

## A New Pomacanthid Fish, *Chaetodontoplus caeruleopunctatus*, from the Philippines

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(Received June 15, 1976)

**Abstract** A new angel fish, *Chaetodontoplus caeruleopunctatus*, is described on the basis of a specimen collected from the Philippines. This species is readily distinguishable from all other species of the genus in having a bluish brown body with numerous blue dots scattered on the sides when alive.

The members of genus *Chaetodontoplus* of the family Pomacanthidae are tropical or subtropical shorefishes and geographically restricted from about 100 to 165° E in the western Pacific.

The following eight species of the genus seem to be valid: *Chaetodontoplus septentrionalis* (Temminck and Schlegel, 1844), *C. chrysocephalus* (Bleeker, 1854), *C. melanosoma* (Bleeker, 1853), *C. personifer* (McCulloch, 1914), *C. duboulayi* (Günther, 1867), *C. conspicillatus* (Waite, 1900), *C. ballinae* Whitley, 1959, and *C. cephalareticulatus* Shen and Lim, 1975.

"*Chaetodontoplus*" *mesoleucus* and "*C.*" *niger* are also valid species but their inclusion in

*Chaetodontoplus* is inappropriate (Tominaga and Yasuda, 1975), and the point will be discussed in detail in another paper.

Described below is a new species of the genus from the Philippines.

*Chaetodontoplus caeruleopunctatus*, sp. nov.  
(new Japanese name: hoshizora-yakko)  
(Fig. 1)

**Holotype.** ZUMT 52825 (Department of Zoology, University Museum, University of Tokyo), a specimen 77.0 mm in standard length, collected in the Philippines and shipped to an aquarium fish dealer in Tokyo in June 1972.

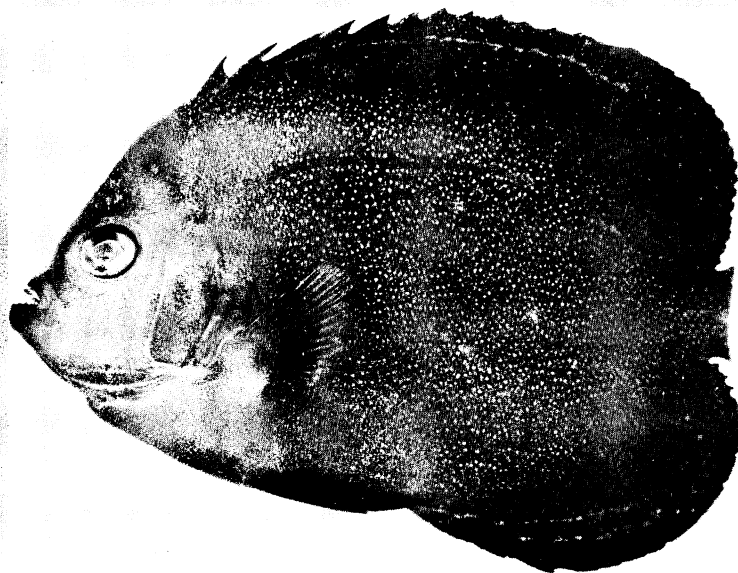


Fig. 1. Holotype of *Chaetodontoplus caeruleopunctatus*, sp. nov. ZUMT 52825, 77.0 mm in standard length, collected from the Philippine Islands.

### Diagnosis

This species is distinguished from other *Chaetodontoplus* species of the family Pomacanthidae by its coloration with numerous blue spots on the dark ground color of the body.

### Description

D. XIII, 17; A. III, 17; P<sub>1</sub>. 18 (1st non-segmented, and 2nd and last two unbranched); P<sub>2</sub>. 1, 5; caudal branched rays 8+7. Scales very small. Lateral line complete, pored scales in lateral line indistinct. Scales between lateral line and 4th dorsal spine ca. 18, scales below lateral line ca. 60; branchiostegals 6; gill rakers on outer row of 1st branchial arch 12 (lower)+1 (middle)+4 (upper); number of vertebrae 10+14 (urostyler vertebra counted as one); predorsal bones 2.

