

One Unrecorded Species of *Acanthurus nigricauda* (Acanthuridae, Perciformes) from Korea

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A single specimen (213.5 mm SL) of the epaullete surgeonfish, *Acanthurus nigricauda* Dunker and Mohr, belonging to the family Acanthuridae was collected by a set net in coastal waters of Busan, Korea. The species has a distinctive dark band above pectoral fin and on mid-lateral part of caudal peduncle. We describe this species as new to Korean fish fauna and propose its new Korean name, “Yang-jwi-dom”.

Key words : *Acanthurus nigricauda*, Acanthuridae, first record

The acanthurid fishes (surgeonfishes), comprising six genera and about 80 species, are characterized by having a distinctive spine or group of spines on caudal peduncle (=caudal spines) (Randall, 2005; Nelson, 2006). They are exclusively marine-dwellers and distribute widely in all tropical and subtropical seas except the Mediterranean Sea (Nelson, 2006). Concerning the genus *Acanthurus* Forsskål, 1775, one of the Acanthurinae, Randall (1956) firstly revised 32 species including one new species, *A. auranticavus* in the Indo-Pacific Ocean. Thereafter, Randall (2005) provided underwater pictures, morphological data, and taxonomic notes of 20 *Acanthurus* species in the South Pacific.

To date, only two genera (*Naso* Lacepède, 1801 and *Prionurus* Lacepède, 1804) and four species [*N. brevirostris* (Cuvier, 1829), *N. lituratus* (Forster, 1801), *N. unicornis* (Forsskål, 1775), and *P. scalprum* Valenciennes, 1835] of the family Acanthuridae have been recorded from Korea (Chyung, 1977; Kim *et al.*, 2005). However, little studies for the genus *Acanthurus* have been done in Korea. A single specimen of *Acanthurus nigricauda* Dunker and Mohr, 1929 was collected by a set net in coastal waters of Busan, Korea. We des-

cribe this species as the new to Korean fish fauna based on the specimen.

Counts and measurements were followed by those of Hubbs and Lagler (1964) and Nakabo (2002). The number of vertebrae was counted from radiographs. The examined specimen was deposited in the National Fisheries Research and Development Institute (NFRDI) of Korea.

Genus *Acanthurus* Forsskål, 1775
(New Korean name: Yang-jwi-dom-sok)

Acanthurus Forsskål, 1775: 59 (type species: *Acanthurus sohal* Forsskål, 1775).

Body elliptical and deeply compressed; a single sharp folding spine on each caudal peduncle; dorsal fin spines usually IX, pelvic fin rays I, 5 and anal fin spines III; teeth on jaws fixed, spatulate with denticulate edges, 8~28 on each jaw; scales ctenoid (Kishimoto, 1984).

***Acanthurus nigricauda* Dunker and Mohr, 1929**
(New Korean name: Yang-jwi-dom)
(Fig. 1; Table 1)

Acanthurus gahm var. *nigricauda* Dunker and

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Fig. 1. *Acanthurus nigricauda* Dunker and Mohr, NFRDI 20050901-01, 213.5 mm SL, Dongam, Gijang-gun, Busan-si, Korea.

Mohr, 1929: 75 (type locality: St. Matthias Group, New Ireland, Papua New Guinea).

Acanthurus gahhm: Kishimoto in Masuda *et al.*, 1984: 232, pl. 230 (Japan).

Acanthurus nigricaudus: Masuda and Kobayashi, 1994: 395, fig. 6 (Ryukyu Islands, Japan); Shimada in Nakabo, 2002: 1329 (Japan); Allen *et al.*, 2003: 48 (Tropical Pacific).

