

Geographical Distribution : Indian Ocean (Karachi to Madras and perhaps north to Calcutta); specimens from the northwestern coasts of Australia may be this species.

Habitat and Biology : Marine, pelagic, coastal, but probably also entering estuaries. More data needed.

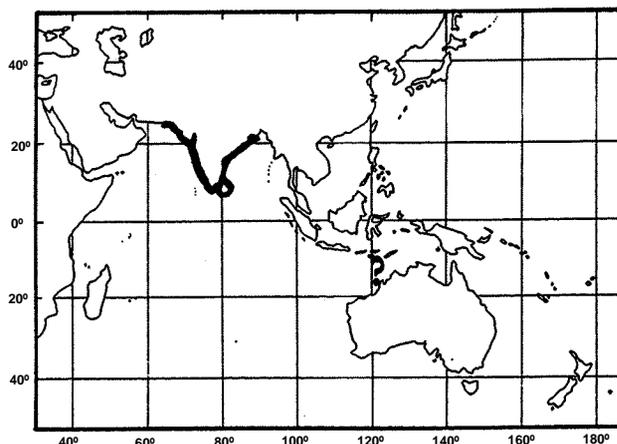
Size : To 18 cm standard length.

Interest to Fisheries : Probably caught with *I. melastoma*.

Local Names : -

Literature : See under Synonyms.

Remarks : Almost certainly confused in the past with the very similar *I. melastoma* in Indian waters.



Pellona Valenciennes, 1847

PRIST Pell

Formerly CLUP Pell

Pellona Valenciennes, 1847, *Hist.nat.Poiss.*, 20:300 (type: *Pellona orbignyana* Valenciennes = *Pristigaster flavipinnis* (Valenciennes)). *Neosteus* Norman, 1923, *Ann.Mag.nat.Hist.*, 9 11:17 (type: *Pellona ditchela* Valenciennes).

Diagnostic Features : Moderate or large-sized marine, estuarine or freshwater clupeoid fishes (to about 50 cm standard length), body moderately deep or elongate, compressed, with a sharp keel of scutes along belly. Eye fairly large; lower jaw projecting, mouth directed obliquely upward; upper jaw reaching at most to eye centre; a small toothed hypo-maxilla between hind tip of pre-maxilla and blade of maxilla (easily detected by rubbing a finger-nail along the lower edge of the jaw); jaw teeth small or minute, usually with a distinct gap at centre of upper jaw. Gillrakers fairly short and thick, few, 20 to 31 (but anterior gillrakers regress in some South American *Pellona* over 30 cm standard length). Dorsal fin at about midpoint of body; pelvic fins present, small, with 6 or 7 finrays, a little or well in front of dorsal fin origin; anal fin moderately long, with 34 to 43 finrays, its origin under or just behind dorsal fin base. Scales moderate, about 35 to 50 in lateral series. No distinctive colour patterns. No tube or tubes at hind end of swimbladder passing backward into body muscles (cf. species of *Ilisha*). *Pellona* strongly resembles *Ilisha*, but the latter lacks a toothed hypo-maxillary bone in the upper jaw.

Biology, Habitat and Distribution : Marine, pelagic and inshore in Indo-Pacific, marine and freshwater in New World (Atlantic and its drainage; absent off Pacific coasts).

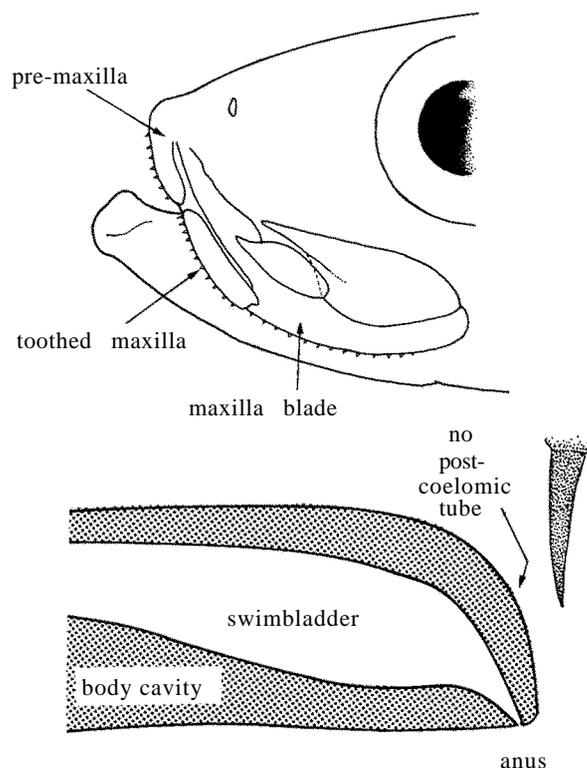
Interest to Fisheries : Contribute to artisanal fisheries.

