

Fig. 11. Holotype of *Ostichthys delta*, BPBM 20050, 150.4 mm, Réunion. Drawing by T. Shimizu.

adjacent spinules; a short spine extending diagonally downward and posterior from ventral margin of lachrymal; suborbital depth below center of eye 2.8 in orbit diameter of holotype; length of longest postorbital bone about 3 in orbit diameter.

Scales coarsely ctenoid, number of ctenii varying from 7 posteriorly on caudal peduncle to 28 dorso-anteriorly on body of holotype; no strong ridges on surface of scales; scales dorsally on head extending forward to a vertical slightly anterior to upper end of preopercular margin; preopercle with 4 diagonal rows of scales; base of opercle with a single row of scales; spinous portion of dorsal fin without scales; soft portion and anal fin with a basal scaly sheath, scales not adhering to fins; caudal and pectoral fins with small scales basally; no scales in axil of pectoral fins; pelvic fins with a basal mid-ventral projection of 2 median scales which overlap 2 lateral scales on each side (all but two scales of holotype lost).

Dorsal and anal spines with weak striations; origin of dorsal fin over first lateral-line scale; third or fourth dorsal spines longest, 2.2 (2.05~2.3) in head; last dorsal spine shortest, its length 6.15 (5.8~6.55) in head and 2.8 (2.65~3.1) in longest dorsal spine; space between last dorsal

spine and first dorsal ray nearly half as great as space between bases of last two spines; longest dorsal ray, third or fourth 2.1 (1.95~2.1) in head; origin of anal fin below base of about fourth dorsal ray; first anal spine very small; third anal spine longest and much stoutest, its length 1.9 (1.8~2.05) in head; longest anal ray, second, 1.9 (1.9~2.05) in head; caudal fin small, 1.7 (1.65~1.85) in head, and forked, caudal concavity 3.7 (3.6~4.3) in head; pectoral fins extending slightly past a vertical at tips of appressed pelvic fins, fourth ray longest, 1.4 (1.4~1.6) in head; origin of pelvic fins below lower base of pectoral fins; second pelvic ray longest, 1.7 (1.7~1.75) in head.

Color in alcohol brown, the fin membranes, opercular membrane, membrane over premaxillary groove and mucous channels of head pale. Color in life uniform red.

**Etymology.** Named *delta* from the triangular fourth letter of the Greek alphabet in reference to the near-triangular shape of the vomerine tooth patch (this shape best developed on holotype).

**Remarks.** All of the specimens were collected by Paul Guézé with gill nets from depths of 150~200 m at rocky escarpments at Réunion. On June 4, 1982 a specimen of *O. delta* 145 mm SL

