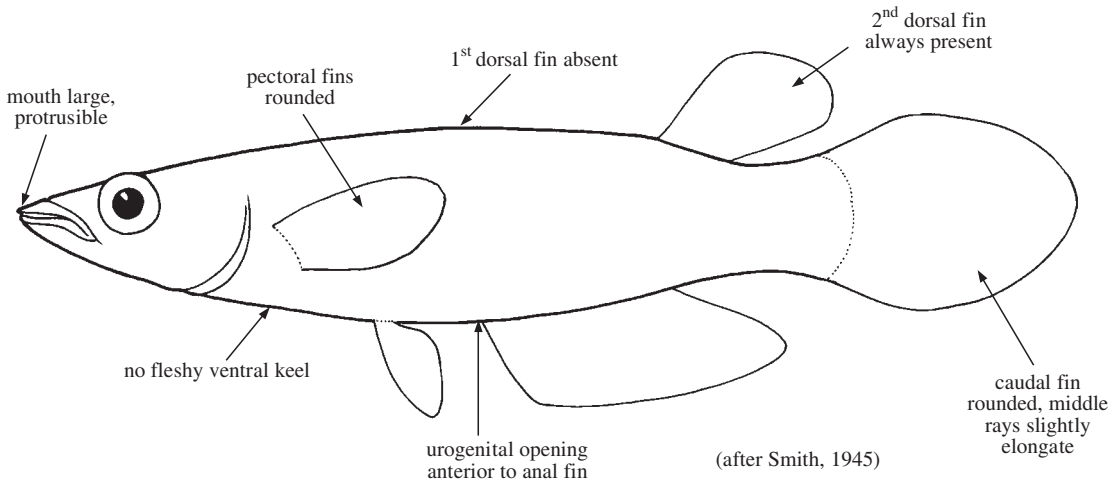
# Order CYPRINODONTIFORMES

## APLOCHEILIDAE

### Egg-laying toothcarps

by L.R. Parenti

**Diagnostic characters:** Small, fusiform, cyprinodontiform fishes (average size at maturity 6 cm standard length). **Dorsal surface of head flat.** Eyes large. Mouth terminal, large, protrusible. Small, unicuspid teeth in pavement dentition in outer jaw. **Pectoral fins rounded.** Caudal fin rounded or middle rays of caudal fin elongate. Dorsal fin with 7 to 20 soft rays; anal fin with 15 to 19 soft rays; caudal fin with 14 to 21 branched rays; pectoral fins with 14 to 21 soft rays; pelvic fins with 6 soft rays. Scales moderate, cycloid, 25 to 42 in lateral series; no lateral line. **Small patch of teeth on vomer. Colour:** (of *Aplocheilus panchax*): highly variable; somewhat translucent in life, with **a silvery, "pineal" spot on dorsal surface of head;** head and body greyish yellow to medium brown dorsally, lighter brown to yellow ventrally; **thin, black horizontal line from tip of lower jaw through eye variably present; large, black spot on middle portions of dorsal-fin rays**; pectoral fins hyaline; **pelvic, anal, and caudal fins with submarginal brownish yellow band.**



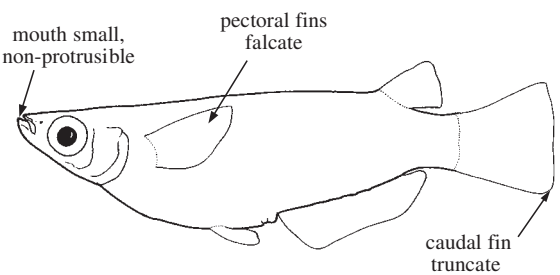

(after Smith, 1945)

**Habitat, biology, and fisheries:** Fresh to brackish water; a single species (*Aplocheilus panchax*) in the area found in brackish water, estuaries, and mangroves. Small, surface-feeding, schooling fishes. Omnivorous, but feeds principally on insects and mosquito larvae. Oviparous.

**Remarks:** The family Aplocheilidae is distributed broadly throughout tropical Africa, Madagascar, and from the Indian subcontinent to the Indo-Australian Archipelago. Meristic data are for the family, with diagnostic colour of *A. panchax*.

### Similar families occurring in area

Adrianichthyidae: superficially similar to egg-laying toothcarps, but readily distinguished by a non-protrusible mouth, no teeth on vomer, dorsal- and anal-fin rays of male longer and thicker than those of females and with bony contact organs on distal segments of anal-fin rays, and pectoral fins falcate. Adrianichthyids are nearly transparent in life, with sparse pigmentation.

