmar, One of famous aquarium fish.

Distribution: Indian subcontinent to Borneo.

## Family Sciaenidae



### *Jonius coitor*

Body oblong, caudal peduncle slender; head large with concave nape, snout projects beyond upper lip. Eyes small; scales on head without spinules. Lateral line continuous on to caudal fin.

Colour: drab or pale silver; fin hyaline yellow with dusky margin.

Size attains 20 cm.

Habitats and biology: Inhabits estuaries and coastal waters. Common in the markets of central Myanmar.

Distribution: Ganges to Irrawaddy basins.



*Otolithoides pama*

Body elongate, tapering with large head, blunt snout. Eye very small; mouth large with thin lips, terminal. Scales small; caudal fin wedge sharps.

Colour: dark silvery with yellow hue; fins dusky.

Size attains 60 cm.

Habitats and biology: Inhabits estuaries and coastal waters. Common in markets of central Myanmar and sometimes exported to Mesot market of Thailand.

Distribution: Indian subcontinent to Mekong Delta.



*Otolithes biaurites*

Body slender, cylindrical; snout pointed eyes small. Mouth oblique, with lip thin; mental pores in 2 pairs. Scales small, cycloid (smooth) on head and back, elsewhere rough (ctenoid).

Colour: green or gray on back, flank gold or orange. Fins pale orange.

Size attains 1 m.

Habitats and biology: Inhabits estuaries and coastal waters. Commonly seen in the markets of coastal Southeast Asia.

Distribution: Indian coast to Mekong Delta and Borneo.

## Family Polynemidae



### *Leptomelanosoma indica*

Body oblong, slightly compress; snout pointed with small eyes, covered with thick eyelid. Mouth inferior with thick, bony lips and villiform teeth. Dorsal fin separated; caudal fin extended into long filament; pectoral fin with 5 free elongated rays.

Colour: dark gray to silvery gray (in fresh); fins dusky.

Size attains 1 m.

Habitats and biology: Inhabits estuaries and coastal waters, entering rivers occasionally. Seasonally common in the markets.

Distribution: Western- Central Indo-Pacific, up to Borneo.



*Polynemus paradiseus*

Body oblong compress; snout pointed with very small eye; mouth inferior. Pectoral fin long with 7 long, free filamentous rays, extending beyond caudal fin tip, caudal fin deeply fork.

Colour: pale silvery with yellow hue or golden; fin paler.

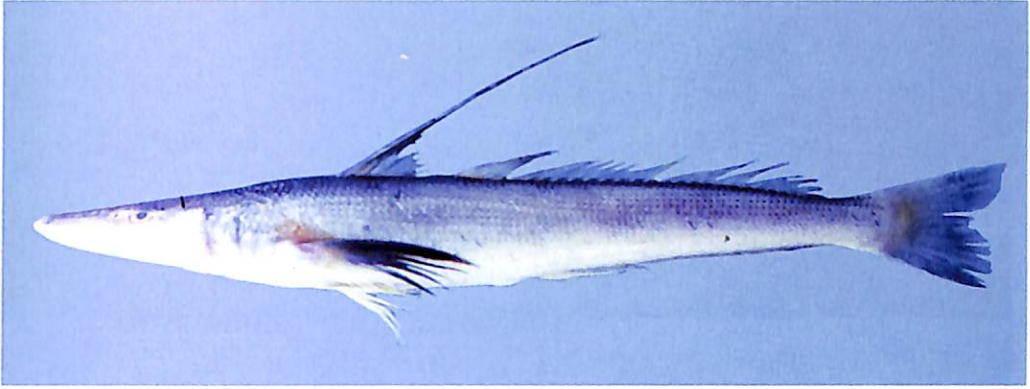
Size attains 30 cm.

Habitats and biology: Inhabits estuaries and lower reaches of the rivers. Common in the markets of coastal area.

Distribution: Ganges Delta to Salween estuaries.