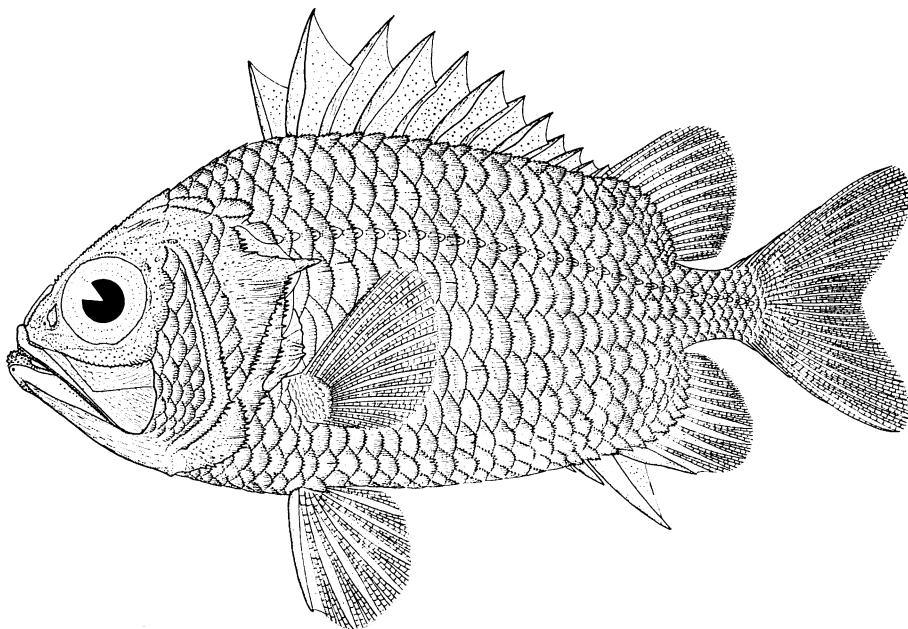


Fig. 12. Adult of *Ostichthys kaianus*, HUMZ 40497, 179.0 mm Okinawa, Japan. Drawing by T. Shimizu.

was caught in 200 m off Tutuila, American Samoa by Paul Pedro of the Marine Resources vessel "Sausauimoana". It has been given by Dr. Richard C. Wass to the Bishop Museum where it is catalogued as BPBM 28107. However, it is not designated as a paratype. We are indebted to him and to L. A. Maugé for permitting us to name this fish; they were aware that these specimens represented a new species and abandoned their plans to describe it upon hearing of our generic revision in progress.

**Differential diagnosis.** *Ostichthys delta* is readily distinguished from all other *Ostichthys* by its possession of XI instead of XII dorsal spines, poorly developed opercular spine, and 27 or 28 (usually 27) lateral-line scales.

***Ostichthys kaianus* (Günther)**  
(Japanese name: Kai-ebisu)  
(Fig. 12, Pl. 2B)

*Myripristis kaianus* Günther, 1880: 39 (type locality, Kai Island, eastern Banda Sea).

*Myripristis (Holotrichys) guezei* Postel, 1962: 158, fig. 1 (type locality, Réunion). New synonymy.

**Description.** Scales above lateral line to mid-base of spinous portion of dorsal fin 2 1/2; no half scale anterior to upper part of first lateral-

line scale; dorsal profile of head slightly convex; no spine at anterior end of nasal bone of adults or subadults; no enlarged spine at corner of preopercle of adults; pectoral rays 15 to 17 (usually 16); lateral-line scales 28 to 30 (usually 28, rarely 30); gill rakers 7~9+14~16; last dorsal spine about equal in length to penultimate spine; space between last dorsal spine and first dorsal ray about half as broad as space between last two dorsal spines; depth of body 2.05~2.2 in SL; head length 2.15~2.4 in SL; snout short, 4.2~4.9 in head; least depth of caudal peduncle 3.8~4.6 in head.

Color when fresh: red with a series of silvery white dashes (middle of each scale with a horizontal streak nearly full width of scale), forming longitudinal bands on body.

**Remarks.** We have examined specimens of *O. kaianus* from Indonesia (holotype), Réunion (holotype of *Myripristis guezei* Postel and one other specimen), and the Ryukyu Islands (24 specimens). This species has been taken by hook and line and by trawling in the depth range of 310~640 m. Further deep-water collecting will undoubtedly dispel its present discontinuous distribution.

