

**A Grouper *Epinephelus albopunctulatus*,
a Synonym of *E. spiniger*, Distinct
from *E. truncatus***

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When Masuda (1942) reported a grouper as *Epinephelus fasciatus albopunctulatus* Boulenger, 1895, he noted that the original description of *E. albopunctulatus* differed from his specimen in having a long second dorsal spine and white spots on the body. He regarded the long dorsal spine as owing to an abnormal individual and the white spots as caused by preservation in alcohol. However, Katayama (1957) described *E. truncatus*, designating *E. fasciatus albopunctulatus* of Masuda (1942) as a synonym of it.

Epinephelus spiniger (Günther, 1859) and *E. albopunctulatus* are both characterized by an elongated second dorsal spine, which is about 1.7 times as long as the third. I examined the holotypes of these two species, and found the two to be conspecific (Table 1).

Epinephelus truncatus closely resembles *E. spiniger* (syn. *E. albopunctulatus*) not only in its proportional measurements (except for the second dorsal spine length) and counts (Table 1) but also in having a spinous dorsal fin with a blackish margin and a truncated caudal fin. It differs from *E. spiniger* (= *E. albopunctulatus*) in having a second dorsal spine not elongated and scales with a greenish brown (in life) spot, instead of a light one as Katayama (1957) pointed out. Katayama (1957) also remarked that in *E. truncatus* the maxillary reaches to below the posterior margin of the orbit instead of the

Table 1. Comparison of measurements and counts between *Epinephelus spiniger* and *E. truncatus*. The specimen ZUMT 54136 may be one of those reported as *E. fasciatus albopunctulatus* from the Ogasawara Islands by Masuda (1942). Abbreviations: BM (NH), British Museum (Natural History); BPBM, B. P. Bishop Museum; ZUMT, Department of Zoology, University Museum, University of Tokyo.

Species	<i>E. spiniger</i>			<i>E. truncatus</i>	
	Holotype of <i>E. spiniger</i> Günther (1859) Locality Cat. No.	Holotype of <i>E. albopunctulatus</i> Boulenger (1895) Marquesas Is. BM (NH) 1978.2.1.1	<i>E. spiniger</i> : Bryan and Herre (1903) Minamitorishima BPBM 2418	<i>E. truncatus</i> : Katayama (1975) Ryukyu Is. Katayama Fish Coll. 5107	(unknown) (unknown) ZUMT 54136
Total length (mm)	253.0	215.0	197.8	220.0	225.0
Standard length (SL) (mm)	205.0	177.0	160.3	184.0	183.0
In % of SL:					
Body depth	34.6	35.4	33.3	35.6	34.4
Head length	38.5	39.6	38.3	40.9	39.6
Snout length	8.9	9.7	8.7	10.5	10.1
Eye diameter	6.7	6.6	7.5	7.7	8.2
Upper jaw length	18.5	18.0	18.4	17.4	17.9
Interorbital width	5.9	5.7	6.4	6.5	5.7
Caudal peduncle depth	13.0	12.3	12.1	10.9	10.9
2nd dorsal spine length	18.5	18.5	16.0	10.9	10.4
3rd dorsal spine length	10.9	11.7	11.5	13.5	(broken)
Pectoral length	23.9	23.1	22.8	26.4	26.0
Pelvic length	20.5	21.7	21.1	20.7	20.8
Counts:					
Dorsal fin rays	XI, 16	XI, 16	XI, 17	XI, 16	XI, 16
Anal fin rays	III, 8	III, 8	III, 8	III, 8	III, 8
Pectoral fin rays	19	19	20	19	19
Pored scales in lateral line	70	70	73	70	74
Gill rakers	7+14	6+14	7+14	7+15	7+15

pupil as in *E. albopunctulatus* (= *E. spiniger*). Actually, however, the maxillary of *E. truncatus* does not reach below the posterior margin of the orbit, while that of *E. spiniger* extends beyond its margin. Synonym lists of the two species are given below. As shown in the synonyms of *E. truncatus*, there are still some confusions which exist with *E. albopunctulatus* (= *E. spiniger*) concerning the identification of *E. truncatus*.

Epinephelus truncatus Katayama

Japanese name: Akahata-modoki

Epinephelus fasciatus albopunctulatus (not of Boulenger); Masuda, 1942: 113, pl. 5, lower fig. (descr.; Ogasawara Is.).

Epinephelus albopunctulatus; Matsubara, 1955: 630 (key); Gushiken, 1972: 30, fig. 138 (color photo; Ryukyu Is.); Yoshino et al., 1975: 80 (listed; Ryukyu Is.); Masuda et al., 1975: 216, pl. 48, fig. H (brief descr.; southern Japan); Shirai, 1977: 102, fig. (not numbered) (brief descr.; Ryukyu Is.).