Measurements expressed in hundredths of standard length (77.0 mm): total length 123.1; depth of body through base of 4th dorsal spine 57.1; head length to fleshy rim of opercle 29.9; snout length 9.1; horizontal diameter of orbit 9.1; interorbital width 9.7; least depth of caudal peduncle 13.0; snout to dorsal origin 36.4; snout to anal origin 63.6; snout to pectoral insertion 28.6; snout to pelvic insertion 42.9; dorsal base 75.3; length of 13th (longest) dorsal spine 22.1; anal base 41.6; length of 3rd (longest) anal spine 22.1; length of pectoral fin 19.5; length of pelvic fin 27.3; length of pelvic spine 18.2.

Teeth on both jaws are brush-like, well exposed beyond lips and arranged in several rows; internal ones are smaller. The prevomer and palatines are devoid of teeth. Openings of nostril, are immediately in front of eye; anterior one has a raised fleshy rim. Eye diameter is nearly equal to interorbital width. The first infraorbital (preorbital) is devoid of spines; its hind margin is not free. The preopercle has a stout spine at its angle and about 20 small bony serrations on posterior vertical margin; its ventral and horizontal margin is smooth. The interopercle is large, without spine, and with a patch of scales. Vertical margin of the interopercle is not covered by the preopercle. Posteroventral rim of the subopercle and exposed rim of the cleithrum are smooth.

Scales are ctenoid. Auxiliary scales are

absent. Scales on occiput, around eyes, and on fins are smaller and more irregularly arranged than those on body. Exposed parts of the interopercle and branchiostegals below the preopercle are scaled. Soft portions of the dorsal and anal fins are rounded. Tip of the pelvic reaches the anal origin. The caudal fin is rounded.

When alive, head and anterior part of body (separated by a vertical line through base of the pectoral) are olive brown. Anterior part of head above and before eyes has indistinct pale brown mottlings or vermiculations. Posterior part of the body, dorsal, anal, and pelvic fins are chocolate brown. Many small blue spots are scattered on the dorsal and anal fins and body except head and belly. Dorsal fin has one blue line parallel with fin margin; anal with two. Basal part of the pectorals black. The caudal fin is yellow.

In formalin, blue spots of living specimens turned pale and blue line dark sepia. Pale brown markings on head disappear. Yellow part of caudal fin became white.

### Remarks

Among eight species enumerated in the introduction, *C. duboulayi* can at once be separated from others in having fewer dorsal spines. The remaining species cannot be segregated by external counts, although some species tend to have higher or lower values for certain counts.

The difference in body proportion is also almost useless because of high degree of intraspecific and low interspecific variation. In such circumstances we can segregate the species almost only by the difference of color pattern.

The new species can at once be distinguished by the minute, but brilliant and numerous **blue** spots scattered over the side of body when alive.

In preserved state, however, these spots become obscure and rather uniform sepia remains all over the body, except darker pelvic, dorsal and anal fins and whitish caudal fin. Absence of peculiar markings is the characteristic to the species in the preserved specimen.

The revisional work of the genus *Chaetodontoplus* is now in progress and phyletic relationships with other members of the genus will be presented in near future.

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- (FY: Tokyo University of Fisheries, Kōnan, Minato-ku, Tokyo, 108; YT: Department of Zoology, University Museum, the University of Tokyo, Bunkyo-ku, Tokyo, 113, Japan)
- フィリピンより採集されたキンチャクダイ類の一新種  
安田 富士郎・富永 義昭
- フィリピン産の標本にもとづいて、キンチャクダイ類の新種ホシゾラヤッコ (*Chaetodontoplus caeruleopunctatus*) を記載した。
- この種類は、生時は緑褐色で体側には小さい青色点(ホルマリン標本では白色でみにくくなる)が多数散布することなどにより他種と容易に区別される。
- (安田: 108 東京都港区港南 東京水産大学; 富永: 113 東京都文京区本郷 東京大学総合研究資料館)