First specimen-based record of *Bodianus leucosticticus* (Perciformes: Labridae) from the Amami Islands, Japan

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■ Abstract

A single specimen (148.5 mm standard length) of *Bodianus leucosticticus* (Bennett, 1832), previously known from the Mascarene Islands, Indonesia, Taiwan and Japan, was collected from Amami-oshima island, Amami Islands in the middle of the Ryukyu Archipelago, Japan. In Japanese waters, the species has been recorded only from the Izu Islands, the Pacific coast of Japanese mainland from Izu Peninsula to Kochi, the Osumi Islands, and the Okinawa Islands. Thus, the specimen, described here in detail, represents the first specimen-based record of *B. leucosticticus* from the Amami Islands.

■ Introduction

The wrasse genus *Bodianus*, occurring in the Atlantic, Indian and Pacific oceans, is currently known to comprise 46 valid species (Baranes et al., 2016; Parenti and Randall, 2018). During ichthyofaunal surveys of Kagoshima Prefecture, southern Japan, a single specimen of *Bodianus leucosticticus* (Bennett, 1832), originally described from Mauritius and currently recorded from the southwestern Indian and western Pacific oceans (Allen and Erdmann, 2012; Shimada, 2013; Nakae et al., 2018), was caught from Amami-oshima island in the Amami Islands, Kagoshima Prefecture. The Amami-oshima specimen, described here in detail, represents the first specimen-based record of *B. leucosticticus* from the Amami Islands.

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■ Materials and Methods

Counts and measurements followed Gomon (1997, 2006). Standard and total lengths are expressed as SL and TL respectively. All measurements were made by using digital caliper to the nearest 0.1 mm. Curatorial procedures followed Motomura and Ishikawa (2013). Specimens of *B. leucosticticus* examined in this study are deposited at the Kagoshima University Museum, Japan (KAUM).

■ Results and Discussion

Bodianus leucosticticus (Bennett, 1832)
Japanese name: Sujikitsune-bera (Fig. 1)

Material examined: KAUM–I 130891, 148.5 mm SL, 170.1 mm TL, off Amami-oshima island, 13 June 2019, landed at Naze Fishing Port, coll. by T. Maekawa.

Description: Meristics and morphometrics (as % SL) of the Amami-oshima specimen are as follows: dorsal-fin rays XII, 10; anal-fin rays III, 12; pelvic-fin rays I, 5; pectoral-fin rays 16; pored lateral-line scales 29; scale rows above lateral line 4½; scale rows below lateral line 13; pre-dorsal scale rows 27; total gill rakers 18; body depth 37.8; head length 33.0; snout length 9.6; interorbital width 18.4; dorsal-fin base length 47.5; anal-fin base length 23.1; orbit diameter 7.5; pectoral-fin length 22.5; pectoral-fin base length 6.9; pelvic-fin length 17.6; first dorsal-fin spine length 6.8; second dorsal-fin spine length 7.5; last dorsal-fin spine length 15.4; first anal-fin spine length 6.7; third anal-fin spine length 14.1; longest dorsal-fin soft ray length 17.7; longest anal-fin soft ray length 15.8; shortest dorsal-fin soft ray length 9.7; shortest anal-fin soft ray length 9.2; uppermost caudal-fin ray length 25.5; medial caudal-fin ray length 21.6; lowermost caudal-fin ray length 20.9; caudal-peduncle length 16.7; caudal-peduncle depth 16.5.

Body slightly compressed and moderately elongated;

Fig. 1. Color photograph of fresh specimen of *Bodianus leucosticticus* from Amami-oshima island, Amami Islands, Japan (KAUM–I. 130891, 148.5 mm SL).

deepest at the origin of the dorsal fin. Mouth extremely protrusive with prominent lips; snout sharply pointed; tongue short. Upper jaw with first prominent anterior canine about equal to second; first canine directed anteroventrally; second canine directed anteroventrally, slightly laterally and recurved posteroventrally; as many as 19 small teeth posterior to prominent anterior canines, best developed posteriorly; single prominent canine at posterior end of jaw directed anteroventrally, though somewhat stronger anteriorly. Lower jaw with first prominent anterior canine about half size of second; first canine directed anterodorsally; second directed anterodorsally, slightly laterally and recurved dorsally; dental ridge prominent on anterior half of jaw with irregular somewhat humped dorsal outline; up to 13 moderately small teeth posteriorly on ridge. Pectoral fin broad, paddle-like structure; caudal fin truncate without filamentous ray. Lateral line smoothly curved and uninterrupted; lateral line extending from posterior tip of opercle to caudal-fin base. Cycloid scales covered head and body, except snout and jaws; head scales smaller than body ones. Dorsal and anal fins with scaly basal sheath of ½ to 4 scale high; caudal-fin base with 3 scale high. Pre-dorsal-fin scales reaching forward to above anterior nostril on dorsal midline of head.