Epinephelus truncatus Katayama, 1957: 158, fig. 4 (orig. descr.; Izu and Ogasawara Is.); Katayama, 1960: 77, pl. 47 (descr.); Randall, 1964: 283, fig. 3 (descr.; Society Is.); Katayama, 1965: 284, fig. 546 (descr.); Randall, 1973: 186 (listed; Society Is.); Bagnis et al., 1974: 95, fig. (not numbered) (brief descr.; Polynesia); Katayama, 1975: 162 (descr.; Ryukyu Is.); Kyushin et al., 1977: 220, fig. 102 (descr.; Chagos Bank); Zama and Fujita, 1977: 108 (listed; Ogasawara Is.); Takahashi et al., 1977: 124 (listed; Capel Bank).

Notes. The figures of *E. fasciatus albopunctulatus* given by Masuda (1942) and of *E. albopunctulatus* by Gushiken (1972), Masuda et al. (1975) and Shirai (1977) show a maxillary not extending to below the posterior margin of the orbit, the second dorsal spine not elongated, and a darkish spot on each scale which is indistinct in the figures by Gushiken (1972) and Masuda et al. (1975). These features are characteristic of *E. truncatus*, not of *E. albopunctulatus* (= *E. spiniger*).

Epinephelus truncatus has been reported from four isolated localities in the Indo-Pacific, i.e. southern waters of Japan (Ryukyu, Izu and Ogasawara Is.), the Society Islands, the Capel Bank (east of Australia), and the Chagos Bank

(south of India).

I propose to use the Japanese name akahata-modoki given by Katayama (1957) to *E. truncatus* although Matsubara (1955: 625, as *E. albopunctulatus*) adopted the name sedaka-akahata for this species.

Epinephelus spiniger (Günther)

New Japanese name: Hirenaga-hata

Serranus spiniger Günther, 1859: 146 (orig. descr.; type locality unknown); Fowler, 1928: 176 (descr.; Minamitori-shima and Marquesas Is.); Fowler, 1934: 458, fig. 33 (brief descr.; South Africa); Fowler, 1938: 281 (listed; Marquesas Is.).

Epinephelus spiniger; Boulenger, 1895: 197, pl. 4, fig. B (descr. of the type); Bryan and Herre, 1903: 129 (descr.; Minamitori-shima); Jordan and Seale, 1906: 259 (listed, reference from Bryan and Herre, 1903); Smith, 1961: 194, fig. 432 (brief descr., probably reference; South Africa); Bagnis et al., 1974: 100, fig. (not numbered) (brief descr.; Marquesas Is.).

Epinephelus albopunctulatus Boulenger, 1895: 234, pl. 9 (orig. descr.; Nukuhiva, Marquesas Is.); Jordan and Seale, 1906: 260 (listed; Marquesas Is.).

Serranus albopunctulatus; Fowler, 1928: 181 (descr., reference from Boulenger, 1895); Fowler, 1938: 281 (listed; Marquesas Is.).

Notes. The holotypes of *E. spiniger* and *E. albopunctulatus* were examined at the British Museum (Natural History). The type of *E. spiniger* had become shriveled and the light spot on each scale of the body was indistinct, while in the type of *E. albopunctulatus*, the light spot was clearly recognized. *E. spiniger* is distinguished from other species in the genus *Epinephelus* in having a second dorsal spine conspicuously elongated, compared to the other spines of the fin. It is present even in adults, although this character is found at the juvenile stage of some other species in the genus, e.g. *E. akaara* (Temminck et Schlegel), *E. moara* (Temminck et Schlegel), and *E. septemfasciatus* (Thunberg) (Nakamura, 1935; Uchida, 1937; Katayama, 1960; Mito, 1967). As shown in Table 1, there is a great difference between the second dorsal spine lengths of *E. spiniger* and *E. truncatus* with similar standard lengths.

The Minamitori-shima specimen of *E. spiniger*

reported by Bryan and Herre (1903) was also checked at the B. P. Bishop Museum, and its identification was confirmed (Table 1). Fowler (1934, fig. 34) figured a specimen (about 47 mm in standard length according to the figure) from South Africa as *E. spiniger*, but it has a preopercular spine and a round caudal fin along with an elongated second dorsal spine. Therefore, the possibility remains that the specimen may be a juvenile of another species.

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アカハタモドキとヒレナガハタ(新称)のシノニムについて

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Masuda (1942) によって *Epinephelus fasciatus albopunctulatus* として報告されたハタは松原 (1955) により種のレベルに昇格され、本邦ではセダカアカハタ *E. albopunctulatus* として知られていた。しかしながら、筆者は背鰭第二棘が突出するという顕著な特徴をもった *E. albopunctulatus* と *E. spiniger* の両模式標本を調査した結果、前者は後者のシノニムであり、本邦より *E. albopunctulatus* として報告されていたハタはアカハタモドキ *E. truncatus* と査定されることが明らかになった。以上の推移より *E. truncatus* に対してセダカアカハタとアカハタモドキの2和名が重複するので、混乱を避けるためにアカハタモドキを用いることを提唱する。また、*E. spiniger* は本邦では南鳥島より報告されているのでヒレナガハタの新和名を提唱する。

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