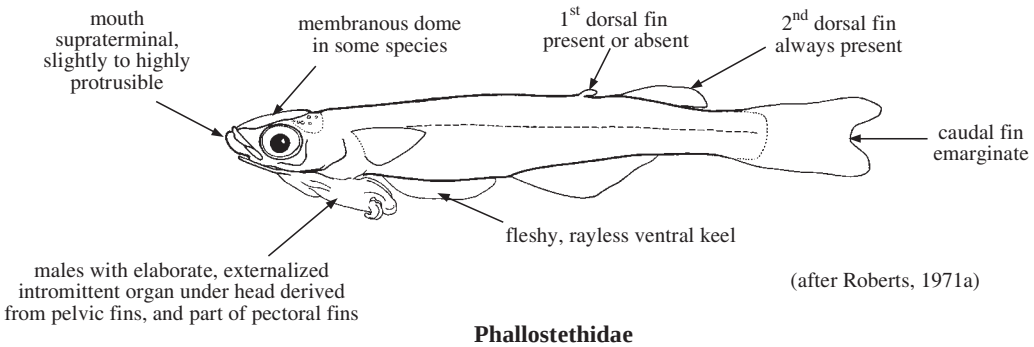



**female**

**Adrianichthyidae**

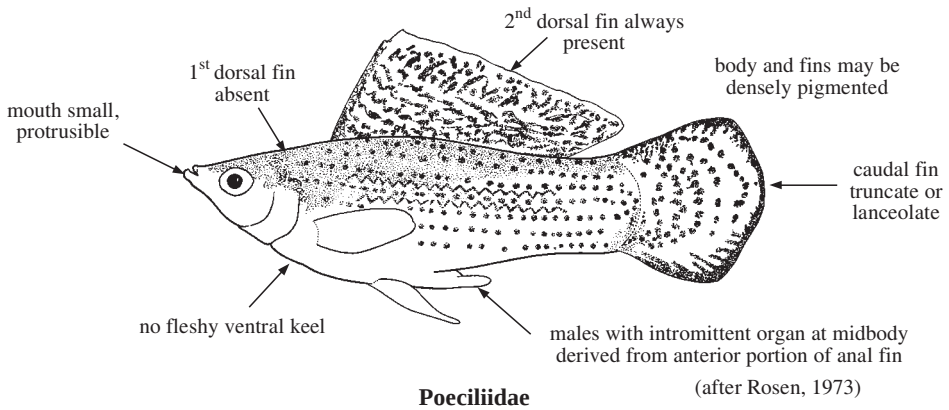
(after Iwamatsu et al., 1982)

Phallostethidae: readily distinguished from egg-laying toothcarps by the presence, in males, of a bony, externalized intromittent organ, and urogenital openings under head; nearly transparent in life, with sparse pigmentation.




**Phallostethidae**

Poeciliidae: readily distinguished from egg-laying toothcarps by males with an intromittent organ derived from anterior anal-fin rays, and a small mouth.




**Poeciliidae**

### A single species occurring in the area

*Aplocheilus panchax* (Hamilton, 1822)

### References

Parenti, L. R. 1981. A phylogenetic and biogeographic analysis of cyprinodontiform fishes (Teleostei, Atherinomorpha). *Bull. Amer. Mus. Nat. Hist.* 168(4):335-557.

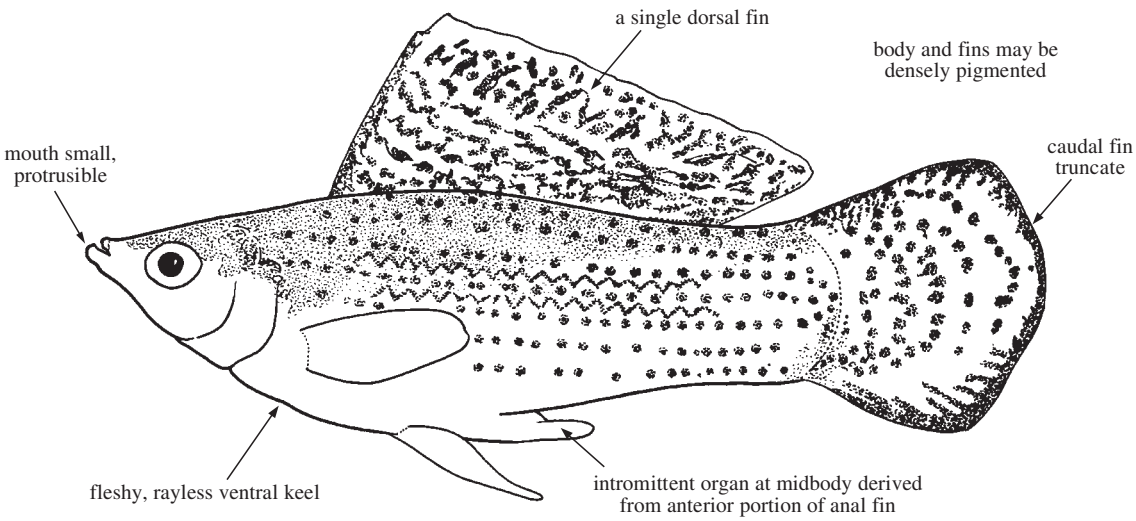
Smith, H.M. 1945. The freshwater fishes of Siam, or Thailand. *Bull. U.S. Natn. Mus.*, 188(11):1-622.

# POECILIIDAE

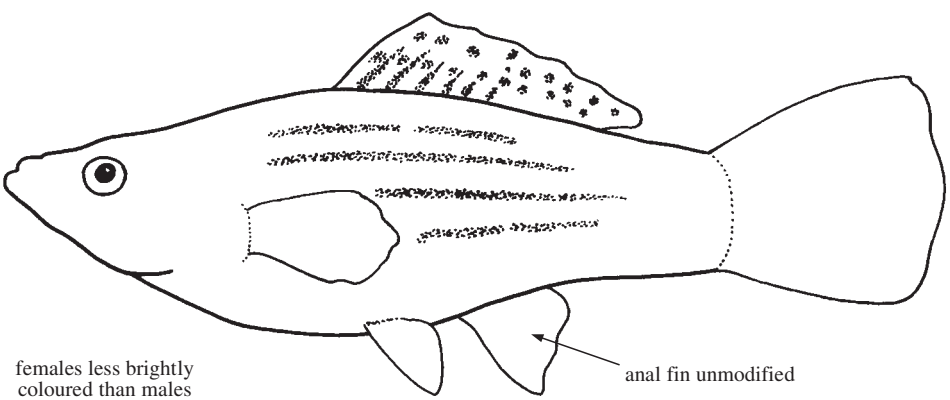
## Livebearing toothcarps

by L.R. Parenti

**Diagnostic characters:** Small to moderate, laterally compressed, cyprinodontiform fishes; females usually larger than males. Eyes moderately large. Mouth supraterminal, small, and protrusible. Small, unicuspid teeth in single or multiple rows on premaxilla and dentary; no tooth patch on vomer. Pectoral fins falcate, may be set relatively high on side of body. Caudal fin truncate or slightly lanceolate. Single, soft-rayed dorsal fin at midbody or set posteriorly. Dorsal fin with 4 to 16 soft rays; anal fin with 8 to 10 soft rays; pectoral fins with 9 to 16 soft rays; pelvic fins with 6 soft rays; caudal fin with 11 to 15 branched rays. **Species in the area with anal fin of males modified into a gonopodium used to transfer sperm bundles to females. Anal-fin rays 3 through 5 of males thickened and elongate; haemal arches expanded.** Scales moderate, cycloid, 30 to 34 in lateral series; no lateral line. **Colour:** some species highly sexually dichromatic and dimorphic; males may be more brightly coloured and smaller than females; body nearly transparent in life in females and juveniles.




