

## ゴマフエダイの岩手県からの初記録

後藤 友明

### **A Record of Mangrove Red Snapper, *Lutjanus argentimaculatus*, from Iwate Prefecture, Northern Honshu, Japan**

Tomoaki Goto

#### **Abstract**

A 525mm SL lutjanid fish collected by a set-net off Taro-area, Miyako, Iwate Prefecture, was described in detail. This specimen was identified as *Lutjanus argentimaculatus* by having dorsal fin covered with scales at the proximal region; long snout nearly straight dorsal profile; scales above lateral line nearly parallel to lateral line; narrow suborbital width; body color reddish without conspicuous blotch nor lines. The species is distributed in the subtropical waters of Indo-Pacific and has been recorded only from Hyogo Prefecture and Kochi Prefecture and southern waters in Japan. Therefore, the present record is judged as the first record from northern Japan including Iwate Prefecture.

Key words ; *Lutjanus argentimaculatus*; Iwate Prefecture; first record

The snapper genus *Lutjanus* is the largest genus among the family Lutjanidae and about twenty species have been recorded from Japanese waters.<sup>1,2)</sup> In Japan, all species included in this genus are distributed in the coastal waters of southern Japan from the central Honshu to Ryukyu Islands, but there have been no records from northern Japan.<sup>1,2)</sup>

In October 2005, an adult lutjanid snapper, *Lutjanus argentimaculatus*, was collected from off Iwate Prefecture and brought to Iwate Fisheries Technology Center. The species is widely distributed from mangrove estuaries to deeper reef areas in the subtropical waters of Indo-West Pacific ranging 16 - 30°C; 32° N - 24° S; 40° E - 180° E.<sup>3)</sup> In Japan, the species has been recorded only from the southern Japan from Hyogo Prefecture and Kochi Prefecture to Ryukyu Islands but there are no records in the northern area of Japan (Fish Databases of Japan: <http://fishdb.kahaku.go.jp/cgi-bin/WebObjects/ichthy1.woa>). The present report is described the specimen in detail because it represents the first record of this species from northern Japan including Iwate Prefecture.

#### **Material and methods**

The present material examined is a 525mm SL female specimen (IFES 2005001) collected by a set-net located off Taro-area of Miyako, Iwate Prefecture, Japan on October 12, 2005 and deposited at Iwate Fisheries Technology Center (IFES). The methods of measurements and counts follow Allen.<sup>3)</sup> Standard length and head length are expressed throughout as SL and HL, respectively.

#### ***Lutjanus argentimaculatus* (Forsskål, 1775)**

(Fig. 1)

(Japanese name: Goma-fuedai)

**Description.** Dorsal fin X, 13; anal fin III, 8; pectoral fin 17; lateral line scales 48; transverse scales above lateral line 5 in middle of spinous dorsal fin; gill rakers 6+12 on first gill arch. Body stout and deep, body depth 33 % of SL. Head large; head length 35 % of SL and 2.6 times its maximum width. Preopercular notch shallow. Preopercular knob broadly rounded, with inconspicuous serrations. Anterior and dorsal part of head entirely

naked; cheek with scales on preopercle, interopercle, subopercle and opercle. Snout long and pointed, dorsal profile straight, its length in front of eye 36% of HL. Eyes moderate, dorsal to the body axis; eye diameter 16 % of HL. Mouth large, with its length 40 % of HL. Maxillary reaching below anterior third of eyes. Grooves nor pits absent on head from nostrils to eyes. The longitudinal scale rows above lateral line nearly parallel to the lateral line. Pectoral fins long and pointed, fin length 27 % of SL. Dorsal fin broadly concave at the middle region; second spine longest, its length 12 % of SL. Dorsal and anal fins with rounded posterior profile, covered with scales at the proximal regions. Caudal peduncle length 22 % of SL, 1.9 times its height. Caudal fin large and weakly emarginate. Body color in life dusky reddish on lateral and dorsal parts, light reddish on ventral part, without conspicuous spots or lines. Caudal fin with a blackish margin on the ventral tip.

**Remarks.** According to Shimada<sup>1)</sup>, twenty species are known from Japanese waters. The present material is distinguished as *Lutjanus argentimaculatus* from the congeners by having dorsal fin covered with scales at the proximal region; long snout with a nearly straight dorsal profile; scales above lateral line nearly parallel to lateral line; narrow suborbital width; reddish body color without conspicuous blotches or lines<sup>1)</sup>

#### Discussion

The present specimen is the first record of *Lutjanus argentimaculatus* from northern Japan including Iwate Prefecture because the previous northern records of this species were Hyogo Prefecture and Kochi Prefecture in Sea of Japan and Pacific Ocean, respectively (Fish Databases of Japan: <http://fishdb.kahaku.go.jp/cgi-bin/WebObjects/ichthy1.woa>). The present sampling location, Taro-area of Miyako, is located at the northern part of Iwate Prefecture (Fig. 2). From the SST distribution calculated from AVHRR/NOAA image, the coastal SST off this area on October 13, 2005 represented

