

A New Dragonet, *Callionymus draconis*, Taken from Kochi Prefecture, Japan

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Abstract A new dragonet, *Callionymus draconis*, is based on a male specimen collected from Kochi Prefecture, Japan. This species differs from other dragonets in having many processes on both inner and outer sides of the preopercular spine, a pair of bicuspid processes on the occipital region, and a supraorbital cirrus.

During investigation of callionymid fishes taken from Japanese waters, I found a species of *Callionymus* which is described here as new to science.

The specimen was caught with many individuals of *Callionymus japonicus* Houttuyn by a deep-sea trawler, off Kochi Prefecture, at a depth of about 150 meters.

Callionymus draconis sp. nov.

(New Japanese name: Tatsu-numeri)

Fig. 1

Holotype: FAKU (Department of Fisheries, Faculty of Agriculture, Kyoto University) 48882, a male, 93.8 mm in standard length, Nov. 13, 1975, taken from Mimase-market, Kochi Prefecture.

Diagnosis

This species is apparently distinguished from other species of *Callionymus* of the family Callionymidae by having 6 or 5 processes on both inner and outer sides of the preopercular spine, a pair of bicuspid processes on the occipital region, and a supraorbital cirrus.

Description

D. IV, 7; A. 8; P₁. ii+18+i; P₂. 1, 5; C. 8+ii.

Tip of snout to gill-opening 2.99 in standard length; body width 3.91; body depth 5.83; depth of caudal peduncle 17.4; predorsal 3.40; caudal fin length 1.06.

Snout length 2.51 in head length; eye

diameter 2.85; interorbital width 16.5; 1st dorsal spine 1.53; 2nd dorsal spine 1.37; 3rd dorsal spine 1.30; 4th dorsal spine 1.97; 1st dorsal ray 1.51; 2nd dorsal ray 1.47; 3rd dorsal ray 1.47; 4th dorsal ray 1.45; 5th dorsal ray 1.44; 6th dorsal ray 1.47; last dorsal ray 1.57; 1st anal ray 3.49; 5th anal ray 2.10; last anal ray 1.76; longest pectoral fin ray 1.44; pelvic fin (from base to tip) 1.15.

Body elongate and depressed. Head depressed. Snout about as long as eye. Eye large. Interorbital space narrow and somewhat concave, 5.8 in eye diameter. A thread-like cirrus on the dorsoposterior edge of eye, about 2 in eye diameter. Gill-opening oval, located behind dorsal origin. Preopercular spine straight, 4.19 in head length, with 6 or 5 processes on both inner and outer sides (Fig. 2). Upper jaw protractile, and posterior end of maxillary does not extend to anterior edge of eye. Teeth on both upper and lower jaws villiform in broad bands. Palatine and vomer toothless. Ridges of preorbital, lateral ethmoid and supra-orbital smooth. Occipital region with a pair of bicuspid processes. Anal papilla conical and elongate, 10.5 in head length. Lateral line single, reaches to the base of caudal fin ray; the line of opposite side interconnected by transverse branch across occiput, but not across the dorsal surface of caudal peduncle. Skin of body thin.

First dorsal begins above the insertion of pelvic fin. Dorsal spines not produced into filament; third one longest, extending beyond the origin of second dorsal when the fin is depressed. First and second dorsal contiguous.