Acanthurus nigricauda: Randall in Smith and Heemstra, 1986: 814, pl. 129 (Seychelles); Randall, 1987: 54, fig. 2 (Marshall Islands); Myers, 1991: 246, pl. 126-F (Saipan); Shen *et al.*, 1993: 544, pl. 182-7 (Taiwan); De Bruin *et al.*, 1994: 128 (Sri Lanka); Kuitert, 1996: 366 (Great Barrier Reef, Australia); Yamashida in Okamura and Amaoka, 1997: 644 (Ryukyu Islands, Japan); Randall and Lim, 2000: 642 (listed, South China Sea).

Material examined. NFRDI 20050901-01, 213.5 mm in standard length (SL), Dongam, Gijang-gun, Busan-si, Korea, about 20 m depth, 1 September 2005, set net, collected by K.S. Hwang.

Description. Counts are shown in Table 1.

Measurements in percentage of SL: Body depth 45.9; body width 17.1; head length 26.4; postorbital length 7.8; snout length 16.4; upper jaw length 6.0; eye diameter 5.0; suborbital length 17.6; interorbital width 9.2; predorsal length 38.3; prepectoral length 25.8; prepelvic length 39.8; preanal length 49.3; preanus length 46.3; caudal peduncle length 10.8; caudal peduncle depth 10.1.

Body oval, deep and compressed; dorsal profile of head steep; interorbital region convex; mouth small, subterminal; distance between eye and mouth long; teeth immovable, close-set and mar-

Table 1. Comparison of counts of *Acanthurus nigricauda*

	Present study	Shen <i>et al.</i> (1993)	Randall (2005)
Number of specimen	1	2	–
Standard length (mm)	213.5	68.6~207	–
Counts			
Dorsal fin rays	IX, 25	IX, 24~27	IX, 25~28
Pectoral fin rays	16	16~17	17
Pelvic fin rays	I, 5	I, 5	–
Anal fin rays	III, 24	III, 23~25	III, 23~26
Branched caudal fin rays	16	–	–
Vertebrae	22 (9+13)	–	–

gin of tip denticulate, protruding out of lip; skin leathery; dorsal and anal fins continuous and unnotched; bases of dorsal and anal fins long; triangle-like pectoral fin located anterior to pelvic fin; caudal fin lunate, prolonged; caudal peduncle with one movable spine.

Color when fresh. Body greenish brown; dorsal and ventral parts of body dark brown to nearly black; a distinct black band above pectoral fin extending backward from upper end of opercle; dark mark pointed anteriorly around caudal spine; front of head, margin of dorsal and anal fins reddish brown; pectoral fin with a distinct yellow posterior margin; caudal fin with a distinct white posterior margin.

Color after preservation. Body reddish brown; dorsal and ventral regions with dark brown patches; pectoral and caudal fins with a white posterior margin.

Distribution. Korea (near Busan, present study), southern Japan (Shimada, 2002), Taiwan (Shen *et al.*, 1993), Micronesia (Myers, 1991), Great Barrier Reef (Kuitert, 1996), and East Africa

(Randall, 2005).

Remarks. Counts of the present specimen agree well with previous descriptions of *Acanthurus nigricauda* (Table 1). *A. nigricauda* has been confused with *A. gahhm* Forsskal, 1775, because two species have overlapping of meristic characters and similarity of body coloration (Randall, 1987). However, they are distinguished by the length of dark band on caudal spine (long in *A. nigricauda* vs. short in *A. gahhm*), and the distribution (Indo-Pacific in the former vs. Red Sea and Gulf of Aden in the latter) (Randall, 1956; Yamashida, 1997; Randall, 2005). We propose the new Korean name, "Yang-jwi-dom", for *A. nigricauda*.

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한국산 양쥐돔과 어류 1 미기록종, *Acanthurus nigricauda*

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농어목 양쥐돔과 (Acanthuridae)에 속하는 *Acanthurus nigricauda* 1개체 (체장 213.5 mm)가 부산시 기장군 동암 앞바다에서 정치망으로 처음 채집되었다. 본종은 가슴지느러미 상부와 미병부의 측면 중앙에 1개씩의 선명한 검은 반문이 있는 것이 특징이며, “양쥐돔”이라 명명하였다.