***Poecilia sphenops* (male)**




(after Rosen, 1973)

***Poecilia sphenops* (female)**

**Habitat, biology, and fisheries:** Fresh to brackish water, species in the area in tidal portions of rivers, estuaries, or in mangroves. Small, surface-feeding, abundant, schooling fishes. Omnivorous. Tolerant of extremes of temperature and salinity. Species in the area viviparous, males pass sperm bundles to females through a modified anal fin or gonopodium. Poeciliids are not native to the area; species found here were either introduced for mosquito control or released, presumably accidentally, from aquarium stocks.

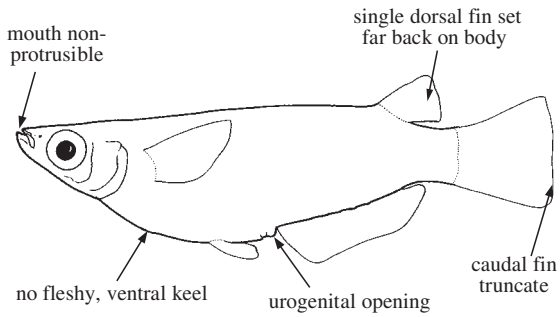
**Remarks:** The family Poeciliidae as diagnosed by Parenti (1981) comprises 3 subfamilies: Poeciliinae, Fluviphylacinae, and Aplocheilichthyinae. Parenti's Poeciliinae is equivalent to the Poeciliidae of previous authors, such as Rosen and Bailey (1963). The only species in the family Poeciliidae that have been introduced into the Western Central Pacific are in the subfamily Poeciliinae. The characters listed above refer only to that subfamily.

### Similar families occurring in area

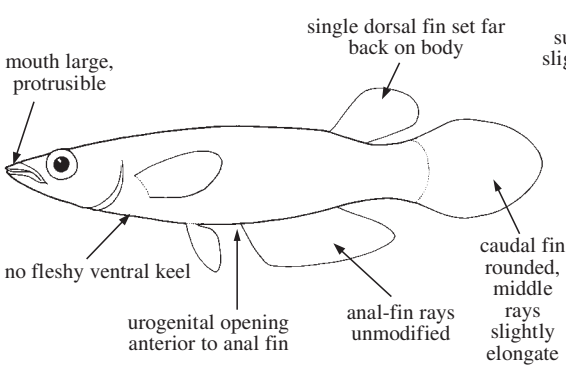
Adrianichthyidae: superficially similar to livebearers but with a non-protrusible rather than protrusible mouth and lacking an intromittent organ.

Aplocheilidae: differing most notably from livebearers by having a large mouth and lacking an intromittent organ.

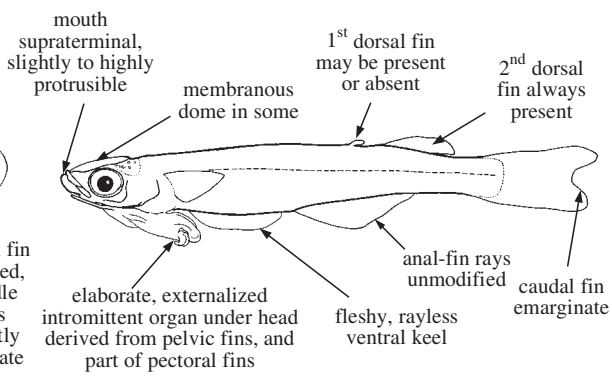
Phallostethidae: superficially similar to livebearers, but with an intromittent organ in males modified from pectoral- and pelvic-fin rays and under the head, not a modified anal fin at midbody; in addition, phallostethids are nearly transparent in life, with sparse pigmentation.




**Adrianichthyidae**
(after Iwamatsu et al., 1982)




**Aplocheilidae**
(after Smith, 1945)




**Phallostethidae**
(after Roberts, 1971)

### List of species occurring in the area

*Gambusia affinis* (Baird and Girard, 1853)

*Poecilia latipinna* (LeSueur, 1821)
*Poecilia reticulata* Peters, 1859
*Poecilia sphenops* Valenciennes in Cuvier and Valenciennes, 1846

### References

Parenti, L.R. 1981. A phylogenetic and biogeographic analysis of cyprinodontiform fishes (Teleostei, Atherinomorpha). *Bull. Amer. Mus. Nat. Hist.*, 168(4):335-557.

Rosen, D.E. 1973. Suborder Cyprinodontoidei. Superfamily Cyprinodontoidea. Families Cyprinodontidae, Poeciliidae, Anablenidae. *Fishes of the Western North Atlantic, part 6*. Sears Foundation for Marine Research.

Rosen, D.E. and R.M. Bailey. 1963. The poeciliid fishes (Cyprinodontiformes), their structure, zoogeography, and systematics. *Bull. Amer. Mus. Nat. Hist.*, 126(1):1-176.

