

A Record of *Ariomma lurida* JORDAN et SNYDER from
Japan, with Notes on its Systematic Position

Masao KATAYAMA
(Yamaguchi University)

In 1904 JORDAN and SNYDER described *Ariomma lurida* as a new genus and new species and placed it under the family Apogonidae on the basis of two rather damaged specimens taken from Honolulu, Hawaiian Islands, and since then nothing has been added to our knowledge of it.

In my trip for collection of fishes to Kochi-ken on November 30, 1950, I was fortunate enough to find a peculiar fish at Koch fish market in the catch of deep-sea motor trawler. Upon careful examination this fish was found to be identical with *Ariomma lurida* and to be placed in Nomeidae.

As the original description of the present rare species was made rather briefly, here it is necessary to give a full description in order to supplement it.

In the present paper, the standard length means from the tip of the snout to the lower base of caudal fin; the length of head, from the tip of the snout to the extreme posterior margin of opercular flap; the depth of the body, the vertical depth of the highest part; the interorbital space, the shortest distance between the upper margins of the eyes.

I wish to return herewith my gratitude to Prof. Kiyomatsu MATSUBARA for his kindness extended to me in various ways My hearty thanks are also due to Prof. Tosiji KAMOHARA and Mr. Tamotsu IWAI, for their kind assistance rendered.

Ariomma lurida JORDAN et SNYDER

Ariomma lurida JORDAN and SNYDER, 1904, p. 942, Honolulu (original description). — JORDAN and EVERMANN, 1905, p. 217, pl. 37 (after JORDAN and SNYDER).

Material examined. — KATAYAMA'S Fish Coll. No. 635, 133 mm. in standard length, off Kochi, November 30, 1950 (the scales are mostly lost off and the fins broken).

Description: D. XI, 16; A. II, 15; P. 21; V. I, 5; scales in lateral line about 61; branchiostegals 5; gill-rakers on first arch 10+19; vertebrae 15+16=31; pyloric coeca 8.

Head 2.77 in standard length; width at upper pectoral base 6.04; depth at dorsal origin 3.69; distance from origin of ventral to that of anal 2.88; distance from tip of snout to first dorsal origin 2.44, to second dorsal origin 1.58, to upper pectoral base 2.71, to ventral base 2.46, to anal origin 1.58, and to vent 1.41; base of first dorsal 4.58; base of second dorsal 3.24; base of anal 4.29. Snout 4 in head; orbit 3.09; maxillary 4.17; interorbital space 3; posterior part of head 2.53; depth of caudal peduncle 6; length of the same 6.4; longest pectoral ray 1.5; longest gill-raker 12; longest gill-lamella 9.05.

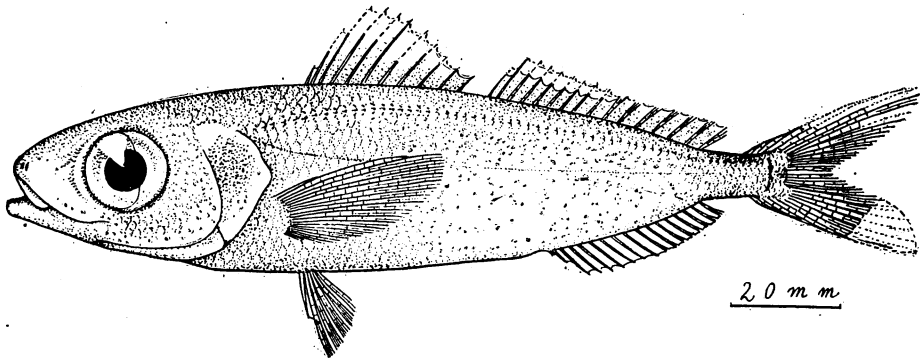


Fig. 1, *Ariomma lurida* JORDAN et SNYDER, 133 mm. standard length; in lateral view.

Body oblong and compressed, caudal peduncle slender and cylindrical. Snout rather truncate anteriorly, shorter than orbit. Interorbital space slightly convex, as wide as diameter of orbit. Eye extremely large, with thin, transparent adipose lids, the posterior one extends to posterior edge of pupil, the anterior scarcely developed. Nostrils located near tip of snout and close together. Mouth rather small; lower jaw projecting a little beyond the upper; premaxillaries not protractile; maxillary slipping under the adipose preorbital, without supplemental bone and not reaching eye, its posterior margin roundish. Lower jaw with high dentary bone becoming abruptly very low anteriorly. Jaws each with a single row of slender, minute and comb-like teeth, but no teeth on vomer and palatines. Tongue thin, large and concave, with minute and slender teeth posteriorly.