## Family Silaginidae



### *Sillaginopsis punijas*

Body cylindrical; head depressed with projected snout, small subterminal mouth. First dorsal fin ray very elongate, reaching caudal fin tip.

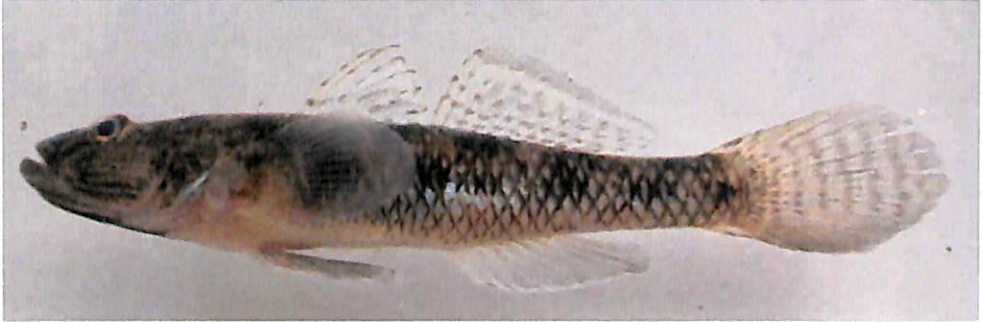
Colour: yellowish or silvery gray, fins hyaline yellow, caudal fin with dusky margin, pectoral fin dark or dusky in mature males.

Size attains 3.5 cm.

Habitats and biology: Inhabits estuaries and coastal waters, occasionally entering rivers. Seasonally common in Yangon markets.

Distribution: Ganges estuaries to southern Myanmar, rarely seen in Andaman coast of Thailand.

## Family Gobiidae



### *Glossogobius giuris*

Body cylindrical; dorsal fin well separated, caudal fin round. Head large, slightly depressed; mouth terminal, large with projected lower jaw. Pelvic fin forming a complete cup.

Colour: dark or olive brown with five dark blotches; fins hyaline with dusky spots. Cheek with pale thin stripes.

Size attains 30 cm.

Habitats and biology: Inhabits lower reaches and estuaries, occasionally entering to upstreams. Common in markets of central Myanmar.

Distribution: Indian subcontinent to Borneo.



*Odontamblyopus rubicundus*

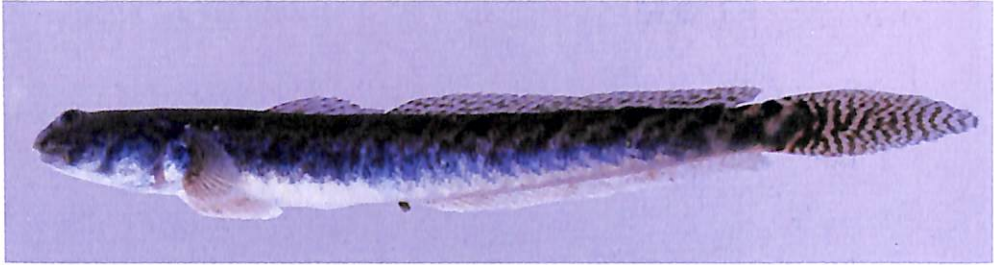
Body very elongate, slightly compress. Head small with wide mouth, small canine teeth on jaws; eye minute. Scales small; dorsal and anal fins with long base, well separated from a pointed caudal fin.

Colour: reddish brawn body with dusky fins.

Size attains 25 cm.

Habitats and biology: Inhabits muddy estuaries and mangroves. Seasonally common in the Yangon markets.

Distribution: Ganges Delta to Malay Peninsula and Indonesia.



*Pseudopocryptes elongatus*

Body very elongate with separated dorsal fin; caudal fin lanceolated. Eye large, projecting above dorsal profile.

Colour: pinkish brown with dusky blotches; fins hyaline with dark or dusky marking; caudal fin with fine dark bars.

Size attains 20 cm.

Habitats and biology: Inhabits estuaries and coastal waters with muddy bottom. Commonly seen, mixed with other small fishes in the Yangon markets.