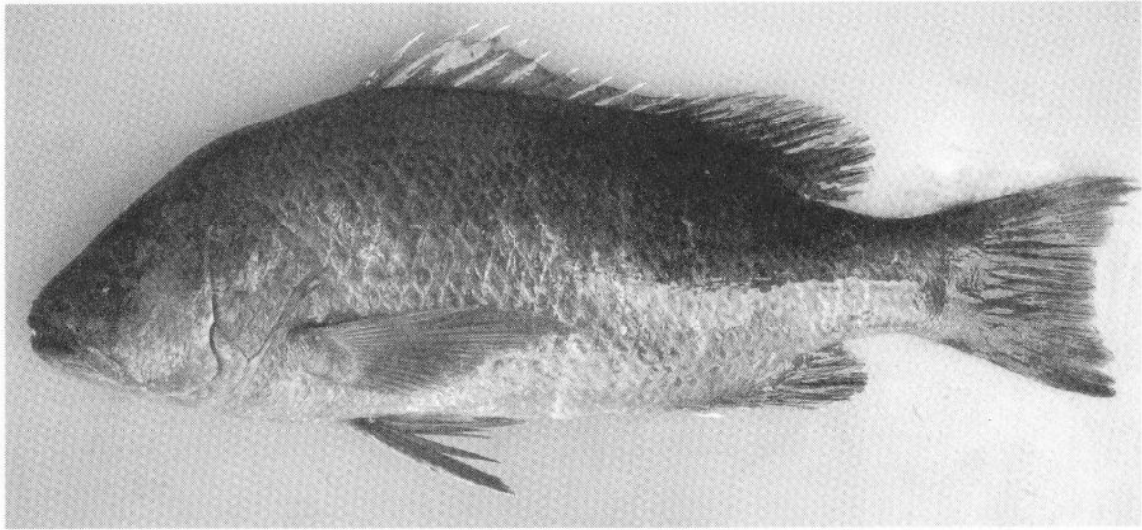
about 18 °C (Fig. 2). *Lutjanus argentimaculatus* is distributed in mangrove estuaries during juvenile and young but eventually migrates offshore penetrating depths in excess of 100 m in adult and prefers subtropical waters ranging from 16 °C to 30 °C.<sup>3)</sup> The water temperature on October 13, when the present material was collected, is nearly critical for this species but is almost maximum in this area. It is therefore thought that the present specimen was accidentally occurred as a result of the offshore migration of adult maybe throughout Sea of Japan via Tsushima Warm Current or Kuroshio Current.

#### Acknowledgments

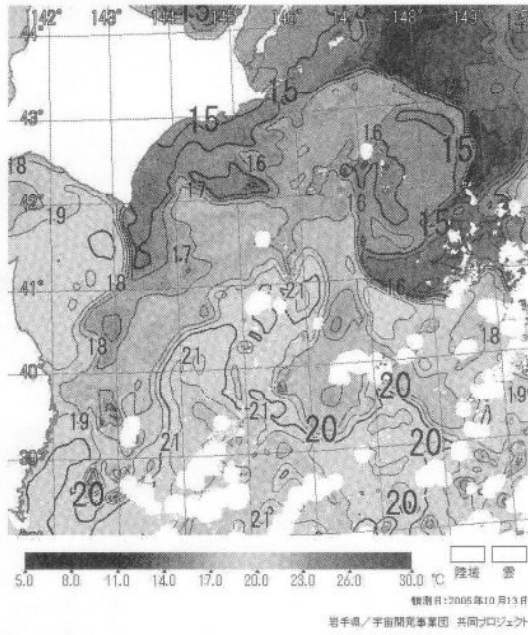
I would express my thanks to Mr. Tomohiro Sugawara of Iwate Nippo Co. Ltd. who gave me the catch information of the present material and to Mr. Katsumi Ito of Iwate Prefectural Fisheries Museum who gave me the material.

#### Literature Cited

- 1) Shimada K. Lutjanidae. In: Nakabo T (ed.). Fishes of Japan with pictorial keys to the species.
- 2) Akazaki M. Family Lutjanidae. In: Masuda H, Amaoka K, Araga, C, Uyeno T, Yoshino T (eds.). The Fishes of Japanese Archipelago. Tokai University Press, Tokyo. 1984; 166-171.
- 3) Allen GR. FAO species catalogue. Vol. 6. Snappers of the world. An annotated and illustrated catalogue of lutjanid species known to date. FAO Fish. Synop. 1985; 125: 1-208.



**Fig. 1.** *Lutjanus argentimaculatus*, IFES 2005001, 525 mmSL, female, collected from Taro-area of Miyako, Iwate Prefecture, Japan.



**Fig. 2.** SST distribution calculated from AVHRR/NOAA image on October 13, 2005.