Gill opening very large, the membranes connected below, free from the isthmus. Gill-rakers rather long and slender, with minute and slender spinules (Fig. 2, D. E.); pseudobranchiae large. Preopercle entire; opercle unarmed.

Scales cycloid, very deciduous. Lateral line high, concurrent with back.

Origin of first dorsal vertical above the base of ventral fin; base of first dorsal a little shorter than two-thirds of the length of head; the spines feeble and damaged, so the longest one is not determined; the sixth spine 3 in head; base of second dorsal rather low and a little shorter than head; all the rays feeble. Anal fin low, inserted below sixth soft dorsal ray; the first spine very short. Caudal fin deeply forked, fin rays feeble. Pectoral fin low, beginning just below the posterior end of opercle and extending below the posterior extremity of base of first dorsal. Ventral small, inserted a little behind the base of pectoral, the fin-rays also feeble, fitted into shallow hollow on the belly.

Oesophagus large, with many papillae bearing minute and slender teeth, longest papilla 2.5 mm.; stomach large, Y-shaped; intestine long, convoluted; pyloric coeca few, rather long, the longest one 2.4 in head. Vent opening just in front of anal insertion (Fig. 2; A. B. C.). Air bladder simple.

Coloration: General color of body and head in formalin uniformly light grayish brown; pharynx and gill cavity black; dorsal dusky; anal, pectoral and ventral pale.

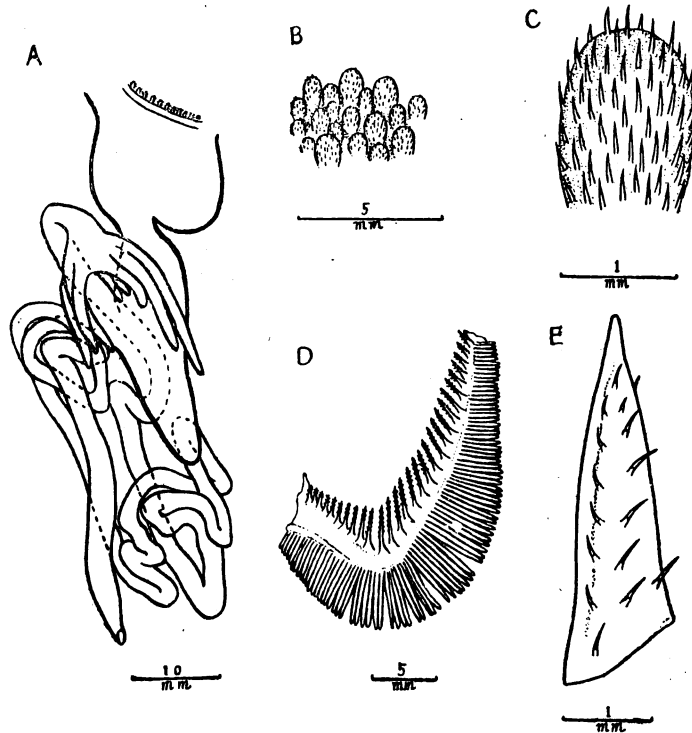


Fig. 2 Alimentary canal and gill-raker of *Ariomma lurida*. A, Right side of alimentary canal. B, Inner surface of oesophagus, with many papillae. C, Papilla of oesophagus, with many, minute, and slender teeth. D, Outer side of first gill-arch on right side of body. E, Gill-raker on upper arm of first gill-arch.

Remarks: The specimen at my disposal differs from the holotype in the following points:

Items	Holotype	Present specimen
Snout into head	3.3	4.0
Interorbital space into head	4.0	3.0
Depth of caudal peduncle into head	7.0	6.0
Dorsal rays	X, 17	XI, 16
Anal rays	15	II, 15
Pectoral rays	20	21
Gill-rakers on first arch	9+19=28	10+19=29

Ariomma JORDAN et SNYDER is closely related to *Icticus* JORDAN et THOMPSON, but differs from it in having the adipose eye-lids, no teeth on vomer and palatines, and smaller number of dorsal and anal rays. This genus also differs from *Cubiceps* LOWE in having the adipose eye-lids and no teeth on palatines.

It is worthy of special mention that this fish should be placed in the family Nomeidae (this family occasionally has been included in the larger family Stromateidae) rather than the family Apogonidae at least in having the following characters.

Oesophagus large, with many papillae bearing minute and slender teeth; body oblong, covered with small cycloid scales; caudal peduncle slender; opercle unarmed; upper jaw scarcely protractile; soft dorsal and anal elongate.

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