Studies on the Deep-Sea Fishes of Japan.⁽¹⁾

IX. Description of a New Gadid Fish.

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A peculiar specimen of a gadid fish with the lower jaw projecting beyond the upper was obtained in March of 1938 off Kinkazan, east to Ozika Peninsula, Miyagi Prefecture, and was found to represent a new species which I propose to call *Laemonema morosum*, n. sp.

I wish to return herewith my hearty thanks to Professor A. TERAÔ for his kind supervision during the course of my study.

Laemonema morosum sp. nov.

New Japanese name: *Itohiki-dara*.

D. 6-52; A. 50; P. 15; V. 2; C. 22 including rudiments; branchiostegal rays 6; scales 9 rows between origin of first dorsal and lateral line; gill-rakers on first arch 7+19, slender and bluntly pointed, the longest one 1.17 in eye and 1.57 in orbit.

Head 4.68 in body length, measured to lower caudal base; depth 6.58; distance of first dorsal from tip of snout 4.00; base of second dorsal 1.50; same of anal 1.60; ventral 3.05. Eye 6.93 in head; orbit 5.16; snout 3.57; maxillary 2.28; interorbital space 3.53; width of preorbital 14.26; postorbital part of head 1.89; distance between root of ventral and origin of anal 1.15; length of caudal peduncle 9.70; depth of the same 11.83; longest ray (second one) of first dorsal 3.00; longest ray of second dorsal 2.54 anteriorly and 1.95 posteriorly; same of anal 2.49 and 2.04; caudal 1.16; pectoral 1.18.

Body elongate, compressed, deepest at the insertion of the second dorsal, thence the body gradually tapering into slender caudal peduncle which is somewhat lower than half diameter of orbit and 1.22 times in its own length, measured from base of last anal ray. Head compressed, with rather straight profile, longer than the distance between root of ventral and origin of anal. Snout rather long, bluntly pointed, about as long as the width of interorbital space which is very wide and slightly convex. Eye rather small, somewhat longer than half the length of snout. Nostrils two, large and close together, without fleshy flap, much nearer to eye than to tip of snout. Maxillary extending below middle of eye. Mouth moderately large, slightly oblique, lower jaw somewhat projecting beyond the upper when mouth is closed. Barbel entirely absent on chin. Teeth in jaws villiform, set in a single row in lower jaw and in front part of the upper, somewhat larger than the lateral teeth of the upper jaw in which they are arranged in rather broad band, becoming gradually narrower anteriorly; premaxillary with a wide toothless space at front; vomer with a single row of several teeth on its anterior head and a single small but pungent one on its either lateral head; no teeth on palatine; tongue smooth, pointed, and free anteriorly. Edge of preopercle is entirely hidden under the skin; opercle ending in a flat spine which is covered by the skin. Gill-openings very wide, continued forward below, the membranes united, narrowly jointed to the isthmus; gills 4, a slit behind the last arch, slightly shorter than diameter of eye.

(1) Contributions from the Zoological Laboratory, Imperial Fisheries Institute, No. 78.

Dorsals close together, but entirely separated, the first of which is inserted posteriorly to the pectoral, none of the rays filamentous; anal beginning under fourth ray of second dorsal; second dorsal and anal not emarginated; vent directly in front of anal; caudal rounded posteriorly; pectoral long, about as long as the length of head exclusive of the snout before anterior nostril, extending posteriorly to below eighth ray of second dorsal; ventral exceedingly long and filamentous, each ray nearly free to the base, reaching posteriorly to base of fifteenth ray of second dorsal and also to that of eleventh anal ray.

Scales of body very thin and deciduous; base of dorsal and anal covered with small scales; other fins naked; lateral line well defined, concurrent with the back of body.

Color in life light brown, lips and underside of head dark brown. Dorsals, anal and caudal blackish brown except basal parts of them; other fins somewhat paler. Peritoneum dark gray

Fig. 1. *Laemonema morosum*, n. sp.

Described and figured from a male specimen, Imp. Fish. Inst. Fish. Sp. No. 5723, measuring 512 mm long (body length 454 mm).

Differs principally from *Laemonema yarrelli* (Lowe), *L. brasiliense* (KAUP), *L. robustum* GÜNTHER, *L. barbatulum* GOODE et BEAN, *L. melanurum* G. et B., and *L. rhodochir* GILBERT in having the lower jaw projecting beyond the upper one and in lacking the barbel on chin. Resembles *L. globiceps* GILCHRIST in lacking the barbel on chin, but differs from it in having the vomerine teeth, much slenderer body, fewer gill-rakers on first gill-arch, longer snout, much elongated ventrals and much shorter first ray of the anterior dorsal.