Distribution: Indo-West Pacific.

## Family Osphronemidae



### *Colisa labiosa*

Small gourami with compressed, oval body; dorsal fin base almost same length as anal fin base. Lip thick, mouth papillae in adults.

Colour: bluish or greenish silver with dark oblique stripes and orange or red spots on fins. Colour iridescent in life.

Size attains 7 cm.

Habitats and biology: Inhabits lowland marshes and rivers. Common in the central Myanmar markets, consumed as fermented and dried products; uncommon in aquarium trade.

Distribution: Endemic to lower Irrawaddy and Sittuang basins; introduced elsewhere.



*Paraspherichthys ocellatus*

Body compressed, oblong with large head. Snout point with small terminal mouth; eye large. Dorsal fin base hard; pelvic fin simple without filamentous ray, caudal fin truncate.

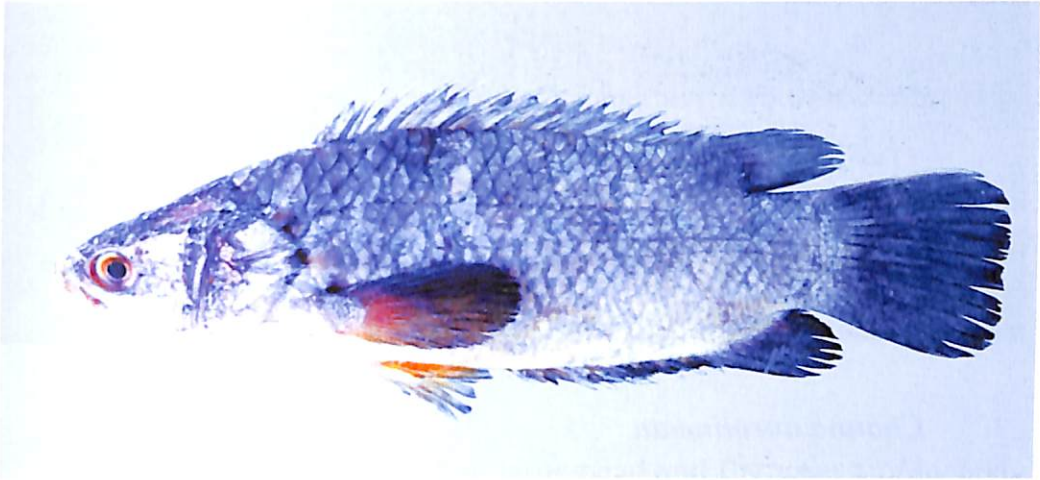
Colour: dark or chocolate brown with some pale patches on ventral; body flanked with dark eye spot; fins hyaline with dusky markings.

Size attains 5 cm.

Habitats and biology: Inhabits streams and marshlands. Uncommon in aquarium trade.

Distribution: Endemic to Myithina area.

## Family Anabantidae



### *Anabas testudineus*

Body oblong, slightly compress with large head, terminal mouth; lateral line interrupted. Dorsal and anal fin bases long, caudal fin rounded. Scales large, rough; operculum with strong spines.

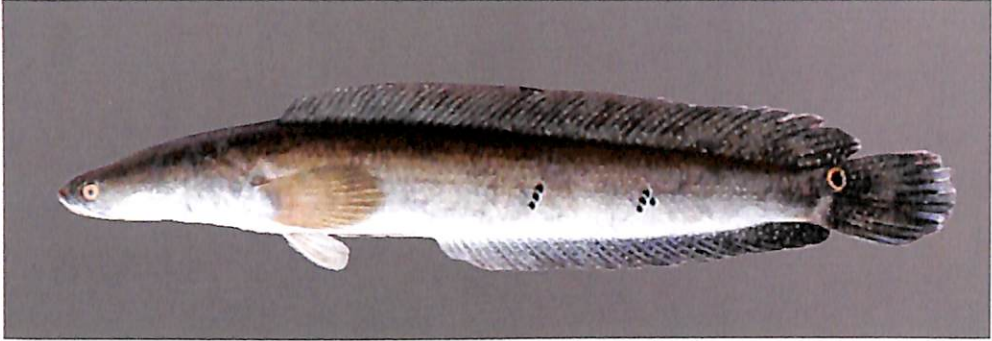
Colour: olive or brownish gray body with dark blotches, caudal fin base with dark spot.