Species : Wongratana (1980) recognized 2 Indo-Pacific species, and Whitehead (1973a) 3 New World species:

Indo-West Pacific

P. dayi Wongratana, 1983, India, Indonesia

P. ditchela Valenciennes, 1847, East Africa to Papua New Guinea.



New World

- P. castelnaeana Valenciennes, 1847, Orinoco, Amazon, freshwater
P. flavipinnis (Valenciennes, 1837) Orinoco to Buenos Aires, freshwater
P. harroweri (Fowler, 1917), Panama to Brazil, marine.

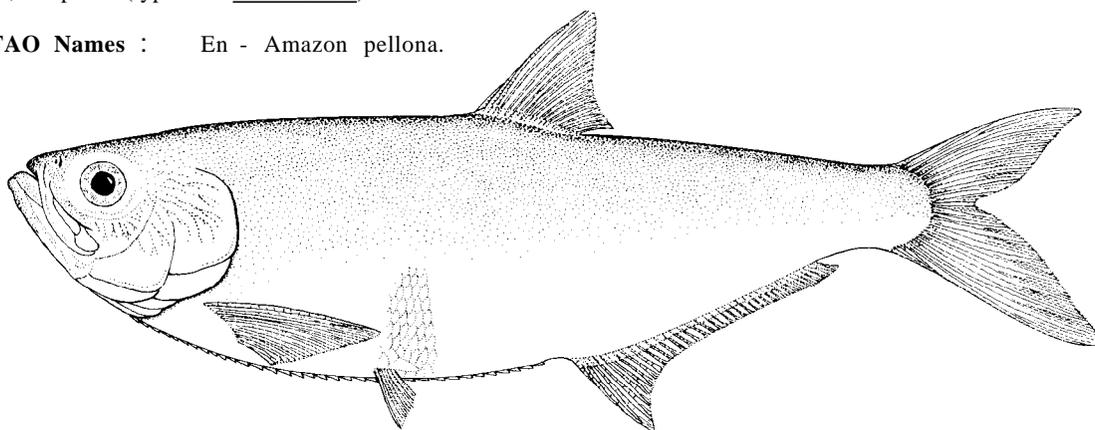
Pellona castelnaeana Valenciennes, 1847

PRIST Pell 3

Pellona castelnaeana Valenciennes, 1847, Hist.nat.Poiss., 20:306 (Amazon mouth).

Synonyms : [Pellona polypeis, MS name of Steindachner; type NMV 1103 ex Jatuarana]; ? Pellona altamazonica Cope, 1872:256 (Ambyiacu River, Ecuador; types lost fide Böhlke, 1984:62); FWNA, 1964:417, fig. 104 (Amazon between Parà and Manãos; lower gillrakers only 12 or 13); Ilisha desuratus Nakashima, 1941:77, fig. (near Iquitos, Peruvian Amazon); Pellona castelnaeana - Whitehead, 1967:108 (types of castelnaeana); Idem, 1970:25 (key, separation from P. flavipinnis on gillrakers); Idem, 1973a:71, fig. 21 (Guianas); Whitehead & Bauchot, in press (types of castelnaeana).

FAO Names : En - Amazon pellona.



Diagnostic Features : Body moderately deep and compressed, its depth about 29 to 34% of standard length, belly with 23 or 24 + 8 to 11, total 33 or 34 scutes. Lower jaw projecting; upper jaw with a toothed hypomaxillary bone between hind tip of pre-maxilla and lower bulge of maxilla blade (easily felt with fingernail); lower gillrakers 12 to 14 (in fishes of 20 to 50 cm standard length). Pelvic fins present, with a distinct axillary scale; anal fin long, its origin under dorsal fin base, with about 34 to 38 finrays. Scales fairly small, about 70 in lateral series. Closely resembles P. flavipinnis, which has more lower gillrakers (23 to 31) and more post-pelvic scutes (13 or 14); P. harroweri has only 5 to 7 post-pelvic scutes and no pelvic axillary scale. Ilisha amazonica lacks a toothed hypo-maxilla. Other similar clupeoids have a shorter anal fin (less than 30 finrays).

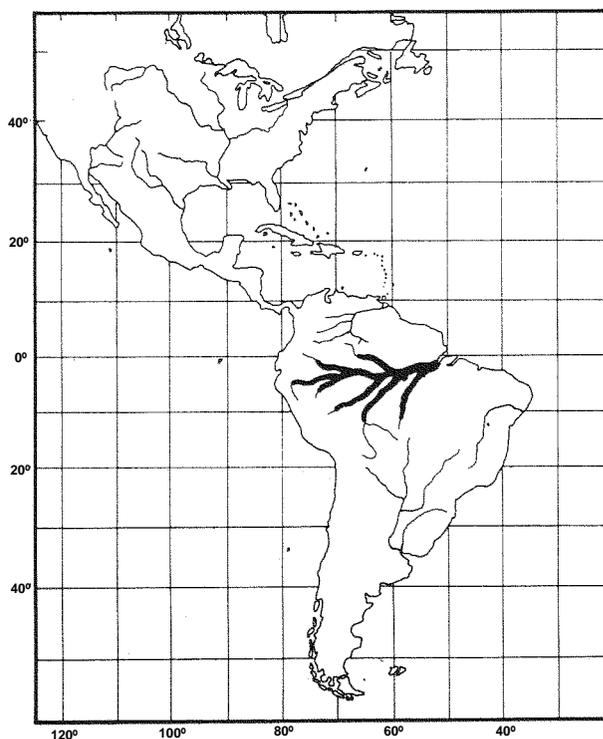
Geographical Distribution : Amazon system (Iquitos on Peruvian Amazon and Ambyiacos River in Ecuador to Manãos and perhaps Parà), the Guianas (Lake Amuku area where the Amazon and Essequibo systems join in wet years).