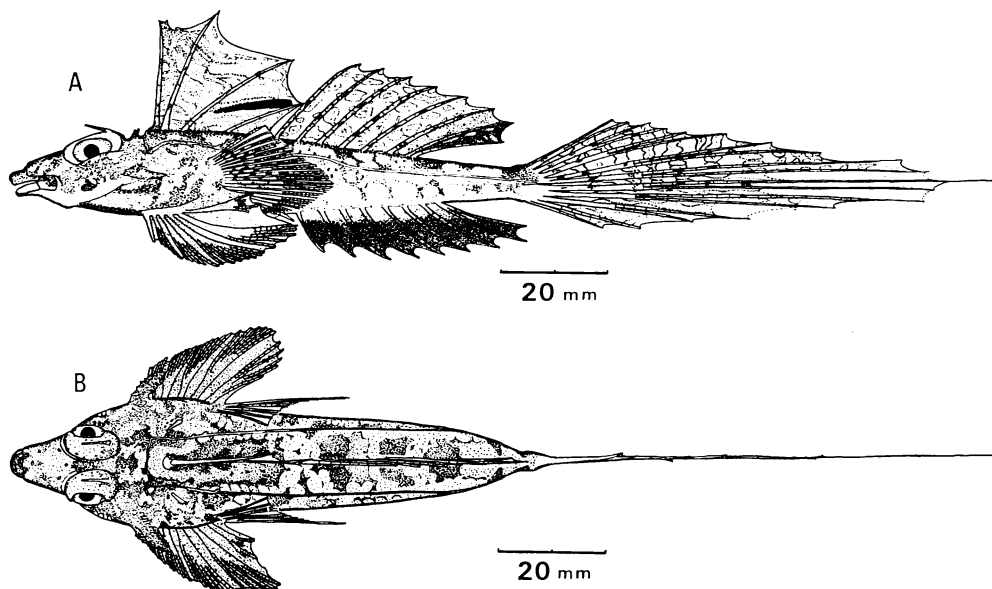


Fig. 1. Holotype of *Callionymus draconis* sp. nov. FAKU 48882, 93.8 mm in standard length, collected from Mimase-market, Kochi Prefecture, Japan. A, Lateral view; B, Dorsal view.

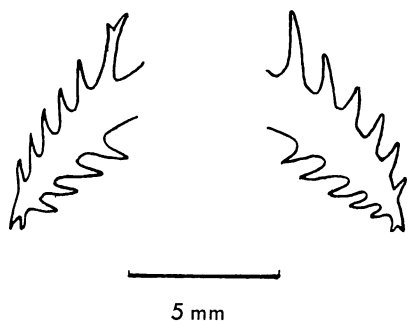


Fig. 2. Preopercular spine of holotype of *Callionymus draconis* sp. nov.

Dorsal rays unbranched except the last; tip of the last ray reaches nearly to the base of caudal when laid back, each dorsal rays almost equal in length. Anal fin begins behind a perpendicular through the origin of second dorsal. Anal rays increase in length posteriorly and the last one extends beyond base of caudal. Upper half of pectoral fin truncate, lower half slightly convex; its tip reaching to 3rd or 4th anal rays. Pelvic fin round, reaches to 2nd anal ray (right one normal, left abnormal in holotype shown in Fig. 1, B), and connected by membrane with 13th pectoral ray base. Caudal lanceolate

and elongate, about as long as the standard length.

Color in life: body dark brown, whitish below; several white circles on the lower side of the body. Surface of throat dark brown. First dorsal with several elongated yellow marks and one black bar on the middle part of the membrane between 3rd and 4th spines. Second dorsal ornated with 3 or 4 series of round yellow spots; 3 or 4 dark brown spots on each ray; membrane between last two rays blackish. Pectoral pale, with small dark brown spots on upper half. Pelvic uniformly dark brown. Anal black with pale proximal part. Caudal with yellow spots and brown cross-bars.

Color in formalin: body blackish dark brown, whitish below. Yellow spots faded.

Remarks

This new species is closely related to *Callionymus spiniceps* Regan, taken from Seychelles, Indian Ocean (Regan, 1908: 249, pl. 30, fig. 4; Smith, 1963: 555, pl. 84, L) in having many processes on both inner and outer sides of the preopercular spine and several processes on occipital region, but differs in the following features: 1) head length

2.98 in standard length (3.75 in the latter); 2) ridges of preorbital, lateral ethmoid and supraorbital smooth (serrated); 3) supraorbital cirrus present (absent in Regan's fig. 4); 4) occipital region with a pair of processes (two pairs); 5) 3rd dorsal spine longest (1st longest); 6) preopercular spine shorter than 1/2 head length (longer); 7) anal almost black (outer half black).

Etymology. The specific name "*draconis*" refers to the species having dragon-like head.

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Literature cited

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高知県より採集されたネズッポ類の1新種

中坊 徹次

高知市御豊瀬魚市場において、機船底曳網による漁獲物中からネズッポ類の新種と思われる1種を得たので、タツヌメリ (*Callionymus draconis*) としてここに記載した。

本種は、前鰓蓋骨棘の内側と外側に、それぞれ数本の突起、後頭部に左右一対の2尖頭突起、眼上後方に細長い皮弁を持つこと等により他種と容易に区別される。

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