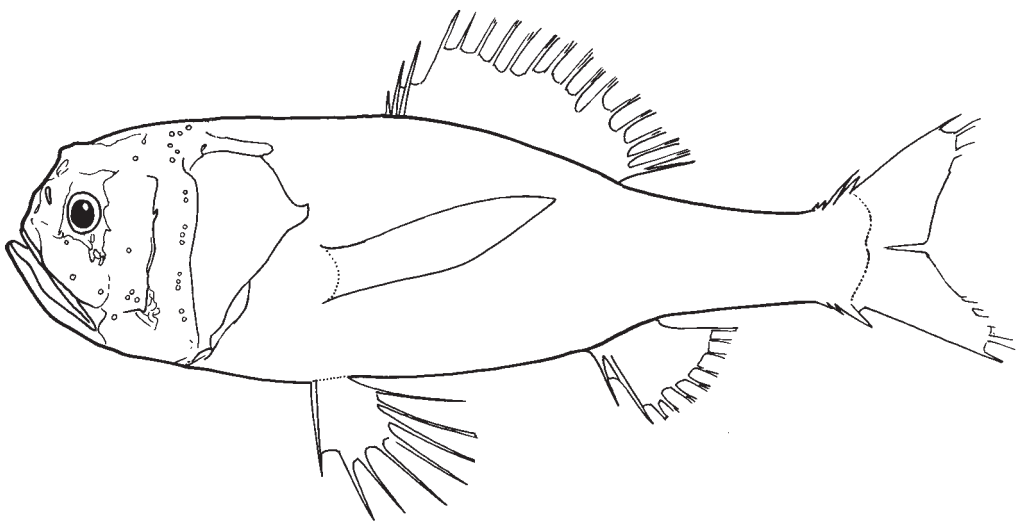
# Order STEPHANOBERYCIFORMES

## MELAMPHAIDAE

### Bigscales (ridgeheads)

by J.A. Moore and J.R. Paxton

**Diagnostic characters: Small (to about 16 cm total length) stephanoberyciform fishes with subcylindrical body. Head large; large mucous cavities separated by thin ridges.** Eyes small in most species. **Snout short and steep**. Jaws long, extending to or beyond posterior margin of eye. Teeth minute, in bands or uniserial row in jaws; palate toothless. **One dorsal fin with I to III weak spines and 9 to 18 soft rays**; anal fin with I weak spine and 7 to 10 soft rays; caudal fin with 3 or 4 procurrent spines preceding upper and lower lobes; **pelvic fins thoracic, with I spine and 6 to 8 soft rays**; pectoral fins with 13 to 16 rays. Scales thin and cycloid, usually deciduous, moderate-sized to very large, 12 to 40 in longitudinal series. **Lateral line reduced to 1 or 2 pored scales behind upper edge of operculum.** No photophores or light organs. **Colour:** body and head dark brown or black.

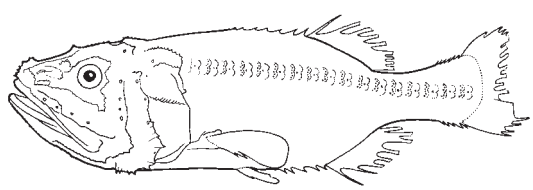


**Habitat, biology, and fisheries:** Occurring in meso- and bathypelagic waters in depths of 200 to 2 000 m. Many species widely distributed in Atlantic and Indo-Pacific. Feed primarily on gelatinous organisms and small crustaceans. Little is known of behaviour. In Western Central Pacific, *Scopeloberyx opisthopterus, Melamphaes simus*, and *M. danae* are dwarf species maturing at sizes less than 3 cm. Frequently taken in deep-water trawls, but of no commercial importance.

**Remarks:** A total of 33 species in 5 genera is recognized, found in the midwaters of all oceans except the Arctic Ocean and Mediterranean Sea. The genera *Poromitra* and *Scopeloberyx* need revision. Further deep-sea trawling should add more species to the area.

**Similar families occurring in the area**

Gibberichthyidae: dorsal fin preceded by V to VII stout, wide-based spines; anal fin preceded by III to V stout, wide-based spines; 5 to 7 procurrent spines in upper and lower lobes of caudal fin; pelvic fins with I spine and 5 soft rays; lateral line fully developed.



**Gibberichthyidae**

## List of species occurring in the area

*Melamphaes danae* Ebeling, 1962
*Melamphaes eulepis* Ebeling, 1962
*Melamphaes janae* Ebeling, 1962
*Melamphaes longivelis* Parr, 1933
*Melamphaes polylepis* Ebeling, 1962
*Melamphaes simus* Ebeling, 1962

*Poromitra crassa* Parin and Ebeling, 1980
*Poromitra crassiceps* (Günther, 1878)
*Poromitra megalops* (Lütken, 1877)
*Poromitra oscitans* Ebeling, 1975

*Scopeloberyx opisthopterus* (Parr, 1933)
*Scopeloberyx robustus* (Günther, 1887)

*Scopelogadus mizolepis mizolepis* (Günther, 1878)
*Scopelogadus unispinis* Ebeling and Weed, 1963

*Sio nordenskjoldii* (Lönnberg, 1905)

## Reference

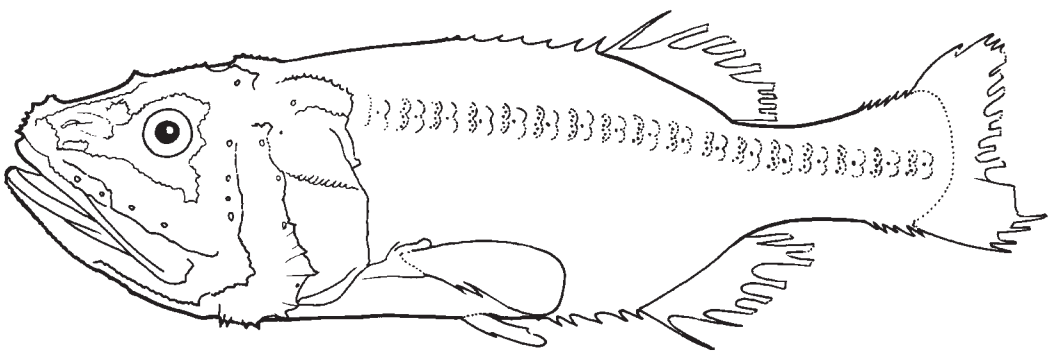
Ebeling, A.W. 1986. Family Melamphaidae. In *Smiths' sea fishes*, edited by M.M. Smith and P.C. Heemstra. Johannesburg, Macmillan South Africa, pp. 427-431.

