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# A New Record of the Kyphosid Fish *Sectator ocyurus* from Japan

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Recently, a single specimen of the kyphosid fish, *Sectator ocyurus* (Jordan et Gilbert), was collected by a bottom gill-net at a depth of 6 m, off Yaene Port (33°05′N, 139°45′E), Hachijo-jima, one of Izu Islands, on October 6, 1982.

This species was originally described by Jordan and Gilbert (1882) as *Pimelepterus ocyurus* on the basis of three specimens obtained from Panama Bay. Jordan (1886) transferred the species from *Pimelepterus* to *Kyphosus* without any comment. The genus *Sectator* was erected for the species *ocyurus* by Jordan and Fesler (1893), because of poorly developed tooth roots and the deeply forked caudal fin. During investigations of the aquatic resources of the Hawaiian Islands in 1901, a new kyphosid fish was collected and described as *Sectator azureus* by Jordan and Evermann (1904). An additional specimen of *S. ocyurus* was reported from the Society Islands by Randall (1961). He compared types of *Sectator azureus* and *S. ocyurus*, and indicated that both belong to the same species. The present specimen from off Yaene Port, Hachijo-jima, represents the first record of this species from Japanese waters.

*Sectator ocyurus* (Jordan et Gilbert, 1882)
(New Japanese name:
Koshinaga-isuzumi)
(Fig. 1)

*Pimelepterus ocyurus* Jordan and Gilbert, 1882: 327, 328 (type locality, Panama Bay).

*Sectator azureus* Jordan and Evermann, 1904: 185 (type locality, Heeia, Oahu, Hawaiian Islands).

**Materials examined.** MTUF 25003, 1 specimen, 403.5 mm in standard length (SL), off Yaene Port, Hachijo-jima, 6 m deep, October 6, 1982. BPBM 28209, 1 specimen, 310.0 mm SL, Mahukona, Hawaii, October 27, 1982. USNM 50664 (type of *Sectator azureus*), 297.0 mm SL, Heeia, Oahu, Hawaiian Islands, 1901. Abbreviations for repositories of materials: MTUF, Museum of Tokyo University of Fisheries; BPBM, Bernice P. Bishop Museum; USNM, National Museum of Natural History, Smithsonian Institution.

**Description.** Dorsal rays X～XI, 15; anal rays III, 13; pectoral rays 20; lateral-line scales to caudal base 62～66; scales above lateral line to origin of dorsal fin 13～14; scales below lateral line to origin of anal fin 20～22; gill rakers 28～30; predorsal bones 3; epurals 3; vertebrae 10+16=26.

Depth of body 3.0～3.3, head length 4.0～4.1, predorsal length 2.8～2.9, distance from snout to origin of anal fin 1.7～1.8, distance from snout to origin of pelvic fin 2.9～3.0, base of dorsal fin 2.0, base of anal fin 3.3～3.8—all in SL.

Snout length 2.5～3.6, eye diameter 4.6～5.1, interorbital width 2.4～2.5, postorbital length of head 1.8～1.9, upper jaw length 3.7～3.9, caudal peduncle length 1.3, caudal peduncle depth 2.8～3.5, pectoral fin length 1.6～1.7, pelvic fin length 2.0～2.2—all in HL.

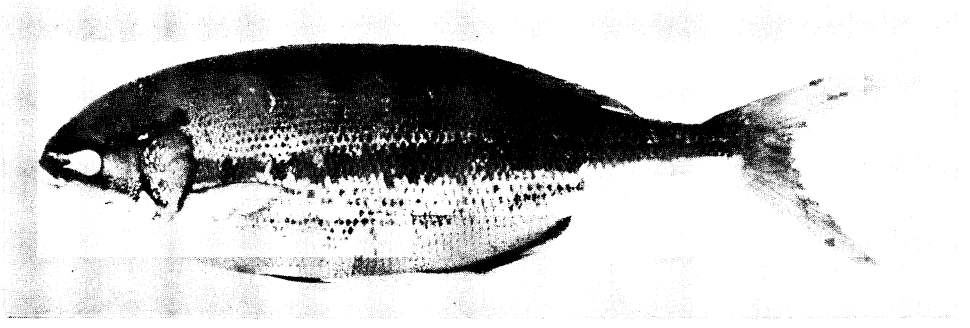

Fig. 1. *Sectator ocyurus* (Jordan et Gilbert), 403.5 mm SL, collected from Hachijo-jima, one of Izu Islands, Japan.