**Material examined.** RÉUNION: MNHN 62-319, 259 mm, holotype of *Myripristis (Holotrichys) guezei* Postel.

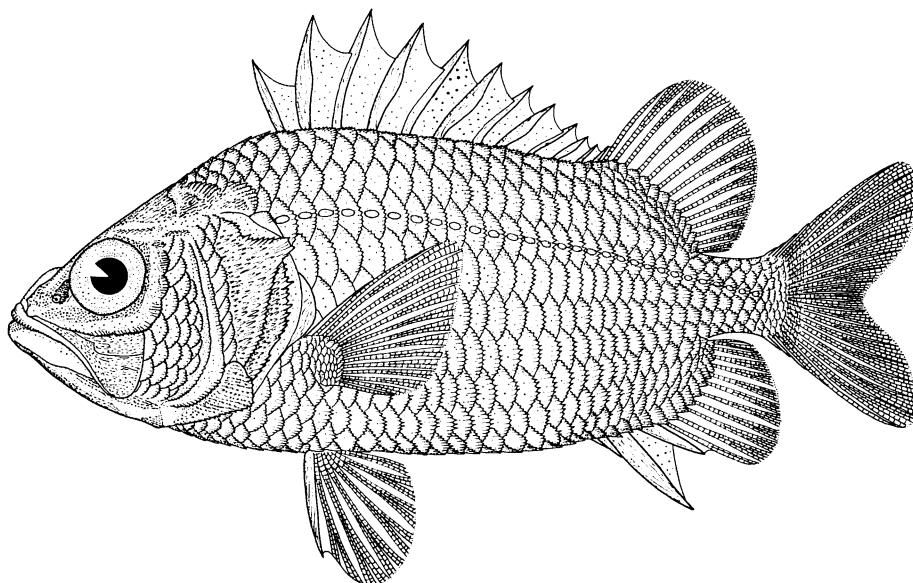


Fig. 13. Adult of *Ostichthys archiepiscopus*, HUMZ 63048, 197.0 mm, Okinawa, Japan. Drawing by T. Shimizu.

*trachys*) *guezei*; MNHN 1966-847, 205 mm. INDONESIA: BM(NH) 1879.5.14.150, 149.9 mm, holotype of *Myripristis kaianus*, Kai Island, eastern Banda Sea. JAPAN: BPBM 10048, 208 mm, Naha fish market, Okinawa; HUMZ 40494~97, 47400, 62721, 63112, 7: 172.5~223 mm, Naha fish market; HUMZ 47685, 234.5 mm, Ishigaki Island, Yaeyama Islands, Okinawa Pref.; HUMZ 47687, 222.7 mm, Itoman fish market, Okinawa Is., Okinawa Pref.; HUMZ 74960, 74961, 74964, 74965, 74968~70, 79233, 80259, 80289, 80357, 11: 98.4~292 mm, 26°45.5'~26°47.2'N, 135°19.2'~135°24.5'E; HUMZ 80214, 80215, 2: 219.8~241.7 mm, 25°33.8'N, 126°25.2'E; KSHS 16965, 211.5 mm, Naha fish market.

***Ostichthys archiepiscopus* (Valenciennes)**  
(New Japanese name: Oki-ebisu)  
(Fig. 13, Pl. 2C)

*Myripristis archiepiscopus* Valenciennes, 1862: 1169 (type locality, Île Bourbon=Réunion).  
*Myripristis Pillwaxii* Steindachner, 1893: 215, pl. 1 (type locality, Honolulu, Hawaii). New synonymy.

**Description.** Scales above lateral line to mid-base of spinous portion of dorsal fin 2 1/2; a half scale anterior to upper half of first lateral-

line scale; dorsal profile of head straight; no spine at anterior end of nasal bone of adults or subadults; opercular spine usually very large; no enlarged spine at corner of preopercle of adults; pectoral rays 15; dorsal soft ray modally 14 (13 in other species of *Ostichthys*); lateral-line scales 28~30 (usually 29); gill raker 7~9+13~15; last two dorsal spines about equal in length or last slightly shorter; space between last dorsal spine and first dorsal ray about half as broad as space between last two dorsal spines; depth of body 2.1~2.35 in SL; head relatively short, 2.45~2.6 in SL; snout long for the genus, 3.7~4.3 in head; depth of caudal peduncle 3.8~4.7 in head.

Color red with a faint whitish longitudinal banding following scale rows.

**Remarks.** *Ostichthys archiepiscopus* is known from Réunion in the Indian Ocean (holotype and one other specimen from Réunion examined), the Hawaiian Islands, and it is here recorded from the Ryukyu Islands. Specimens have come from the depth range of 146~360 m. They have been taken in trawls and by hook and line.