## GIBBERICHTHYIDAE

### Gibberfishes

by J.R. Paxton

**Diagnostic characters:** Small (to 13 cm) stephanoberyciform fishes; body deep (young) to moderately robust. Head moderate; **large mucous cavities on top of head separated by very thin ridges and covered by thin skin in undamaged (rarely) specimens.** Eyes very large in juveniles, becoming smaller than snout length in larger specimens. Mouth moderate, jaws extending to posterior margin of eye in larger specimens. Teeth villiform in bands on jaws; no teeth on vomer or palatine. Gill rakers lath-like. **Separate, rigid, wide-based fin spines precede dorsal and anal fins;** origin of soft dorsal and anal-fin rays posterior and opposite; **dorsal fin with V to VII spines and 8 or 9 soft rays; anal fin with IV or V spines and 7 to 9 soft rays;** pelvic fins abdominal, with no spines and 5 or 6 soft rays; **elaborate pelvic-fin appendage from elongated third pelvic-fin ray in larvae and prejuveniles;** pectoral fins with 13 to 15 rays. **Scales cycloid, deciduous. Lateral line as vertical rows of papillae overlying scales.** No photophores or luminous tissue. No cavernous tissue. Total vertebrae 28 to 31. **Colour:** brown-black in largest specimens.

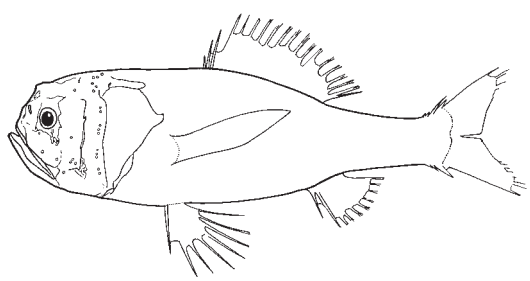


**Habitat, biology, and fisheries:** Meso-, bathy-, and benthopelagic, mostly over continental and island slopes. Distinctive kasidoron larval/prejuvenile stage in epipelagic waters. Feed as zooplankton pickers, with small crustaceans in stomachs of both prejuveniles and adults. Rare deep-sea fishes of no commercial importance.

**Remarks:** Two species in a single genus, one each in the tropical West Atlantic and tropical Indo-West Pacific.

#### Similar families occurring in the area

Melamphaidae: dorsal fin with I to III weak spines; anal fin with I weak spine; pelvic fins with I spine and 6 to 8 soft rays; lateral line reduced to 1 or 2 scales behind operculum, no arborescent, elongate rays in larvae or prejuveniles.



**Melamphaidae**

#### A single species occurring in the area

*Gibberichthys latifrons* (Thorpe, 1969)

#### References

de Sylva, D.P. and W.N. Eschmeyer. 1977. Systematics and biology of the deep-sea fish family Gibberichthyidae, a senior synonym of the family Kasidoroidae. *Proc. Cal. Acad. Sci.*, 41(6):215-231.

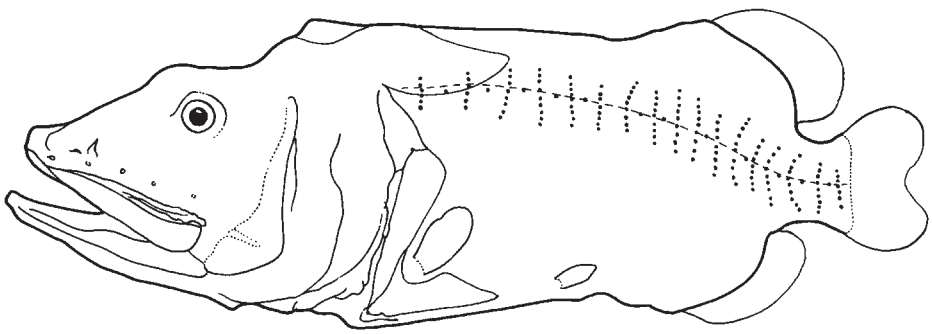
Kotlyar, A.N. 1996. *Beryciform fishes of the world ocean*. Moscow, VNIRO Publishing, 368 p. [In Russian]

# RONDELETIIDAE

## Redmouth whalefishes

by J.R. Paxton

**Diagnostic characters:** Small (to 11 cm) stephanoberyciform fishes, **body flabby, somewhat whale-shaped with median fins opposite and far posterior.** Head large; mucous cavities on top of head indistinct, covered by thick skin. Eyes small. Snout very long; nasal organ moderately developed. Mouth large, **jaws not extending beyond posterior margin of eye.** Teeth small and closely set, on jaws and vomer; palatine, ectopterygoid, and copula lacking teeth. Gill rakers well developed, lath-like. Fins without spines; 1 dorsal fin with 13 to 16 soft rays; anal fin with 13 to 16 soft rays; pectoral fins with 9 to 11 rays; **pelvic fins abdominal with 5 or 6 soft rays;** caudal fin with 19 principal rays. **Lateral line as vertical rows of papillae without supporting internal scales. No external body scales.** No photophores or luminous tissue. No cavernous tissue. Pleural ribs present. **Total vertebrae 24 to 27. Colour:** in life, orange-brown, inside mouth and gill cavities red-orange; in preservative, brown.



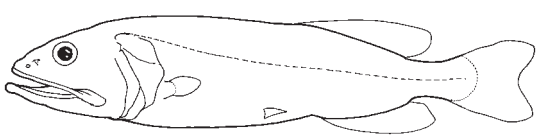
**Habitat, biology, and fisheries:** Meso- and bathypelagic. Feeding mode as predator on amphipods and crustaceans. Uncommon deep-sea fishes of no commercial importance.

**Remarks:** One genus with 2 species throughout the world ocean in tropical and temperate latitudes. *Rondeletia bicolor* is now known from 3 Pacific records, including 1 in the area.