Body oblong, elongate, maximum depth about at the tip of pectoral. Dorsal and ventral outlines of body nearly equally curved. Frontal region little elevated, a marked depression in front of eye to upper jaw. Mouth small, terminal, maxillary not reaching front of eye. Jaw teeth (Fig. 2): a row of small incisor teeth in each jaw lanceolate, roots of teeth developed, no hinge joint between the basal and distal segments shown for the species *Girella nigricans* by Norris and Prescott (1959); minute canine-like teeth in two or three rows at inside of incisor teeth. Minute villiform teeth on vomer, palatines and glossohyal. Tongue broad, rounded and free in front margin. Gill membranes united across throat, free from isthmus. Gill rakers moderately developed. Pectoral fin short, a little longer than pelvic fin. Caudal peduncle long; caudal fin deeply forked. Scales (Fig. 3): ctenoid (Jordan and Evermann, (1904) misdescribed scales as cycloid); four or five grooves present at the basal area, and small weak ctenii at the apical area. Soft dorsal, anal, pectoral and caudal fins covered with scales, head scaled excepting premaxillary, dentary and area in front of eye.

Color in fresh specimen: Abdomen and lower part of sides whitish. Each side of back with a longitudinal cobalt blue stripe, from slightly before dorsal origin to upper part of caudal base. A distinct broad cobalt blue stripe runs from area above base of pectorals straight to base of caudal. Area between these two stripes dark grey. A golden yellow stripe below the broad cobalt blue stripe. A distinct, oblique cobalt blue stripe from snout through upper margin of eye to supracleithrum, another similar stripe runs from snout through lower margin of eye to posterior end of opercle. Below this, a narrow golden stripe present. Anal and pelvic fins golden yellow. Dorsal, pectoral and caudal fins blackish golden yellow.

**Remarks.** Specimens of *Sectator ocyurus* seem to be very rare, because native fishermen told us that they have never seen them in the vicinity of Hachijo-jima. Randall (1961) and Rosenblatt et al. (1972) reported on the distribution of the genus *Sectator,* which is known from the Hawaiian and Society islands in the Central Pacific, and from Cabo San Lucas to Costa Rica, the Gulf of Chiriqui and Panama,

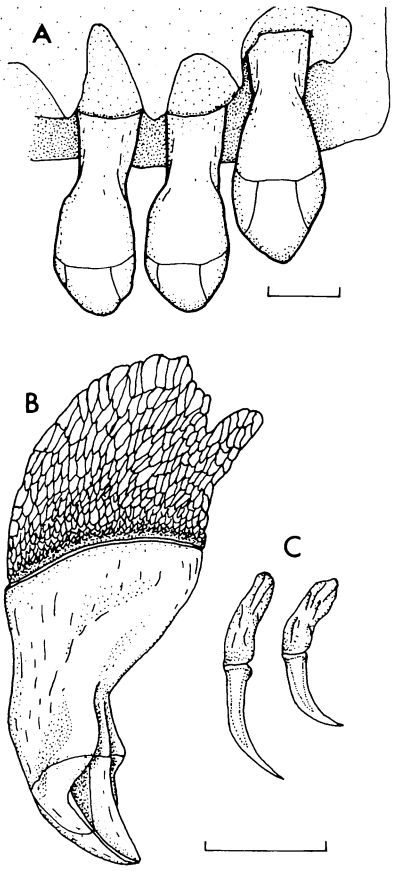


Fig. 2. Jaw teeth of *Sectator ocyurus*. A, frontal view of incisor teeth on upper jaw. B, lateral view of one incisor tooth on upper jaw. C. lateral view of small canine-like teeth on upper jaw. Scales indicate 0.5 mm.

and Isla La Plata, Ecuador, in the eastern Pacific.