Habitat and Biology : Riverine, apparently not entering the sea, although presumably tolerating at least some salinity at the Amazon mouth. More data needed.

Size : To at least 47 cm standard length.

Interest to Fisheries : Almost certainly caught by artisanal fishermen on the Amazon.

Local Names : -



Literature : See under Synonyms; otherwise not clearly distinguished from *P. flavipinnis*.

Remarks : Much confused in the literature with the superficially similar *P. flavipinnis* until separated by gillraker and scute counts. The ranges of the two species overlap in the Amazon drainage, at least in the middle and lower parts, so that previous biological or fishery data may apply to either species.

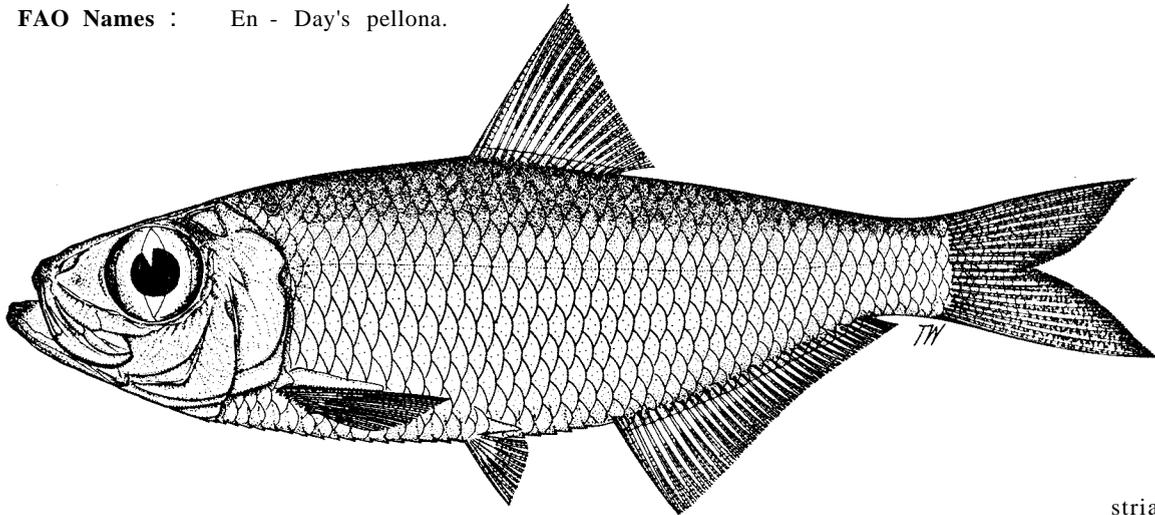
Pellona dayi Wongratana, 1983

PRIST Pell 4

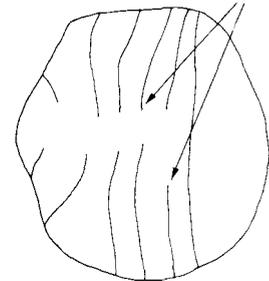
Pellona dayi Wongratana, 1983, *Jap.J.Ichthyol.*, 29(4):395, fig. 12 (Porto Novo, Madras).

Synonyms : None.

FAO Names : En - Day's pellona.



striae
discontinuous



scale

Diagnostic Features : Body moderately deep, compressed, belly with 19 + 8 or 9, total 27 or 28 scutes. Eye large, lower jaw projecting; upper jaw with a toothed hypo-maxillary bone between hind tip of pre-maxilla and lower bulge of maxilla (easily felt with fingernail); lower gillrakers 20 or 21. Dorsal fin origin near midpoint of body; pelvic fins present; anal fin with 35 to 41 finrays. Scales with upper and lower vertical striae not meeting at centre of scale. Closely resembles the widespread *P. ditchela*, which has 22 to 27 lower gillrakers and the vertical scale striae overlapping at centre of scale. Species of *Ilisha* have no hypo-maxilla. Other pristigasterids are much more slender and lack pelvic fins (*Opisthopterus*, *Raconba*).

Geographical Distribution : Indian ocean (on eastern coast of southern India).

Habitat and Biology : Marine, inshore and perhaps, like *P. ditchela*, entering estuaries.