Color when fresh (Fig. 1) — Body dull yellow with five moderately narrow reddish orange and black stripes (each stripe basically reddish orange with black core, except ventral-most stripe); first stripe extending from just below third dorsal-fin spine base to caudal-peduncle; second to fourth stripes extending from posterior edge of orbit to caudal-fin base; fifth stripe extending from just behind pectoral-fin base to caudal-fin base; three rows of black spots between reddish orange stripes, first row between second and third stripes, second and third rows between third and fourth stripes; two pairs of yellow stripes between reddish orange stripes, first pair between third and fourth stripes, second pair between fourth and fifth stripes; random white small blotches on below base of fifth dorsal-fin spine to fourth dorsal-fin soft ray. Upper portion of head including jaw red; lower jaw to thorax white. Dorsal fin mainly red with white membrane between fifth spine to last soft ray; black spot on membrane of fourth to fifth dorsal-fin spines. Dorsal-fin sheath red. Anal fin pale-yellow, grading to white by heading to edge. Anal-fin sheath pale yellow. Pectoral fin light red; single prominent rounded black blotch with white margin on base; single small black separated spot on base of uppermost ray. Pelvic fin transparent to pale yellow. Caudal-fin ray red; caudal-fin membrane white.

Color of preserved specimen — Body, head and all fins basely white. Segmented black spots on the body and black blotches on fins and bases still distinct. Pelvic fin transparent. Dorsal and anal fin sheath brown.

Distribution: Probably widely distributed in the Indo-West Pacific, but recorded only from the Mascarene Islands (Mauritius and Réunion), Indonesia (Bali and Banda), Taiwan and Japan (Gomon, 2006; Allen and Erdmann, 2012). In Japanese waters, *B.*

leucosticticus has been recorded from the Izu Islands, Izu Peninsula (Futo), Wakayama (Shirahama) and Kochi (Kashiwa-jima island) prefectures, the Okinawa Islands (Shimada, 2013), the Osumi Islands (Iwo-jima and Take-shima islands) (Katayama, 2013), and the Amami Islands (Amami-oshima island) (Nakae et al., 2018; this study).

Remarks: The Amami-oshima specimen was clearly assignable to the genus *Bodianus* in having dorsal-fin rays XII, 10, mouth large with two pairs of prominent canines at the front of each jaw, lateral line complete, these being diagnostic of the genus as defined by Gomon (2006). Moreover, it agreed well with the diagnosis of *B. leucosticticus* given by Gomon (2006) in having the following features: anal-fin rays III, 12; pored lateral-line scales 29; scale rows above lateral line 4½; scales on dorsal midline of head reaching in advance of above anterior extent of orbit; caudal fin truncate without filamentous rays; five moderately narrow reddish orange and black stripes; and random white small blotches on below bases of fifth dorsal-fin spine to fourth dorsal-fin soft ray.

In the Ryukyu Archipelago, *B. leucosticticus* has been recorded only from the Osumi and Okinawa islands in the northern and southern archipelago, respectively, on the basis of voucher specimens (Shimada, 2013; Katayama, 2013; this study). In the Amami Islands (middle of the Ryukyu Archipelago), this species was recorded by Fujiyama (2004) from Amami-oshima island on the basis of an photograph (photographed individual not retained). In their checklist of fishes of Amami-oshima island, Nakae et al. (2018) referred to Fujiwara (2004) and did not provide any other additional records or specimens. Accordingly, the present specimen represents the first specimen-based record of the species from the Amami Islands.

Comparative material examined. *Bodianus leucosticticus* — 3 specimens from Kagoshima Prefecture: KAUM–I. 29781, 16.9 mm SL, off south coast of Ombosaki, Take-shima island, Osumi Islands, 30°48′32″N, 130°24′33″E, 5–20 m depth, 27 May 2010; KAUM–I. 37907, 90.0 mm SL, off south coast of Iow-jima island, Osumi Islands, 30°46′32″N, 130°16′43″E, 65 m depth, 17 May 2011; KAUM–I. 37930, 143.3 mm SL, off south coast of Iow-jima island, Osumi Islands, 30°46′32″N, 130°16′43″E, 10–30 m depth, 18 May 2011.

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