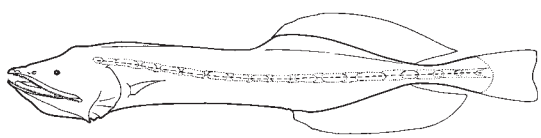
### Similar families occurring in the area

Barbourisiidae: mouth very large with jaws extending far behind eye; head and body covered with tiny scales with central spine giving velvet-like texture; live colour bright red-orange.

Cetomimidae: no pelvic fins; mouth extremely large with jaws extending far behind eye; most with lateral line as broad tube pierced by large pores, a single species with vertical rows of papillae.



**Barbourisiidae**



**Cetomimidae**

### List of species occurring in the area

*Rondeletia bicolor* Goode and Bean, 1895
*Rondeletia loricata* Abe and Hotta, 1963

### Reference

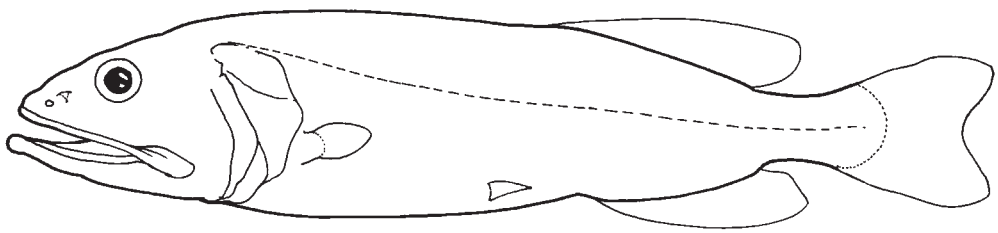
Kotlyar, A.N. 1996. The osteology, intraspecific structure, and distribution of *Rondeletia loricata* (Rondeletiidae). *Vopr. Ikhtiol.*, 36(2):154-168. [In Russian, English transl. *J. Ichthyol.*, 26(3)].

## BARBOURISIIDAE

**Redvelvet whalefish**

by J.R. Paxton

**Diagnostic characters:** Moderate-sized (to 33 cm) stephanoberyciform fishes; **body somewhat flabby,** moderately robust, **whale-shaped with median fins opposite and far posterior.** Head large; mucous cavities on top of head separated by thick ridges and covered by skin. Eyes small. Snout very long; nasal organ moderately developed. **Mouth very large, jaws extending far behind eye.** Teeth small and closely set, on jaws, vomer, and ectopterygoid; palatine and copula lacking teeth. Gill rakers well developed, lath-like. Fins without spines; 1 dorsal fin with 19 to 22 soft rays; anal fin with 15 to 18 soft rays; pectoral fins with 13 or 14 rays; **pelvic fins abdominal with 6 soft rays;** caudal fin with 19 principal rays. **Lateral line well developed as a broad tube pierced by small pores and supported by internal scales. Body and head covered by small, adherent, non-imbricate scales with a single, central spine giving a velvet-like texture.** No photophores or luminous tissue. No cavernous tissue. Pleural ribs present. **Total vertebrae 40 to 43. Colour: in life, bright red-orange; in preservative, white.**



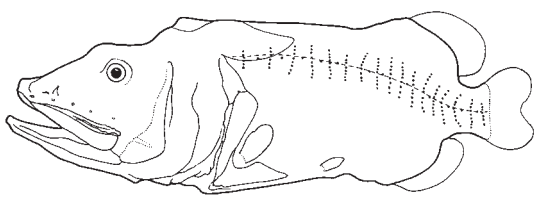
**Habitat, biology, and fisheries:** Mesopelagic as juveniles, benthopelagic as adults. Feeding mode unknown, presumably as predator on crustaceans. Rare deep-sea fishes of no commercial importance.

**Remarks:** One genus and species throughout the world ocean in tropical and temperate latitudes.

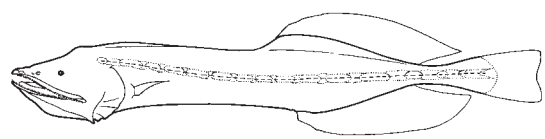
### Similar families occurring in the area

Rondeletiidae: no external body scales; lateral line as vertical rows of papillae; mouth large, but jaws not extending beyond posterior margin of eye; live colour orange-brown, in preservative brown.

Cetomimidae: no external body scales; no pelvic fins; colour brown or black.



**Rondeletiidae**



**Cetomimidae**

### A single species occurring in the area

*Barbourisia rufa* Parr, 1945

### References

Kotlyar, A.N. 1995. Osteology and distribution of *Barbourisia rufa* (Barbourisiidae). *Vopr. Ikhtiol.*, 35(3):282-289. [In Russian, English transl. *J. Ichthyol.*, 35(6)]

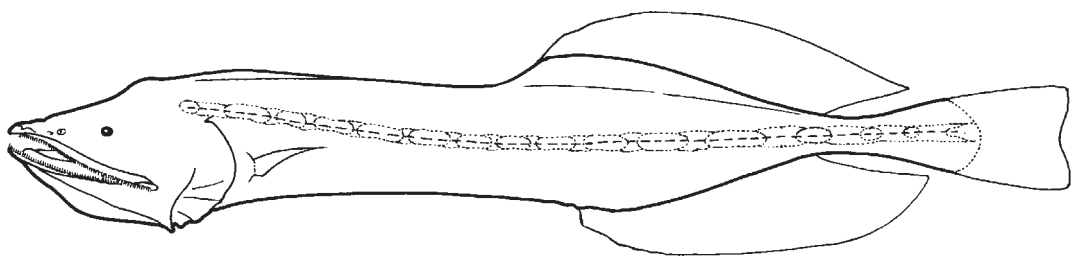
Paxton, J.R. and D.J. Bray. 1986. Family Barbourisiidae. In *Smiths' sea fishes*, edited by M.M. Smith and P.C. Heemstra. Johannesburg, Macmillan, p. 434.