Size attains 20 cm.

Habitats and biology: Inhabits lowland marshes and swamps. Common in markets of the southeast Asia as important foodfish. Usually sold alive, rarely used in aquarium trade.

Distribution: Indian subcontinent to Mekong basin. May comprises with multispecies.

## Family Channidae



### *Channa aurolineata*

Body elongate, cylindrical with longer head. Pelvic fin large, dorsal fin base long, over most of body.

Colour: olive or yellowish brown, paler ventrally with dark blotches and spots on body; caudal fin base with large eyespot on upper part, dorsal fin dark gray with white spots.

Size attains 100 cm.

Habitats and biology: Inhabit rivers and streams with riparian forests. Uncommon in the markets of Southern Myanmar.

Distribution: Irrawaddi to Salween and Chaophaya basins.





*Channa harcourtbutleri*

A small snakehead with large head and flat nape profile; body cylindrical; pelvic fin very small, caudal fin round.

Colour: dark blue or gray body, paler ventrally; fins dark blue with orange or reddish margin.

Size attains 25 cm.

Habitats and biology: inhabits streams and lakes with dense vegetations. Common in the markets around Lake Inle, where this fish is endemic to.



### *Channa striata*

A very common snakehead; large head with prominent surface sculpturing of scales. Pelvic and pectoral fins large; scales small.

Colour: olive or brownish gray body, white ventrally, with dark chevron marking on flank; fins dark with pale margin, caudal fin with dark bars.

Size attains 70 cm.

Habitats and biology: Inhabit several types of wetland. Very common in the markets of the Southeast Asia. Widely cultured in Thailand, one of important foodfish.

Distribution: Indian subcontinent to Borneo.

## Family Tetraodontidae



### *Auriglobus naritus*

Body slightly compress with large head; small mouth, parrot beak-like. Dorsal and anal fins large, caudal fin truncate. Abdomen and head side covered with large spinules.

Colour: gray dorsally, bright yellow ventrally and fins.

Size attains 30 cm.

Habitats and biology: Inhabit estuaries and lower reaches of rivers. Seasonally common in Yangon markets, sold by remove visceral parts for safety from its poison.

Distribution: Indo-west Pacific coasts.



Photograph by Kamphol Udomrittiruj

*Monotrete cutcutia*

A small puffer with large head, slightly globiform body, Dorsal and anal fins small, short base. Body without spinule.

Colour: olive or greenish brown with dark irregular pattern on dorsal part; dark eye spot on flank below dorsal fin origin, and pale spots throughout body.

Size attains 6 cm.

Habitats and biology: Inhabits lower reaches of the rivers up to streams. Not consume as food but uncommon in aquarium trade. Said to be poisonous species.

Distribution: Indian subcontinent to Andaman Sea coasts and western Malay Peninsula.

