

First Record of a Liparid Fish, *Careproctus melanurus* (Teleostei, Scorpaeniformes), from Japan

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Abstract One specimen of a liparid fish, *Careproctus melanurus*, was captured from off Miyako of Iwate Prefecture, Pacific coast of northern Honshu, Japan, during a ground fish survey conducted by the Fisheries Agency of Japan in 1995. This specimen represents the first record of this species from Japan. *C. melanurus* is distinguished from the other species of *Careproctus* by having the following characters: slightly notched pectoral fin; rays of lower lobe of pectoral fin almost free from fin membrane; snout not projecting; dorsal fin rays 53–61; anal fin rays 47–55; pectoral fin rays 27–33; disk oval, shorter than eye diameter, longer than wide; peritoneum black. Intraspecific variation found in meristic characters is discussed.

Key words: Teleostei, Liparidae, *Careproctus melanurus*, new distribution record, Japan.

A liparid fish, *Careproctus melanurus*, was captured from off Miyako, Iwate Prefecture, the Pacific coast of Honshu, Japan during a ground fish survey conducted by the Fisheries Agency of Japan in 1995. This species was known from off Pacific coast of Canada and U.S.A. (Stein, 1978), and the Bering Sea (Quast & Hall, 1972; Fedorov, 1973; Eschmeyer *et al.*, 1983). The new specimen provides the first record of the species from Japan.

The specimen examined here is deposited in the Department of Zoology, National Science Museum, Tokyo (NSMT-P), and comparative specimens in the Laboratory of Marine Zoology, Hokkaido University (HUMZ). Counts and measurements follow Stein (1978). Standard length (SL) and head length (HL) are used throughout.

Careproctus melanurus Gilbert, 1892

[New Japanese name: Higashi-konnyaku-uo]

(Fig. 1)

Careproctus melanurus Gilbert, 1892: 560; Gilbert, 1896: 469; Gilbert, 1915: 354; Townsend & Nichols, 1925: 15, pl. 3, fig. 1; Burke, 1930: 125, fig. 45; Barnhart, 1936: 72, fig. 226; Clemens & Wilby, 1949: 304, fig. 226; Forrester & Wilson, 1963: 1095, fig. 1; Fitch & Lavenberg, 1968:

121, fig. 66.; Quast & Hall, 1972: 28; Miller & Lea, 1972: 138, fig.; Hart, 1973: 574, fig.; Vogt, 1973: 23; Fedorov, 1973: 25; Stein, 1978: 15; Eschmeyer *et al.*, 1983: 191, pl. 20; Allen & Smith, 1988: 66, fig.

Material examined. NSMT-P 48987, female, 149 mm SL, from 39°24.79'N, 142°18.96'E to 39°29.34'N, 142°20.49'E (off Miyako, Iwate Prefecture, Pacific coast of Honshu, Japan), 633–643 m, 27 Oct. 1995.

Diagnosis. A *Careproctus* with slightly notched pectoral fin; rays of lower lobe of pectoral fin almost free from fin membrane; snout not projecting; dorsal fin rays 53–61; anal fin rays 47–55; pectoral fin rays 27–33; disk oval, shorter than eye diameter, longer than wide; peritoneum black.

Description. Counts: Dorsal fin rays 61, anal fin rays 55, pectoral fin rays 29; caudal fin rays 10; vertebrae 10+57=67; pyloric caeca 36.

Morphometry (% SL): Head length 24.6; body depth 15.2; snout length 8.3; eye diameter 5.6; upper jaw length 12.1; lower jaw length 11.0; length of upper lobe of pectoral fin 19.8; gill opening length 9.3; snout to disk length 15.7; snout to anus length 15.7; disk to anus length 3.4; disk length 4.0; disk width 2.3.

Body gently tapering and attenuating, but caudal region stout. Almost all skin torn off.

Head stout, broad. Interorbital space broad and flattened. Snout blunt, not projecting at all. Eye moderately large, its diameter 4.4 in HL, larger than disk length. Nostril short, but conspicuously tubular above middle of eye. Mouth broad, horizontal. Maxillary extending below middle of eye. Teeth minute, forming moderately wide bands in both jaws. Inner teeth trilobed, outer teeth simple. Gill opening broad, entirely above base of pectoral fin and extending below level of posterior corner of maxillary, its length 2.6 in HL. Opercular flap supported by two spines angled ventrally. Tip of upper spine even with posterior corner of maxillary.