Hunter and Mitchell (1968) studied the attraction of pelagic fishes to floating objects in the offshore waters of Costa Rica. They reported that juveniles of this species aggregated bencath moored objects, and 20 individuals of *S. ocyurus* (115~160 mm SL) were tagged. Half of them were reported to remain near moored objects over 32 days after the tagging. This aggregating behavior near or beneath floating algae has been observed in other kyphosid fishes, *Kyphosus cinerascens* and *K. lembus,* and *Girella punctata* belonging to the related family Girellidae, by Uchida and Shojima (1958), Hirosaki (1960), Shojima and Ueki (1964), and

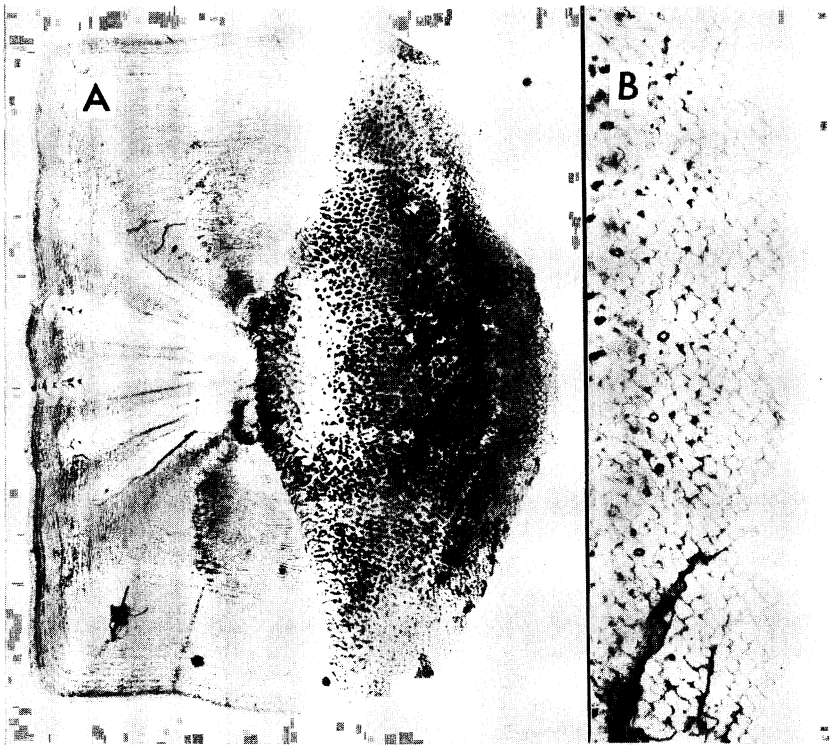


Fig. 3. *Sectator ocyurus* (Jordan et Gilbert). A, a scale on middle part of body. B, small weak ctenii at the apical area.

others. It is noteworthy that such an aggregating behavior is inherent in the juveniles of the kyphosid and the related girellid fishes.

**Acknowledgments**

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## 日本初記録のイスズミ科魚類コシナガイスズミ(新称)

藤田　清・服部　仁・堤　清樹

伊豆諸島の八丈島八重根港沖，水深 6 m の所から，1982 年 10 月 6 日に底刺網によってイスズミ科魚類の 1 種，コシナガイスズミ（新称）*Sectator ocyurus* が 1 尾採集された．

本種の主な特徴は両顎歯が門歯状で歯根を具えること，尾柄が長く，尾鰭が深く 2 叉することである．本種は主として東太平洋の南カリフォルニア沖から南方エクアドル沿岸にかけて報告されている．ハワイ諸島，ソサイエティ諸島海域にも分布するが比較的稀な魚種で，今回採集された標本は日本からの初記録である．

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