## CETOMIMIDAE

### Whalefishes

by J.R. Paxton

**Diagnostic characters:** Small to moderate-sized (to 40 cm) stephanoberyciform fishes; **body soft and flabby,** slender to robust, **whale-shaped with median fins opposite and far posterior. Head very large**; mucous cavities on top of head indistinct and covered by skin in undamaged specimens. Eyes tiny. Snout very long; nasal organ poorly developed (well developed in *Procetichthys*). **Mouth enormous, jaws extending far behind eye.** Teeth tiny and closely set, small and widely spaced, or elongate in well defined, closely set rows; jaws, pharyngobranchials, and **copula always with teeth;** vomer, palatine, and ectopterygoid usually with teeth. **Gill rakers club-shaped, or as tooth patches, tooth plates, or individual teeth, never lath-like.** Fins without spines; 1 dorsal fin with 13 to 37 soft rays; anal fin with 11 to 34 soft rays; pectoral fins with 15 to 24 rays; **no pelvic fins; caudal fin with 10 to 19 principal rays**. **Lateral line very well developed, supported with internal scales; in most as a broad tube pierced by large pores** (*Procetichthys* with vertical rows of lateral-line papillae)**. No external body scales.** No photophores or apparent luminous tissue. **Unique cavernous tissue around anus in most, over base of anal fin and other areas in many species. No pleural ribs. Total vertebrae 38 to 59. Colour:** brown or black; in fresh specimens fin rays and inside mouth reddish orange.



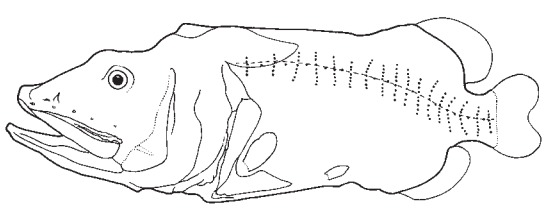
**Habitat, biology, and fisheries:** Bathypelagic as adults, some may be benthopelagic. Feeds on crustaceans. Rare deep-sea fishes of no commercial importance.

**Remarks:** Nine genera with about 35 species (including 15 undescribed) throughout the world ocean from boreal latitudes to the Antarctic. When the genus *Cetomimus* is revised, additional species will be recorded from the area.

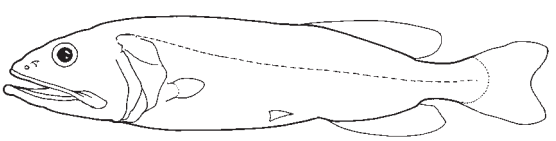
#### Similar families occurring in the area

Rondeletiidae: pelvic fins present; lateral line as vertical rows of papillae; jaws not extending beyond posterior margin of eye; pleural ribs present.

Barbourisiidae: pelvic fins present; head and body covered with tiny scales with central spine giving velvet-like texture; live colour bright red-orange.



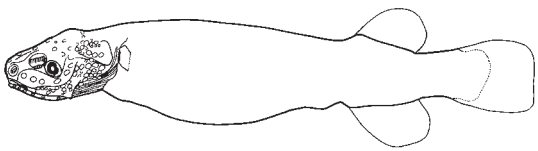
**Rondeletiidae**



**Barbourisiidae**

Megalomycteridae: nasal organ enormous; jaws not extending behind eye; pelvic fins in some; body scales in some.

Mirapinnidae: jaws not extending behind eye; pelvic fins present.



**Megalomycteridae**

**Mirapinnidae**

**List of species occurring in the area**

*Cetomimus gillii* Goode and Bean, 1895

*Cetostoma regani* Zugmayer, 1914

*Danacetichthys galathenus* Paxton, 1989

*Ditropichthys storeri* (Goode and Bean, 1895)

*Gyrinomimus bruuni* Rofen, 1959 (unpublished record, Paxton ms)
*Gyrinomimus* sp. nov. b (unpublished record, Paxton ms)
*Gyrinomimus* sp. nov. c (unpublished record, Paxton ms)

*Rhamphocetichthys savagei* Paxton, 1989

**Reference**

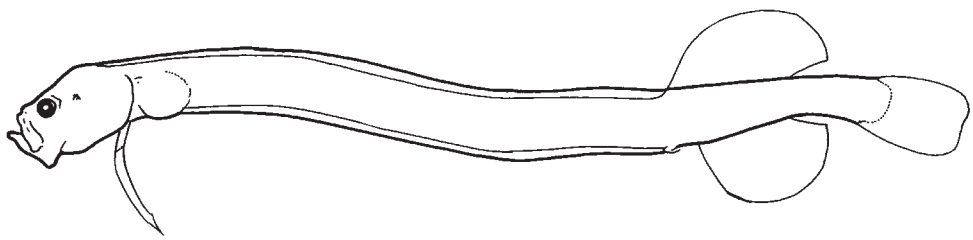
Paxton, J.R. 1989. Synopsis of the whalefishes (family Cetomimidae) with descriptions of four new genera. *Rec. Aust. Mus*., 41(2):135-206.

# MIRAPINNIDAE

## Tapetails (hairyfish)

by J.R. Paxton

**Diagnostic characters:** Small (to 5 cm) stephanoberyciform fishes; **body slender to very elongate, with median fins opposite and far posterior.** Head moderate. Eyes small to moderate. Snout moderate to large; **nasal organ poorly developed. Mouth moderate, jaws not extending behind eye.** Teeth small and closely set in 1 row on premaxillary and few rows on dentary; no teeth on vomer or palatine. Gill rakers lath-like. Fins without spines; 1 dorsal fin with 16 to 33 soft rays; anal fin with 14 to 29 soft rays; pectoral fins with 13 to 24 rays; **pelvic fins jugular with 4 to 10 soft rays;** caudal fin with 19 principal rays, **caudal streamer longer than body in larvae. No lateral line. No body scales. Body of 1 genus** (*Mirapinna*) **covered with dense, hair-like papillae**; others with naked skin. No photophores or luminous tissue. No cavernous tissue. **No pleural ribs. Total vertebrae 42 to 55. Colour:** brown, black, or transparent.



