

Redescription of the moon wrasse, *Thalassoma lunare* (Perciformes : Labridae) from Jeju Island, Korea

Byung-Jik Kim, You-Bong Go* and Young-Don Lee

Marine and Environmental Research Institute, Cheju National University, Jeju-Do 695-814, Korea

*School of Ocean Science, Cheju National University, Jeju-Do, 690-756, Korea

제주도 남부 연안에서 채집된 녹색물결놀래기 *Thalassoma lunare* (농어목 : 놀래기과)의 재기재

김병직 · 고유봉* · 이영돈

제주대학교 해양과환경연구소, *제주대학교 해양과학부

제주도 남제주군 남원읍 위미항에서 채집된 농어목 놀래기과에 속하는 녹색물결놀래기(*Thalassoma lunare*) 1개체(표준체장 75.8 mm)를 근거로 본종의 형태적 특징을 재기재하였다. 본 종은 등지느러미가 8극조 13연조, 뒷지느러미가 3극조 11연조로 이루어져 있으며, 체색이 녹색이며 꼬리지느러미에 반달모양의 황색 반문이 있는 점에서 동속 타종과 쉽게 구별된다.

A single specimen (75.8 mm in SL) of a labrid fish, *Thalassoma lunare* was collected from Wimi fishing port, located at southern coast of Jeju Island, Korea. The species, characterized by having VIII, 13 dorsal fin rays and III, 11 and fin rays and a distinctive body color, was redescribed as the first reliable record from Korea based on actual specimen.

Key words : redescription, *Thalassoma lunare*, Jeju Island, Labridae

During a survey of ichthyofauna of Jeju Island, Korea, we collected a single specimen of labrid fish, *Thalassoma lunare* (Linnaeus, 1758) from Wimi fishing port located at the southern coast of the island. Occurrence of the species from the Korean waters has been reported by several authors (Yoo et al., 1995; Choi et al., 2002; Myoung et al., 2002; Kim et

al., 2005). However, it was not only on the basis of underwater photographs but also detailed description on the external morphology of the species was not given.

In the present study we redescribed the external morphology of *T. lunare* as the first reliable record from Korea based on the actual specimen collected from Jeju Island.

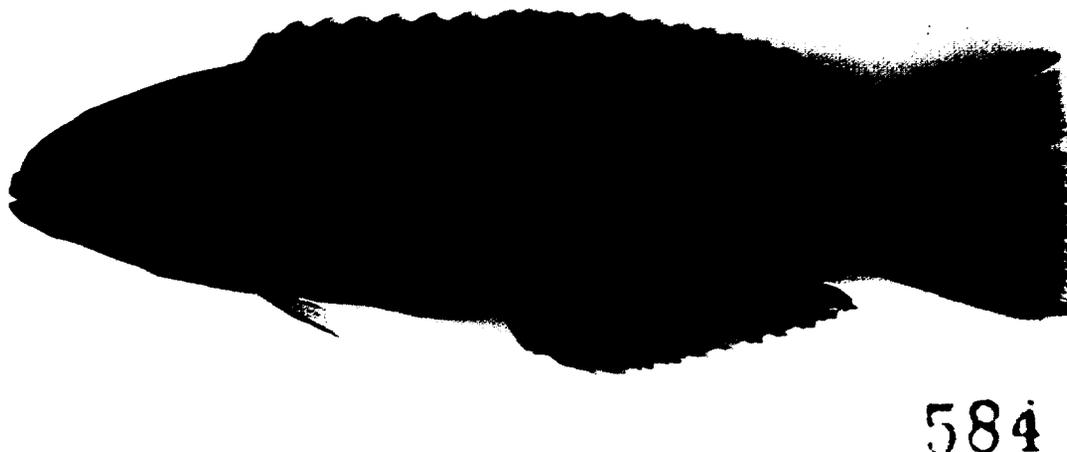


Fig. 1. *Thalassoma lunare*, MRIC 584, 75.8 mm SL, from Wimi fishing port, Jeju-do, Korea.

Counts and measurements followed those of Hubbs and Lagler (1954), and median fins and vertebrae were counted from soft X-ray radiograph. Specimen examined was deposited in the Marine and Environment Research Institute, Cheju National University, Korea (MRIC).

***Thalassoma lunare* (Linnaeus, 1758)**

(Korean Name : Nok-sek-mul-gyeol-nol-rae-gi)

Labrus lunaris Linnaeus, 1758: 283 (type locality: India).