Although the sampling of this species is limited, there is an indication that *O. archiepiscopus* is antitropical in its distribution. All the localities of capture have been between latitudes of 21° and

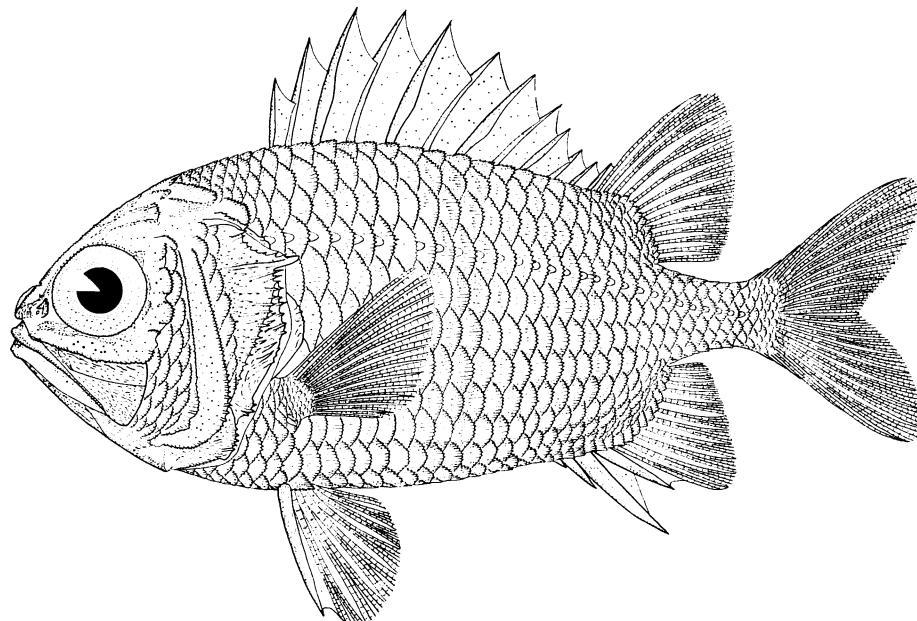


Fig. 14. Adult of *Ostichthys trachypoma*, USNM 24942, 147.1 mm, Cuba. Broken fins restored after other specimens. Drawing by T. Shimizu.

27°.

**Material examined.** RÉUNION: MNHN A. 8095, 255 mm, holotype of *Myripristis archiepiscopus*; MNHN 2589, 273 mm, MNHN 1966-846, 145 mm. HAWAIIAN ISLANDS: BPBM 8160, 8777, 8806, 3: 179~197 mm, Oahu. JAPAN: HUMZ 63048, 197 mm, Naha fish market, Okinawa Pref.; HUMZ 74962, 74963, 74966, 74967, 80186, 80290, 6: 179.8~204.4 mm, 26°45.4'~26°47.2'N, 135°20.8'~135°21.3'E.

***Ostichthys trachypoma* (Günther)**  
(Figs. 14, 15)

*Myripristis trachypoma* Günther, 1859: 25 (type locality, Caribbean Sea).

*Myripristis fulgens* Poey, 1860: 160 (type locality, Cuba).

**Description.** Scales above lateral line to mid-base of spinous portion of dorsal fin 2 1/2; a half scale anterior to upper half of first lateral-line scale; dorsal profile of head convex; no spine at anterior end of nasal bone of adults or sub-adults; pectoral rays 14~16 (usually 15); lateral-line scales 28 to 30 (usually 29); gill rakers 8~11+14~17; last two dorsal spines about equal in length; space between last dorsal spine and first dorsal ray less than half space between last two

spines; depth of body 2.0~2.2 in SL; head length 2.3~2.5 in SL; snout 4.6~5.6 in head; least depth of caudal peduncle 4.0~4.5 in head.

Color when fresh (from Woods and Sonoda, 1973): body red with white stripes of about equal width to the red interspaces following scale rows; head, including iris and lips, red; cheeks usually red but sometimes showing white; branchiostegal membranes white, the rays pink; membranes of spinous portion of dorsal fin dark red, the spines pale; dorsal and caudal soft rays red, the membranes pale; spines of anal and pelvic fins white, the soft rays pink; basal scaled part of pectoral fins red, unscaled distal portion yellowish pink.