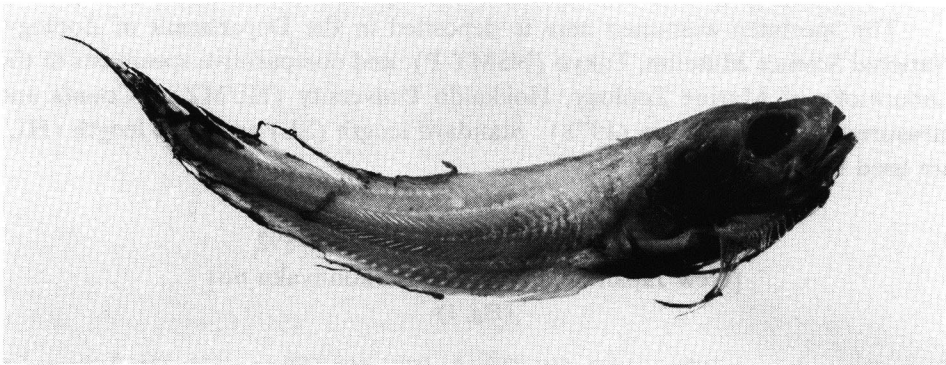


Fig. 1. *Careproctus melanurus*, NSMT-P 48987, 149 mm SL, from off Miyako, Iwate Prefecture, Japan. Lateral view of right side because of poor condition on left side.

Base of pectoral fin sharply angled anteroventrally. Level of uppermost pectoral fin ray below posterior corner of maxillary. Upper lobe of pectoral fin extending behind origin of anal fin. Lower lobe of pectoral fin extending below tip of opercular flap when depressed. Rays of lower lobe of pectoral fin not counted because of its poor condition, but at least anterior 4 rays completely free from fin membrane. Symphysis of pectoral fin located under chin and below anterior margin of orbit. Origin of dorsal fin above uppermost point of gill opening. Origin of anal fin below 7th dorsal fin ray.

Disk oval and cupped, its width less than the length, its margin thick and fleshy. Anus immediately behind disk, located below posterior margin of orbit.

Stomach and pyloric caeca located on left side of body cavity. Stomach moderately large. Pyloric caeca very long, slender.

Caudal, posterior portions of dorsal and anal fins black. Extant skin on head and body pink. Oral and branchial cavities and peritoneum black. Stomach and pyloric caeca pale.

Distribution. Known from off Pacific coast of Canada and U.S.A., Bering Sea and off Pacific coast of Honshu from depths of 89–2,286 m.

Remarks. The present specimen agrees well with previous descriptions of *C. melanurus* (Gilbert, 1892; Burke, 1930; Stein, 1978). The prominent differences are its higher counts of dorsal and anal fin rays and vertebrae (61, 55 and 67). According to Stein (1978), the specimens captured from California to British Columbia have 53–57 dorsal fin rays, 47–51 anal fin rays and 57–63 vertebrae. But HUMZ specimens used as comparative material here have 57–60 dorsal fin rays, 49–55 anal fin rays and 60–66 vertebrae, and they were captured from Oregon to the Aleutian Islands. Therefore, all difference between the present specimen and Stein's specimens are due to intraspecific variation in *C. melanurus*, and their known meristic ranges are extended to 53–61 dorsal fin rays, 47–55 anal fin rays and 57–67 vertebrae.

Comparative material. HUMZ 34423, male, 267 mm SL, 55°55'N, 135°25'W (southeastern Alaska), 470–510 m, 6 June 1969; HUMZ 67238, male, 147 mm SL, 55°11'N, 156°14'W (Gulf of Alaska), 545–560 m, 14 June 1977; HUMZ 68500, female, 346 mm SL, 50°58'N, 171°00'E (Aleutian Islands), 560–580 m, 25 June 1977; HUMZ 82669, male, 342 mm SL, 55°59.85'N, 170°19.35'W (Bering Sea), 708–780 m, 7 July 1979; HUMZ 88552, female, 350 mm SL, 51°44.23'N, 175°5.68'W (Aleutian Islands), 535–543 m, 1 Aug. 1980; HUMZ 94278, male, 222 mm SL, (Coos Bay, Oregon), depth & date unknown.

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