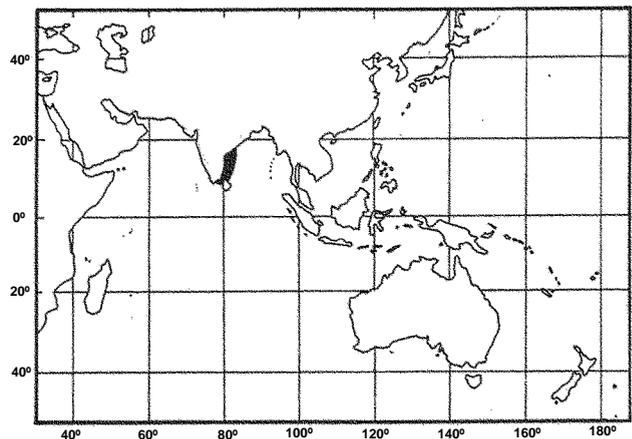
Size : To 13.5 cm standard length.

Interest to Fisheries : No data (included in catch records of *P. ditchela*).

Local Names : -

Literature : Presumably included in references to *P. ditchela*.

Remarks : Not easy to separate from *P. ditchela* on the scale striation character since scales easily lost. Further specimens may blur the distinction on gillraker numbers.



Pellona ditchela Valenciennes, 1847

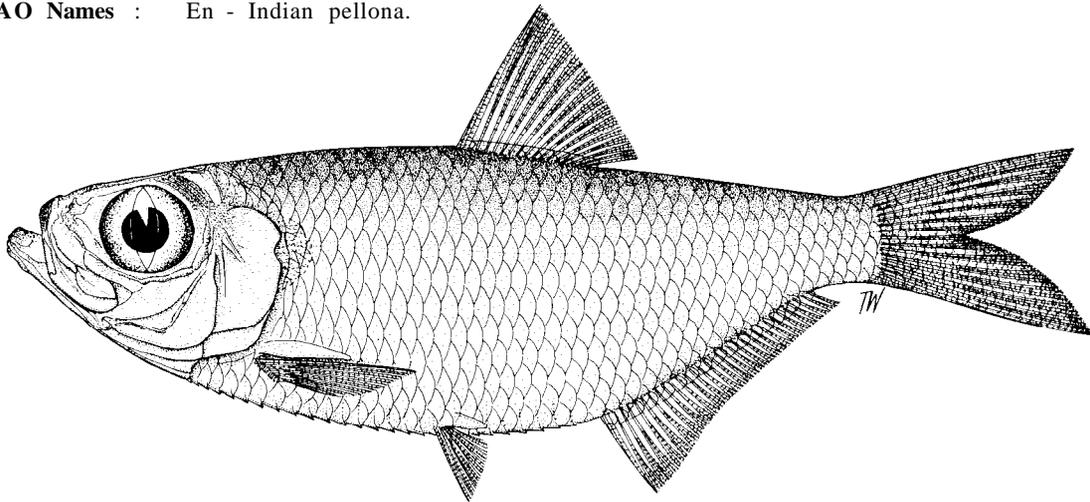
PRIST Pell 1

Formerly CLUP Pell 1 and
CLUP Pellon 2 (error)

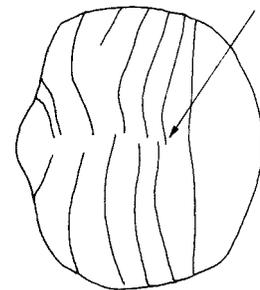
Pellona ditchela Valenciennes, 1847, Hist.nat.poiss., 20:314 (on Ditchelee of Russell, 1803).

Synonyms : Pellona hoevenii Bleeker, 1862:21 (Jakarta); Weber & de Beaufort, 1913:86, fig. 29 (jaws) (Indonesia); Pellona natalensis Gilchrist & Thompson, 1908:202 (Natal coast); Pellona ditchela - Fowler, 1941:648 (South Africa to Indonesia and the Philippines; large synonym.); Whitehead et al., 1966:91, pl. 11, fig. 2 (Bleeker's fig.) (types of hoevenii); Losse, 1968:104 (East Africa;synon., descr.); Whitehead, 1973b:209, fig. 35 (key, synonym., refs); Wongratana, 1980:195, pls 155, 156 (revision);CLOFFA, 1984:48 (African freshwater refs); SFSA, in press (South Africa).

FAO Names : En - Indian pellona.



striae
overlapping



scale

Diagnostic Features : Body moderately deep, compressed, belly with usually 18 or 19 + 8 or 9, total 26 to 28 scutes. Eye large, lower jaw projecting; upper jaw with a toothed hypo-maxillary bone between hind tip of pre-maxilla and lower bulge of maxilla blade (easily felt with fingernail); lower gillrakers 22 to 27. Dorsal fin origin near midpoint of body; pelvic fins present; anal fin with 34 to 42 finrays. Scales with upper and lower vertical striae slightly overlapping each other at centre of scales. Closely resembles P. dayi, which has only 20 or 21 lower gillrakers and the vertical scale striae not meeting at centre of scale. Species of Ilisha have no hypo-maxilla. Other pristigasterids are much more slender and lack pelvic fins (Opisthopterus, Raconda). See CLUP Pellon 2, Fishing Area 51; also CLUP Pell 1, Fishing Areas 57, 71.

