Japanese Journal of Ichthyology
Vol. 37, No. 2 1990

魚類学雑誌
37巻2号 1990年

First Record of the Blenniid Fish *Laiphognathus multimaculatus* from Japan

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During the course of our study on the shorefish fauna of the Uwa Sea, Ehime Prefecture, southern Japan, we obtained a specimen of the blenniid fish, *Laiphognathus multimaculatus* Smith 1955, which is the first record of the species from Japan. The monotypic genus *Laiphognathus* is distinguished from the other members of Omobranchini by the following characters: cirri present on rims of anterior and posterior nostrils; circumorbital pores 9 to 12 (usually 10); one or more supratemporal canal pores on occiput just anterior to median supratemporal pore (Springer, 1985). Our specimen agrees well with these diagnostic characters of the genus and generally fits with the original descrpition of *L. multimaculatus*. This species was hitherto known from tropical seas of the Indian and Pacific Oceans, from the east coast of Africa to New Guinea and the Solomon Islands, northerly to the Gulf of Thailand, and southerly to Inhaca (Springer, 1972, 1981, 1982, 1986). The present specimen represented a significant northern range extension of this species. Though most species of Omobranchini are usually taken at depths under 3 m, and often much shallower, *L. multimaculatus* is reported from reefs and tide pools at depths under 8 m (Springer, 1981). The present specimen was collected from an empty feather-duster wormtube on rocky substratum at a depth of about 8 m. In this paper, we give a detailed meristic and morphometric data on the Japanese specimen with notes on its elongated dorsal fin spines.

Methods follow Springer and Gomon (1975) (counts of cephalic sensory pores), and Hubbs and Lagler (1958) (proportional measurements). Vertebrae were counted from radiographs. The specimen is deposited in the National Science Museum, Tokyo (NSMT).

Laiphognathus multimaculatus Smith, 1955
(New Japanese name: Madara-ginpo)
(Fig. 1)

Material examined. NSMT-P 30662, male, 35.5 mm SL, Morode Bay (33°00′ N, 132°30′ E), Uwa Sea, Ehime Pref., southern Japan, 8 m in depth, 13 July, 1987.

Description. Meristic counts and proportional measurements are given in Table 1. Body elongate, compressed; head small, without crests (Fig. 1). Three equal-sized filamentous cirri on anterior nostril; 2 cirri on posterior nostril, inner filament longest. Mouth small; maxillary reaching below iris. A single row of 22 incisiform teeth in both jaws. A large canine tooth posteriorly on each side of both jaws. A thin, small, smooth-margined flap present at corner of mouth. Counts of cephalic sensory pores: 9 in circumorbital, 3 in mandibular, 15 in supratemporal-preoperculo-mandibular, 3 in interorbital series. Lateral line reaching below base of 6th dorsal spine; lateral line tubes 5.

All fin rays simple. Dorsal fin base about 3/4 SL. First dorsal fin spine shortest; 7th and 8th spines elongate, 7th spine about twice length of 6th spine and slightly longer than 8th spine. Pectoral fin round. Anal fin originating from a point below 10th or 11th dorsal fin spine, rays becoming longer posteriorly. Caudal fin round, free from dorsal and anal fins.

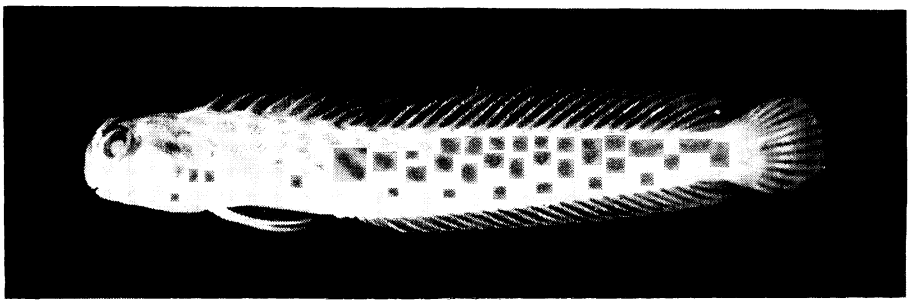

Fig. 1. *Laiphognathus multimaculatus*, NSMT-P 30662, male, 35.5 mm SL, from Morode Bay, Uwa Sea, Ehime Pref., southern Japan.