**Remarks.** *Ostichthys trachypoma* is the only Atlantic species of the genus. Adults have been collected from North Carolina to northern Brazil, including the northern Gulf of Mexico, the Bahamas, and the Caribbean Sea, in the depth range of 37 to 460 m. The late postlarval stage may be taken at the surface with a dip net at a night light. It is carried in the Gulf Stream farther north than the species is resident. The most northern record is off Montauk, Long Island (41°N). This stage has a prominent rostral projection (see Fig. 15), as does that of the

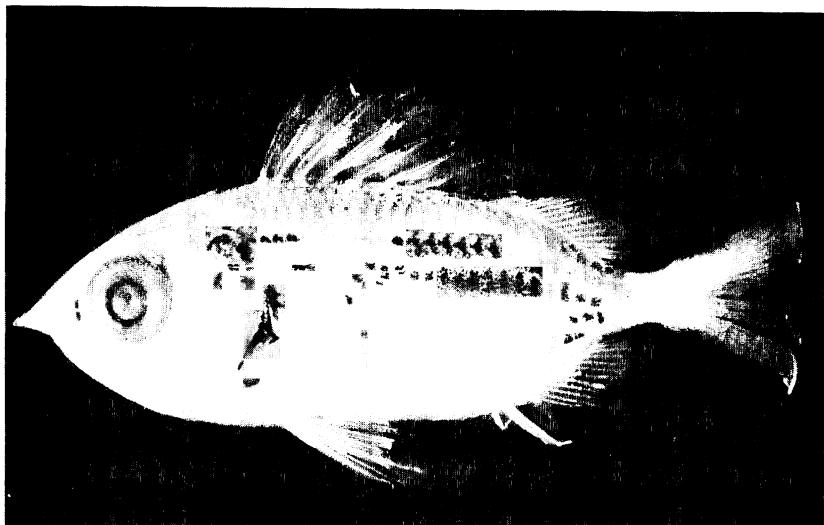


Fig. 15. Prejuvenile of *Ostichthys trachypoma*, MCZ 43254, 25.5 mm, 36°57'N, 68°05'W. Photo by J. Randall.

species of *Myripristis*.

Woods and Sonoda (1973) reported the largest specimen they examined as 190 mm SL.

**Material examined.** GEORGIA: CAS 44677, 92 mm, 31°19'N, 80°11.5'W. FLORIDA: USNM uncatalogued ("Silver Bay" Sta. 2479), 3: 92~135 mm, 25°29'N, 79°19'W. BAHAMAS: ANSP 144032, 34 mm, 23°40'N, 79°06'W; UMML 588, 65 mm, 27°27'N, 78°58'W; UMML 1162, 96.5 mm, 27°30'N, 78°52'W; UMML 20919, 75 mm, 26°35'N, 78°25'W; USNM 157989, 120 mm, Grand Bahama Bank; USNM 157990, 2: 82~130 mm, off Grand Bahama Bank (22°50'N, 79°08'W). CUBA: ANSP 144031, 115 mm, 23°05'N, 78°49'W; FMNH 64057, 3: 95~118 mm; MCZ 10980, 107 mm; MCZ 10981, 162 mm; USNM 12546, 167 mm; USNM 19804, 127 mm; USNM 24942, 147 mm; USNM 157868, 130 mm; USNM 157989, 118 mm. PUERTO RICO: FMNH 65198, 5: 52~83 mm, west of Puerto Rico. HAITI: USNM uncatalogued ("Silver Bay" Sta. 3498), 2: 119~130 mm. PANAMA: UMML 20919, 75 mm, 26°35'N, 78°25'W. COLOMBIA: USNM 214182, 74.4 mm, 11°09'N, 74°39'W. VENEZUELA: FMNH 66965, 5: 62~68 mm, 12°13'N, 72°34'W. SURINAM: FMNH 70602, 4: 137~153 mm, 80°28'N, 58°19'W. SARGASSO SEA: MCZ 43254, 25.5 mm, 36°57'N, 68°05'W.