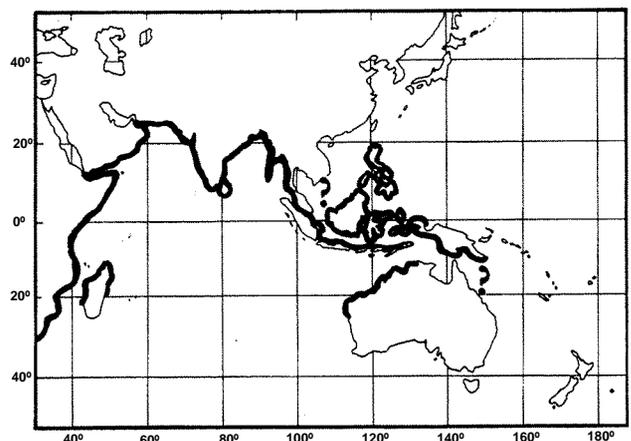
Geographical Distribution : Indian Ocean (western coasts from the Gulf of Oman to Durban, also Madagascar; coasts of India and Andaman Sea, perhaps off eastern Java, and south to Western Australia), South China Sea (the Philippines), Indonesia to northern Australia and Papua New Guinea.

Habitat and Biology : Marine, coastal, but entering mangrove swamps and penetrating estuaries into freshwater (e.g. in the Pangani River, Tanzania), thus apparently fully euryhaline.

Size : To 16 cm standard length.

Interest to Fisheries : No specific fishery, but contributes to artisanal catches of clupeoids. Only Malaysian catch reported (2 542 tons in 1983).

Local Names : EAST AFRICA: Chaa (genera), Simu (Shimoni), Simu koko (Malindi); SOUTH AFRICA: Indiense pellona.



Literature : Sadasivan (1965 - general biology); Losse (1968 - description, habitat in East Africa).

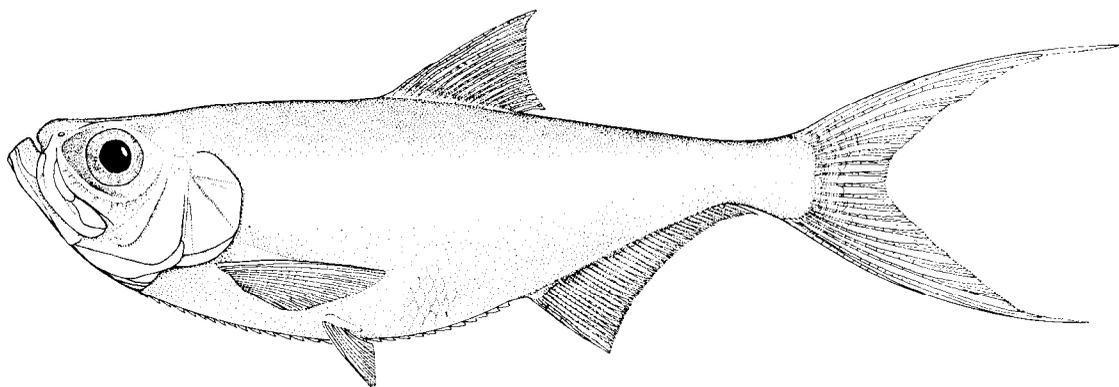
Pellona flavipinnis (Valenciennes, 1837)

PRIST Pell 5

Pristigaster flavipinnis Valenciennes, 1837, in d'Orbigny, *Voy. Amer. merid., Poiss., Atlas:pl. 10*, fig. 2 (figure only based on Buenos Aires specimens *vide* Whitehead, 1967:106); Valenciennes, 1847, *ibid.*, 5(2):8 (descr.).

Synonyms : *Pellona orbignyana* Valenciennes, 1847:302 (Buenos Aires); [*Pellona staudingeri*, MS name of Steindachner; types NMV 1112, 1893 *ex* Iquitos] [*Pellona macrolepis*, MS name Steindachner; type NMV 1101 *ex* Teffé, middle Amazon]; *Ilisha castelnaeana*:FWNA, 1964:419 based on Norman, 1923; misidentified); *Pellona castelnaeana*:Cervigón, 1966:130 (Orinoco mouth; lower gillrakers 25, 27, thus the present species); *Pellona flavipinnis* - Ringuet, Aramburu & Aramburu, 1967:60, fig. 1c (Argentina; descr. refs); Whitehead, 1967:106, 107, pl. 7a (original Valenciennes fig.) (types of *flavipinnis*, *orbignyana*); *Idem*, 1970:26, fig. 2 (gillraker numbers) (key, distinction from *P. castelnaeana*; 'types' of *staudingeri*, *macrolepis*); *Idem*, 1973a:67, fig. 19 (Guianas); Cervigón, 1982:211 (Orinoco); Whitehead & Bauchot, in press (types of *flavipinnis*, *orbignyana*).