Thalassoma lunare: Tanaka, 1935: 441, pl. 121, fig. 349 (Nagasaki, Japan); Randall et al., 1990: 337 (Great Barrier Reef); Yoo et al., 1995: 152, photos (Jeju Island, Korea); Myoung, 2002: 192, photo (Jeju Island, Korea); Choi et al., 2002: 613 (Jeju Island, Korea); Kim et al., 2005: 381, photo (Jeju Island, Korea).

Material examined. *Thalassoma lunare*: MRIC 584, 75.8 mm in standard length (SL), Wimi fishing port, Namwon-eup, Namjeung-gun, Jeju-do, Korea, 7 February, 2003, collected by B.J. Kim.

Description. Dorsal fin rays VIII, 13; anal fin rays III, 11; pectoral fin rays 14, uppermost one unbranched; pelvic fin rays I, 5; principal caudal fin rays 14; lateral line scales 26 (posteriormost one not included in count), scales above lateral line 3; scales below lateral line 9; predorsal scales 9 gill rakers 5+1+10; vertebrae 25.

Proportion as % standard length (SL): body depth 24.4; head depth 31.4; snout length 9.6; upper jaw length 5.8; eye diameter 5.7; interorbital width 7.7; predorsal length 31.5; dorsal fin base 59.5 length of first dorsal spine 4.2; length of eighth dorsal spine 9.8; length of fourth dorsal fin ray 12.0; anal fin base 33.2; length of first anal spine 2.4; length of third anal spine 7.9; length of second anal

soft ray 10.7; caudal peduncle depth 16.8
caudal peduncle length 15.7; pectoral fin length
20.4; pelvic fin length 12.1

Body elongate and rather compressed, caudal peduncle short, deep and compressed. Head moderately large, eye small, and interorbital region convex; snout relatively long with a steep curved profile; mouth terminal, short, posteriorly reach to a vertical of anterior nostril. Both jaws with a row of small conical teeth; vomer and palatine without teeth. Dorsal fin base long, eighth dorsal spine longest, fourth dorsal soft ray longest. Anal fin base relatively long, second anal soft ray longest. Pectoral fin moderately large and third fin ray longest. Pelvic fin rather small. Caudal fin truncate. Body with cycloid scales; head entirely naked except for three small cycloid scales on upper portion of opercle; a row of scaly sheath on dorsal and anal fin bases; caudal fin base and its upper and lower produced rays with scales. Lateral line complete, high, and abruptly bending downward and backward posteriorly below 10th dorsal soft ray, continued to caudal base along middle of body.

Color when fresh. Head green with several red longitudinal bands, and body dark green with vertical reddish lines. Dorsal and anal fins with red, blue, pale green, yellowish orange longitudinal bands from their bases in turn. Caudal fin yellow with upper and lower marginal reddish longitudinal bands, its upper and lower portions pale blue; pectoral fin bluish with red longitudinal band on upper portion; pelvic fin bluish with narrow reddish band. A dark spot in middle of dorsal fin and

a black blotch on caudal fin base.

Color after preservation. Head dark brown and body brownish. Dorsal and anal fins brown basally, yellowish distally. A small dark spot on anterior portion of soft dorsal. Pectoral fin pale bluish with a brown band on upper region. Pelvic pale yellowish. Caudal fin brownish basally and caudal fins pale yellowish except for upper and lower some darkish rays.

Distribution. Known from the Indo-Pacific Ocean: Red Sea and East Africa (Randall, 1986) to the Line Islands, north to southern Japan (Araga, 1984, 1997; Kagawa, 1997) and Korea (Yoo et al., 1995; Myoung, 2002; Choi et al., 2002; present study), south to Australia (Allen, 1997), and northern New Zealand (Paulin et al., 1989).

In Korea, *Thalassoma lunare* was also observed in Munseom (Isl.), locating in the southern coast of Jeju Island (pers. obs.).

Remarks. In the labrid fish genus *Thalassoma* Swainson, 1839, three species of *T. cupido* (Temminck and Schlegel, 1845), *T. purpureum* (Forsskål, 1775), and *T. lunare* (Linnaeus, 1758) have been reported from the Korean waters to date (Chyung, 1977; Lee and Kim, 1996; Choi et al., 2002; Kim et al., 2005). Among them, *T. lunare* was recently reported from coastal waters of Jeju Island, Korea by You et al. (1995) on the basis of underwater photographs without any detailed description. Kim et al. (2005: 318, photo) provided a photograph of the present specimen with a short description, however, the

morphometric characters of *T. lunare* were not shown.

In the present study, we redescribed *T. lunare* as the first reliable record from Korea in detail. The present species agrees well with photographs and description of Araga (1997) as well as Randall et al. (1990). The species is easily distinguishable from its similar species by having a yellow lunate tail. The Korean name of the species follows that of Yoo et al. (1995) that is the first report of the species from Korea.

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