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#### エビスダイ属の分類の再検討と 4 新種の記載および 1 属の創設

John E. Randall・清水 長・山川 武

アカマツカサ亜科の属レベルの分類を再検討し, *Ostichthys* (エビスダイ属), *Myripristis* (アカマツカサ属), *Plectrypops* (リュウキュウエビス属), *Corniger* および新属 *Pristilepis* (ヤセエビス属, 新称) の 5 属を認めた。

新属には、従来の *Holotrachys oligolepis* Whitley (ヤセエビス) のみが含まれる。本属は、鼻骨が著しく長大で吻端をこえる、細長い形の前上顎骨溝(両側の鼻骨の間に形成される溝)、第 1 眼下骨に上顎をこえる鋭い棘があり、上顎縫合部内面に 1 小歯板をもつ、基底後頭骨の後下端での突起物の欠如、18 個の尾椎、成魚でも独立した第 2 尾鰭椎体(U<sub>2</sub>)、などの特徴をもつ。

エビスダイ属には、4 新種を含む 8 種が含まれる。

*O. acanthorhinus* (新種) は、成魚でも鼻骨先端に前方に向かう明瞭な 1 小棘をもち、また前鰓蓋骨の隅角にも 1 小棘をもつことにより識別される。本種はオーマン湾、インド南西岸およびバリ島から記録された。

*O. delta* (新種) は、11 本の背鰭棘(他の全種は 12 本、稀に 13 本) で識別される。本種はインド洋のレユニ

ニオン島およびサモア島から採集された。

*O. japonicus* (エビスダイ) は、最後の背鰭棘がその直前の棘より著しく長いことにより密易に識別される。さらに側線上方鱗数(側線から背鰭棘部の中央部までの鱗数)が 3.5、胸鰭条数が通常 17、下肢鰓耙数 12~14、眼窓中央部で第 2 眼下骨の高さが高く、背鰭最長棘が比較的短いなどの特徴をもつ。

*O. hypsipterygion* (新種、ヒレダカエビス、新称) は、3.5 の側線上方鱗数によりエビスダイに似ているが、最後の 2 本の背鰭棘がほぼ同長、胸鰭条数が通常 15、眼窓中央部での第 2 眼下骨の高さが低い、背鰭最長棘が著しく長いなどの特徴により同種から区別される。本種は沖縄で採集された。

*O. sandix* (新種) は、3.5 の側線上方鱗数により、エビスダイとヒレダカエビスに似るが、15~16 の下肢鰓耙数により両種から区別される。さらに、ほぼ同長の最後の 2 本の背鰭棘と低い第 2 眼下骨により前種から、通常 16 の胸鰭条数と短い背鰭最長棘により後種から区別される。本種はハワイで採集された。

*O. kalianus* (カイエビス) は、側線上方鱗数 2.5、胸鰭条数が通常 16、第 1 側線鱗の前上方に 1 小鱗がないなどの特徴をもつ。

*O. archiepiscopus* (オキエビス、新称) は、直線的な頭部側面観と長い吻部により識別される。また、2.5 の側線上方鱗数によりカイエビスに似るが、胸鰭条数 15、第 1 側線鱗の前上方に 1 小鱗があるなどの特徴により同種から区別される。

*O. trachypoma* は、2.5 の側線上方鱗数によりカイエビスとオキエビスに似る。しかし、第 1 側線鱗の前上方に 1 小鱗があることにより前種から、またゆるやかに突出する頭部側面観と短い吻長により後種から区別される。

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### Explanation of plates

#### Plate 1

- A. Juvenile of *Pristilepis oligolepis*, BPBM 22710, 127 mm, Hawaiian Islands. Photo by J. Randall.
- B. Adult of *Pristilepis oligolepis*, BPBM 6603, 231 mm, Easter Island. Photo by J. Randall.
- C. Adult of *Ostichthys japonicus*, BPBM 22269, 303 mm, Okinawa, Japan. Photo by J. Randall.

#### Plate 2

- A. Holotype of *Ostichthys hypsipterygion*, HUMZ 62836, 147.1 mm, Okinawa, Japan. Photo by T. Shimizu.
- B. Adult of *Ostichthys kaianus*, BPBM 10048, 208 mm, Okinawa, Japan. Photo by J. Randall.
- C. Adult of *Ostichthys archiepiscopus*, BPBM 8777, 179 mm, Hawaiian Islands. Photo by J. Randall.