FAO Names : En - Yellowfin river pellona.



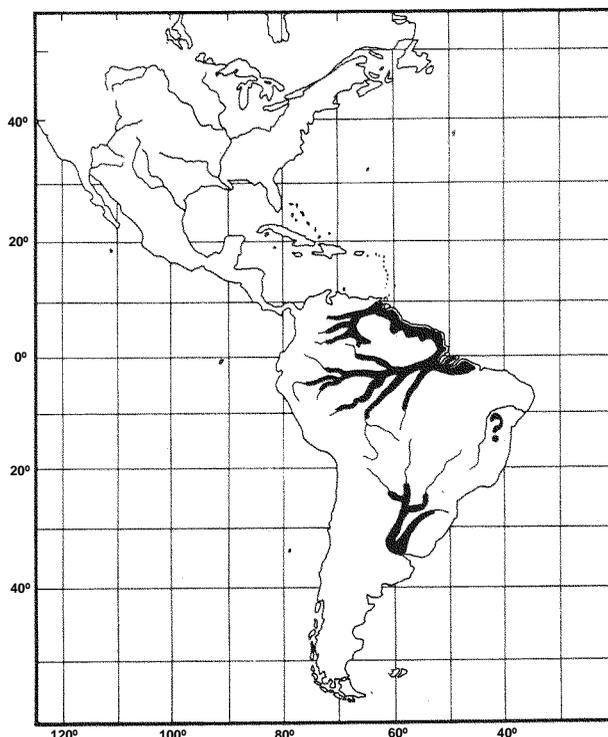
Diagnostic Features : Body moderately deep and compressed, its depth 30 to 37% of standard length, belly with 20 to 24 + 12 to 14, total 32 to 37 scutes. Lower jaw projecting; upper jaw with a toothed hypo-maxillary bone between hind tip of pre-maxilla and lower bulge of maxilla blade (easily felt with fingernail); lower gillrakers 23 to 31 (in fishes of 10 to 50 cm standard length, with the lower numbers in the larger fishes). Pelvic fins present, with a distinct axillary scale; anal fin long, its origin under dorsal fin base, with 38 to 46 finrays. Scales fairly small, about 60 in lateral series. Closely resembles *P. castelnaeana*, which has fewer lower gillrakers (12 to 14) and fewer post-pelvic scutes (8 to 11); *P. harroweri* has only 5 to 7 post-pelvic scutes and no pelvic axillary scale. *Ilisha amazonica* lacks a toothed hypo-maxilla. Other similar clupeoids have a shorter anal fin (less than 30 finrays).

Geographical Distribution : Argentina (Rio de la Plata down to Buenos Aires, Rio Paraná), Uruguay (Rio Uruguay), Brazil (Rio Tapajoz, Amazon as far up as Rio Jurua and down probably to mouth), the Guianas (Surinam, Guyana), Venezuela and Colombia (Orinoco from Rio Manacacias at Puerto Gaitan to Orinoco mouth).

Habitat and Biology : Riverine, apparently not entering the sea, although presumably tolerating some salinity at river mouths.

Size : To 50 cm standard length.

Interest to Fisheries : Almost certainly of importance to artisanal fishermen.



Local Names : ARGENTINA: Lacha, also Lacha pelada, Salaca.

Literature : See under Synonyms; otherwise not clearly distinguished from P. castelnaeana.

Remarks : See under P. castelnaeana.

Pellona harroweri (Fowler, 1917)