## References

- Annandale, N. 1918. Fish and fisheries of the Inlé Lake. Records of the Indian Museum, 14: 33-64.
- Annandale, N. & S.L. Hora. 1923. The systematic position of the Burmese fish Chaudhuria. Annals and Magazine of Natural History, 9th series, 11: 327-333.
- Brown, B. & A., C. J. Ferraris, Jr. 1988. Comparative osteology of the Asian catfish family Chacidae, with the description of a new species from Burma. American Museum Novitates, 2907: 1-16.
- Day, F. 1875-78. The fishes of India; being a natural history of the fishes known to inhabit the seas and fresh water of India, Burma and Ceylon. Text and atlas in 4 parts. London. xx + 778.
- . 1888. Supplement to the fishes of India. Williams and Norgate, London.
- . 1889. Fishes in The fauna of Britist India, including Ceylon and Burma. W. T. Blanford, ed. London, Calcutta.
- Hora, S. L. & Mukerji, D. D. 1934a. Notes on fishes in the Indian Museum. XXII. On a collection of fish from the S. Shan State and the Pegu Yomas, Burma. Rec. Indian Mus., 36(1): 123-138.
- . 1934b. Notes on fishes in the Indian Museum. XXIII. On a collection of fish from the S. Shan State, Burma. Rec. Indian Mus., 36(3): 353-370.
- Jayaram, K.C. 1981. The Freshwater fishes of India, Pakistan, Bangladesh, Burma and SriLanka-a handbook. Zool. Res. India Calcutta, 475, I-XIII pl.
- Chaudhuri, B.L. 1919. Report on a small collection of fish from Putao (Hkamti Long) on the northern frontier of Burma. Records of the Indian Museum, 16: 271-287.
- Fang F. 1998. *Danio kyathit*, a new species of cyprinid fish from Myitkyina, northern Myanmar. Ichthyological Exploration of Freshwaters, 8: 273-280.
- Fang, F. 2000. Barred *Danio* species from the Irrawaddy River drainage (Teleostei, Cyprinidae). Ichthyological Research, 47: 13-26.
- Fang, F. 2001. Phylogeny and species diversity of the South and southeast Asian cyprinid genus *Danio* Hamilton (Teleostei, Cyprinidae). Doctoral Dissertation. Department of Zoology, Stockholm University and Department of Vertebrate Zoology, Swedish Museum of Natural History, Stockholm.

Ferraris, C.J., Jr. 1999. *Rita sacerdotum*, a valid species of catfish from Myanmar (Pisces, Bagridae). Bulletin of the Natural History Museum, Zoology Series, 65: 15-21.

Ferraris, C.J., Jr. & K.E. Runge. 1999. Revision of the South Asian bagrid catfish genus *Sperata*, with the description of a new species from Myanmar. Proceedings of the California Academy of Sciences, 51: 397-428.

Kottelat, M. 1990. Indochinese nemacheilines. A revision of nemacheiline loaches of Thailand, Burma, Laos, Cambodia and southern Viet Nam. Verlag Dr. Friedrich Pfeil, München, 262

Kottelat, M. & K.-E. Witte. 1999. Two new species of *Microrasbora* from Thailand and Myanmar, with two new generic names for small Southeast Asian cyprinid fishes (Teleostei: Cyprinidae). Journal of South Asian Natural History, 4: 49-56.

Kullander, S.O. & R. Britz. 2002. Revision of the family Badidae (Teleostei: Perciformes). Ichthyological Exploration of Freshwaters, 13: 295-372.

Musikasinthorn, P. 1998. First record of *Parambassis lala* (Pisces: Ambassidae) from Inle Lake, the Salween River Basin, Myanmar. Natural History Bulletin of the Siam Society, 46: 203-205.

Ng, H.H. & M. Kottelat. 2001. A review of the genus *Batasio* (Teleostei: Bagridae) in Indochina, with the description of *B. tigrinus* sp.n. from Thailand. Revue suisse de Zoologie, 108: 495-511.

Ng, H.H., P.K.L. Ng & R. Britz. 1999. *Channa harcourtbutleri* (Annandale, 1918): a valid species of snakehead (Perciformes: Channidae) from Myanmar. Journal of South Asian Natural History, 4: 57-63.

## Index of Scientific and vernacular names

The following lists the valid names and synonyms as well as family names for the 150 species included in this handbooks.