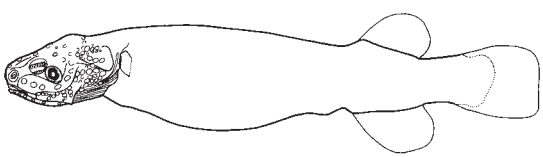
**Habitat, biology, and fisheries:** Larvae and juveniles epipelagic; mature adults unknown, perhaps mesopelagic. Feeding mode zooplankton pickers on copepods. Rare oceanic fishes of no commercial importance.

**Remarks:** Three genera with 6 species (1 undescribed) throughout the world ocean in tropical and subtropical latitudes. The most recent review is that of Bertelsen (1986), while that of Bertelsen and Marshall (1984) illustrates the most species. A revision of the family is needed, but mature specimens have yet to be collected. More species in the area are expected.

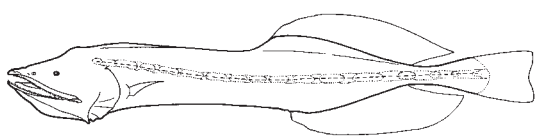
### Similar families occurring in the area

Megalomycteridae: nasal organ enormous; pelvic fins thoracic with 1 to 3 rays, or absent; scales present in some; no skin papillae or caudal streamer.

Cetomimidae: pelvic fins absent; mouth enormous, jaws extending far behind eye.



**Megalomycteridae**



**Cetomimidae**

### List of species occurring in the area

*Eutaeniophorus festivus* (Bertelsen and Marshall, 1956)

*Parataeniophorus* sp.

### References

Bertelsen, E. 1986. Family Mirapinnidae. In *Smiths' sea fishes*, edited by M.M. Smith and P.C. Heemstra. Johannesburg, Macmillan, pp. 406-407.

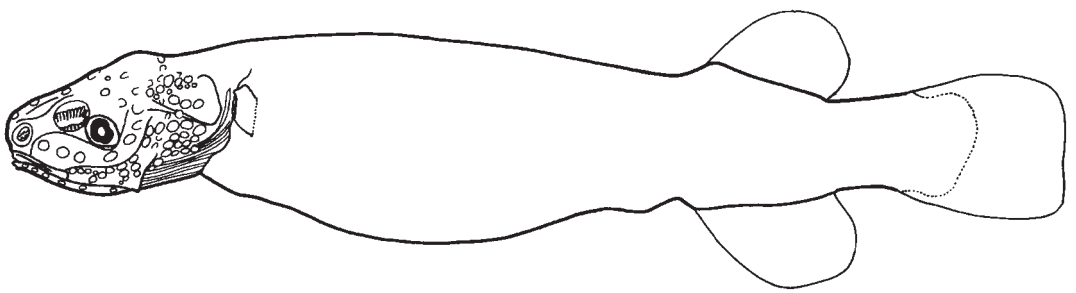
Bertelsen, E. and N.B. Marshall. 1984. Mirapinnatoidei: development and relationships. In *Ontogeny and systematics of fishes*, edited by H.G. Moser et al. *Amer. Soc. Ichthyol. Herpetol. Spec. Publ.*, (1):380-383.

# MEGALOMYCTERIDAE

## Bignose fishes

by J.R. Paxton

**Diagnostic characters:** Small (to 7 cm) stephanoberyciform fishes; **body elongate, with median fins opposite and far posterior.** Head moderate. Eyes small to moderate. Snout elongate to very large; **nasal organ enormous, covering much of snout. Mouth moderate, jaws not extending behind eye.** Teeth small and closely set in 1 to few rows on premaxillary and dentary; teeth present or absent on vomer, absent on palatine and copula. Gill rakers poorly developed, few in number. Fins without spines; 1 dorsal fin with 15 to 31 soft rays; anal fin 13 to 29 soft rays; pectoral fins with 18 to 23 rays; **pelvic fins thoracic with 1 to 3 rays, or absent;** caudal fin with 16 principal rays. **Lateral line poorly developed or unknown. Body scales small to moderate, non-imbricate, cycloid, or absent.** No photophores or luminous tissue. No cavernous tissue. **No pleural ribs. Total vertebrae 41 to 55. Colour:** brown, black, or unknown.



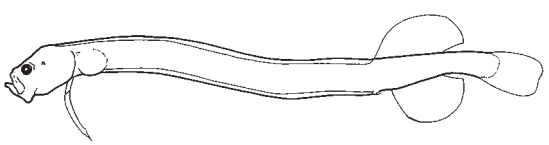
**Habitat, biology, and fisheries:** Meso- and bathypelagic. Feed as zooplankton pickers on copepods. All specimens histologically examined (more than 20) are males. Very rare deep-sea fishes of no commercial importance.

**Remarks:** Four genera with 7 or 8 species (3 undescribed) throughout the world ocean in tropical and subtropical latitudes. A family revision is necessary. More species are expected with further deep-sea collecting in the area.

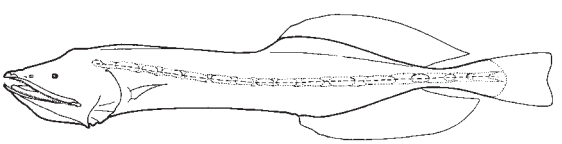
### Similar families occurring in the area

Mirapinnidae: nasal organ poorly developed; pelvic fins jugular with 4 to 10 rays.

Cetomimidae: jaws extending far behind eye; lateral line well developed; all but a single species with poorly developed nasal organs.



**Mirapinnidae**



**Cetomimidae**

### List of species occurring in the area

*Ataxolepis apus* Myers and Freihofer, 1966

*Cetomimoides parri* Koefoed, 1955 (unpublished record from the Philippines)

### Reference

Becker, V.E. 1981. On the first record of a rare bathypelagic fish from the genus *Ataxolepis* (Megalomycteridae) in the southern hemisphere. *Vopr. Ikhtiol.*, 21(3):558-561. [In Russian, English transl. *J.Ichthyol.*, 21(3)]

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