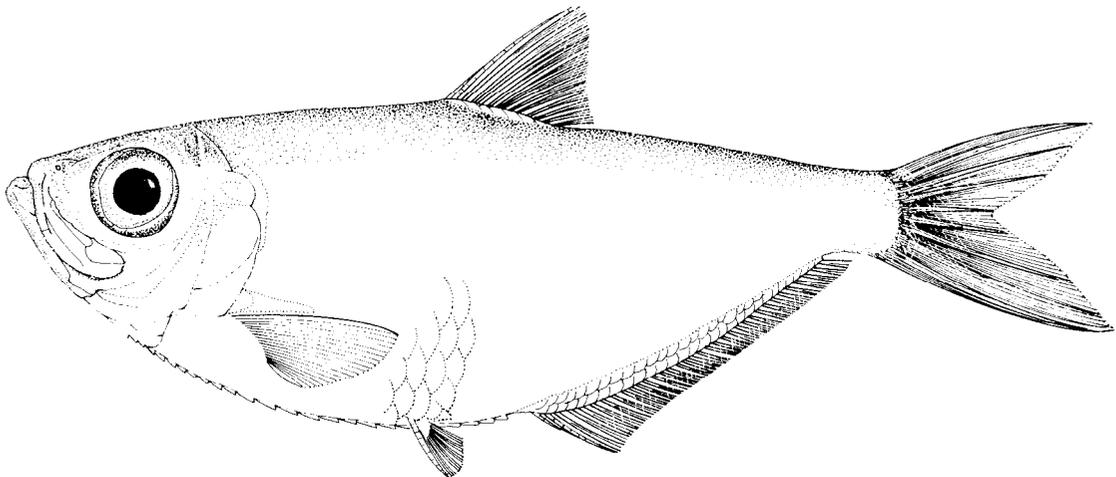
PRIST Pell 2

Formerly CLUP Pell 2

Ilisha harroweri Fowler, 1917, Proc.Acad.nat.Sci.Philad., 69:128, fig. 1 (Colon, Panama).

Synonyms : Ilisha naranansetae Fowler, 1911:208, fig. 1 (Newport, Rhode Island); Neosteus ternetzi Norman, 1923:595 (Rio de Janeiro); Ilisha argentata Hildebrand, 1923:190, pl. 9 (Fox Bay, Colon, Panama); Pristigaster vanderbilti Borodin, 1928:6, fig. 1 Panama; abnormal specimen lacking pelvic fins *vide* Hildebrand, 1964:426; Neosteus mayrinki Pinto, 1972:2 (Bacia do Parnaiba, Brazil); Ilisha harroweri:FWNA, 1964:423, fig. 106 (descr., *synon.*); Pellona harroweri Cervigón, 1966:128, fig. 54 (Venezuela); Whitehead, 1973a:61, fig. 16 (key, *synon.*, descr., Guianas specimens); Figueiredo & Menezes, 1978:25, fig. 31 (Brazil, *synopsis*).

FAO Names: En - American coastal pellona.



Diagnostic Features : Body fairly deep and compressed, its depth about 35 to 42% of standard length, belly with 17 to 20 + 5 to 7, total 22 to 26 scutes. Eye large, lower jaw projecting; upper jaw with a toothed hypo-maxillary bone between hind tip of pre-maxilla and lower bulge of maxilla blade (easily felt with fingernail); lower gillrakers 23 to 25. Pelvic fins present, without a distinct axillary scale; anal fin long, its origin under middle of dorsal fin base, with 36 to 42 finrays. Scales easily lost. Resembles P. castelnaeana and P. flavipinnis, which have more post-pelvic scutes (8 to 14) and a distinct pelvic axillary scale. Ilisha amazonica has no hypo-maxilla. Other similar clupeoids have a shorter anal fin (less than 30 finrays). See CLUP Pell 2, Fishing Area 31.

Geographical Distribution : Western Atlantic (Panama to Trinidad, the Guianas, entire Brazilian coast south of the Amazon to Rio Grande do Sul at about 30°S).

Habitat and Biology : Marine, inshore, along beaches and down to at least 16 m, entering estuaries, but perhaps not tolerating very low salinities.

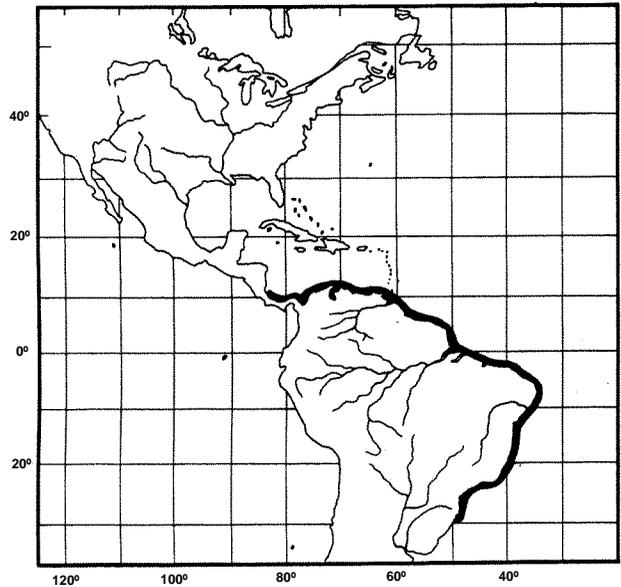
Size : To about 13 cm standard length.

Interest to Fisheries : Enters artisanal catches, but apparently not in large numbers.

Local Names : VENEZUELA: Sardina.

Literature : Matsuura (1973 - postlarva described and figured, Brazil).

Remarks : *Pellona harroweri* bears a remarkable resemblance, not to the two other New World species of *Pellona*, but to *P. ditchela* of the Indo-West Pacific. It differs in having fewer scutes (22 to 26; cf. 26 to 28) and fewer pelvic finrays (i 5; cf. i 6).



Pliosteostoma Norman, 1923

PRIST Plio

Pliosteostoma Norman, 1923, *Ann.Mag.nat.Hist.*, (9)11:21 (type: *Pristigaster lutipinnis* Jordan & Gilbert).