*Italics* Valid scientific names (for genera and species)

Italics Synonyms and misidentifications

**ROMAN** Scientific Family names

Roman FAO and other common English names

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<i>Anabas testudineus</i>	147	<i>auropurpurea, Inlecypris</i>	25
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**B****Badidae***Badis ruber**Bagarius yarrelli***Bagridae***baileyi, Chagunius**Balitora burmanica***Balitoridae***Bangana devdevi**barnoides, Opsarius**batrachus, Clarias**belangeri, Osteobrama***Belonidae***bengalensis, Anguilla**berdmorei, Botia**berdmorei, Exostoma**berdmorei, Lepidocephalichthys**biaurites, Otolithes**bicolor, Anguilla**bilineata, Homaloptera**bimaculatus, Ompok**Botia berdmorei**Botia histrionica**Botia kubotai**Botia rostrata**brevifilis, Folifer**brevis, Yunnanilus**browni, Devario**burmanica, Balitora**burmanicus, Arius**burmanicus, Crossocheilus**burmanicus, Eutropiichthys**burmanicus, Labiobarbus**burmanicus, Scaphiodonichthys**burmannicus, Proeutropiichthys***C***Cabdio morar**cadiocellatus, Macrognathus**calbasu, Morulius**calcarifer, Lates**cancilla, Xenentodon**canius, Plotosus***Carcharhinidae***catla, Gibelion**caudimarginatus, Systemus**cavasius, Mystus**Caelatoglanis zonata***Centropomidae***Chagunius baileyi**Channa acrolineata**Channa harcourtbutleri**Channa stiata***Channidae***chatareus, Toxotes**Chela laubuca**Chelon planiceps**chola, Systemus**chondrorhynchus, Poropuntius**chrysophekadian, Morulius**cincticauda, Schistura**cinereus, Muraenesox**Cirrhinus cirrhosus**Cirrhinus rubirostris**cirrhosus, Cirrhinus**Clarias batrachus***Clariidae****Clupeidae***Clupisoma pratteri***Cobitidae***Coilia dussumierri**Coilia ramcerati**coitor, Jonius*

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## Southeast Asian Fisheries Development Center (SEAFDEC)

### What is SEAFDEC?

SEAFDEC is an autonomous intergovernmental body established as a regional treaty organization in 1967 to promote sustainable fisheries development in Southeast Asia.

### Objectives

SEAFDEC aims specifically to develop fishery potentials in the region through training, research and information services in order to improve food supply through rational utilization of fisheries resources in the region.

### Functions

To achieve its objectives the Center has the following functions:

1. To offer training courses, and to organize workshops and seminars, in fishing technology, marine engineering, extension methodology, post-harvest technology, and aquaculture;
2. To conduct research and development in fishing gear technology, fishing ground surveys, post-harvest technology and aquaculture, to examine problems related to the handling of fish at sea and quality control, and to undertake studies on the fisheries resources in the region; and
3. To arrange for the transfer of technology to the countries in the region and to make available the printed and non-printed media, which include the publication of statistical bulletins for the exchange and dissemination related to fisheries and aquaculture development.

### Membership

SEAFDEC membership is open to all Southeast Asian Countries. The Member Countries of SEAFDEC at present are Brunei Darussalam, Cambodia, Indonesia, Japan, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam.



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The Southeast Asian Fisheries Development Center (SEAFDEC) is an intergovernmental organization established in December 1967 for the purpose of promoting sustainable fisheries development in the region. Its current Member Countries are Brunei Darussalam, Cambodia, Indonesia, Japan, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam.

Representing the Member Countries is the Council of Directors, the policy-making body of SEAFDEC. The chief administrator of SEAFDEC is the Secretary-General whose office, the Secretariat is based in Bangkok, Thailand.

SEAFDEC undertakes research on appropriate fishery technologies, trains fisheries technicians, and disseminates fisheries information. Four Departments were established to pursue the objectives of the Center:

- The Training Department (TD) in Samutprakan, Thailand, established in 1967 for marine capture fisheries development;
- The Marine Fisheries Research Department (MFRD) in Singapore, established in 1967 for fishery post-harvest technology;
- The Aquaculture Department (AQD) in Iloilo, the Philippines, established in 1973 for aquaculture research and development; and
- The Marine Fishery Resources Development and Management Department (MFRDMD) in Kuala Terengganu, Malaysia, established in 1992 for the development and management of the marine fishery resources in the exclusive economic zones (EEZs) of SEAFDEC Member Countries.