Color in life: Head and body pale-yellow with many dusky golden spots. Abdomen pinkish. Longer cirrus on posterior nostril yellow mottled with black. Spinous dorsal fin with a narrow longitudinal black band; distal half of soft dorsal fin speckled with black. Anal fin and margin of caudal fin dusky. Pectoral and pelvic fin membranes transparent.

Color in alcohol: Head and body whitish with dark spots. Black markings or tinge clearly remained on longer dermal cirrus of posterior nostril and on fin membranes.

Remarks. The present specimen differs from the original description in having elongate 7th and 8th dorsal fin spines and in the number of cirri on the anterior nostril rim (two vs. three cirri in the original description). However, Springer (1972) reported that the number of cirri on the rims of each anterior and posterior nostril varies from one to three: the Ceylonese specimens have three cirri on each nostril, whereas in the specimens from other localities there are two cirri on the rims of each anterior and posterior nostril, with one and three cirri as rare variants. He also noted that fin ray and vertebral counts of specimens from the various localities indicate a somewhat clinal shift both in an easterly and westerly direction from the Gulf of Thailand. The present specimen agrees with those from Tanzania, Mozambique, Borneo and the Solomon Islands, but differs from Ceylonese and Thai specimens in the counts of total dorsal fin elements, total anal fin elements, caudal vertebrae and total vertebrae.

According to Springer (1972), secondary sexual dimorphism is exhibited in this species by a relative increase in the length of the nasal cirri of males. The inner cirrus of the posterior nostril in our specimen is long, reaching up to the posterior margin of the orbit. Springer and Gomon (1975) reported that the species of Omobranchini exhibit different types of sexual dimorphism, and that males of *Omobranchus autosplendidus* are distinguished from females in having most of the dorsal fin spines prolonged into

Table 1. Counts and proportional measurements of *Laiphognathus multimaculatus*.

	Present study	Smith (1955)	Springer (1972)
SL (mm)	35.5	35–45	13.9–39.4
Counts			
Dorsal fin elements	32 (XI, 21)	31–32	29–33 (X–XII, 19–21)
Anal fin elements	24 (II, 22)	22	21–25 (II, 19–23)
Pectoral fin rays	13	13	12–14
Caudal fin rays	13	12	
Vertebrae	10+28=38		10+25–29=35–39
Proportional measurements (in % of SL)			
Head length	19.8	20	
Body depth	14.2	15	
Orbit diameter	5.7	4.2	
Interorbital width	2.8	ca. 0.8	
Snout length	4.2	5	
Gill opening length	2.8	2.3	
Dorsal fin base	75.9	76	
Anal fin base	52.7	50	
First dorsal fin spine	5.0	5	
Seventh dorsal fin spine	19.3	9.5	
Last dorsal fin spine	8.5	8.5	
Second anal fin spine	2.3	1.8	
Last anal fin ray	7.4	6	
Pectoral fin length	20.1	17.5	
Pelvic fin length	19.8	17.5	
Caudal fin length	13.6	12	
Predorsal length	21.0	18	
Preanal length	41.1	44	

filaments. Although elongation of the dorsal fin spines of *L. multimaculatus* has not been previously reported, we regard it to be a secondary sexual characteristic of males of the species.

Acknowledgments

We thank the following persons for their assistance during the course of this study: A. Iwata, K. Omori, T. Shimizu, Y. Suzawa, T. Yamakawa and Y. Yanagisawa. This work is partly supported by Takara Harmonist Fund, Takara Shuzo.

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(Received September 14, 1989; accepted January 29, 1990)

日本初記録のイソギンポ科のマダラギンポ（新称）

平松　亘・町田吉彦

愛媛県南宇和郡御荘町の室手湾で，イソギンポ科のマダラギンポ（新称）*Laiphognathus multimaculatus* を採集した．標本（雄1個体，標準体長 35.5 mm）は，水深約 8 m の転石上のカンザシゴカイ類の空の棲管から得られた．*Laiphognathus*（マダラギンポ属：新称）は本種のみを含み，近縁の属とは前・後鼻孔にそれぞれ皮弁が発達すること，頭部の感覚孔数が多いことで容易に区別される．本標本の第7および第8背鰭棘は明らかに伸長しているが，これは本種に関しては未報告の雄の二次性徴と考えられる．新称は本種の体側の特徴的な斑紋に由来する．本種はこれまでインド洋と太平洋の熱帯域からのみ報告されているにすぎず，本報告でより北方に分布することが確認された．

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