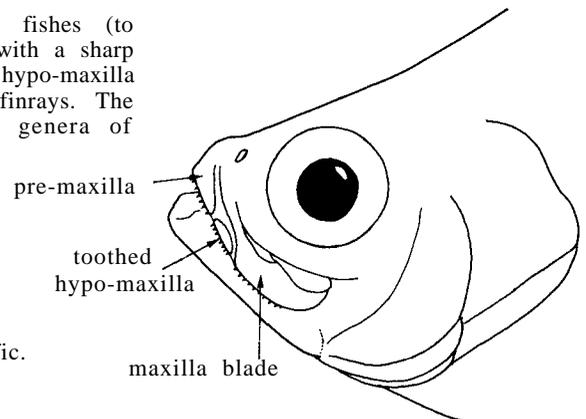
Diagnostic Features : Moderate-sized marine clupeoid fishes (to about 15 cm standard length), body elongate and compressed, with a sharp keel of scutes along belly. Lower jaw strongly projecting; hypo-maxilla present. Pelvic fins absent; anal fin long, with around 50 finrays. The hypo-maxilla distinguishes it from all other pristigasterid genera of Pacific coasts (see species for further distinctions).

Biology, Habitat and Distribution : See species.

Interest to Fisheries : See species.

Species : A single species recognized:

P. lutipinnis (Jordan & Gilbert, 1881), eastern central Pacific.



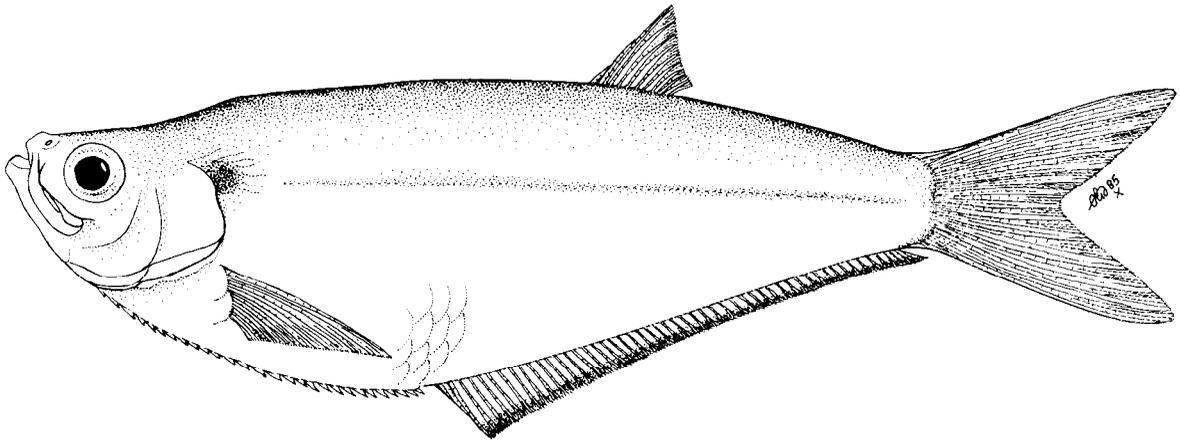
Pliosteostoma lutipinnis (Jordan & Gilbert, 1881)

PRIST Plio 1

Pristigaster lutipinnis Jordan & Gilbert, 1881, *Proc.U.S.natn.Mus.*, 4:340 (Mazatlán, Mexico).

Synonyms : *Opisthopecterus lutipinnis*: Jordan & Evermann, 1896:437 (Mazatlán); *Pliosteostoma lutipinnis* - Norman, 1923:21 (Mazatlán, Mexico); Peterson, 1956:180 (Barranca Bay, Costa Rica); Anon., 1976:67, 68 (Mexico; key, listed).

FAO Names : En - Yellowfin herring.



Diagnostic Features : Body elongate, compressed, its depth about 25% of standard length, belly with about 27 or 28 scutes. Lower jaw strongly projecting, mouth pointing obliquely upward; a distinct toothed hypo-maxillary bone between hind tip of pre-maxilla and lower bulge of maxilla blade (small, but can be felt with fingernail); upper jaw not reaching back beyond eye centre. Lower gillrakers around 18 to 20. Dorsal fin behind midpoint of body; pelvic fins absent; anal fin long, with 49 to 51 finrays, its origin a little before dorsal fin origin. A silver band along flank. No other Pacific coast pristigasterid has a hypo-maxilla; in addition, *Ilisha furthii* has pelvic fins, species of *Odonotognathus* have a long upper jaw (reaching back to gill opening), and *Neopisthopterus tropicus* has a terminal mouth. Resembles very closely the Pacific species of *Opisthopterus*, which have the anal fin very much in advance of dorsal fin origin and more anal finrays (55 to 62).

Geographical Distribution: Eastern central Pacific (Mazatlán, Mexico south to Colombia).

Habitat and Biology : Marine, coastal. More data needed.

Size : To 14.3 cm standard length.

Interest to Fisheries : Probably little.

Local Names :

Literature : See under Synonyms.

