

## A New Anthiine Fish, *Anthias leucozonus*, from Sagami Bay, Japan

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**Abstract** A new anthiine fish, *Anthias (Pseudanthias) leucozonus* is described on the basis of two specimens collected from Sagami Bay. This new species differs from all other species of the genus in the combination of a whitish vertical bar on the body side below the base of the last dorsal spine when alive, fewer lateral-line scales and a produced third dorsal spine.

Recently two specimens of small colorful fish of the Serranidae, subfamily Anthiinae, were captured from Sagami Bay. They are described as new in the present paper.

In the following description, data of the paratype, when different from those of the holotype, are given in parentheses. Caudal peduncle length is the distance between the rear base of the anal fin and the lower edge of the caudal fin base. The last rays of the dorsal and anal fins were counted as one when branched to the base. Counts for vertebrae and predorsal bones were taken from radiographs.

Type specimens are deposited in the Department of Zoology, University Museum, University of Tokyo (ZUMT) and National Science Museum, Tokyo (NSMT).

*Anthias (Pseudanthias) leucozonus*, sp. nov.  
(New Japanese name: Shiro-obi-hanadai)  
(Figs. 1, 2)

**Holotype.** ZUMT 54295, 99 mm SL, male, collected by H. Masuda on February 27, 1977, at a depth of 40 m on a rocky reef off Futo, Izu Peninsula, Shizuoka Pref., Japan.

**Paratype.** NSMT 54296, 86 mm SL, female, May 10, 1981, same locality as holotype.

**Diagnosis.** Dorsal rays X, 16; anal rays III, 7; pectoral rays 19; lateral line scales 37~38; 3 scale rows between middle of spinous dorsal and lateral line; gill rakers 12+25~26; body depth 2.87~2.91 in SL; head length 3.14~3.19; third dorsal spine produced; no papillae along rim of posterior half of eye; subopercle and interopercle slightly serrated; pelvic fin long, reaching well beyond origin of anal fin; caudal deeply emargi-

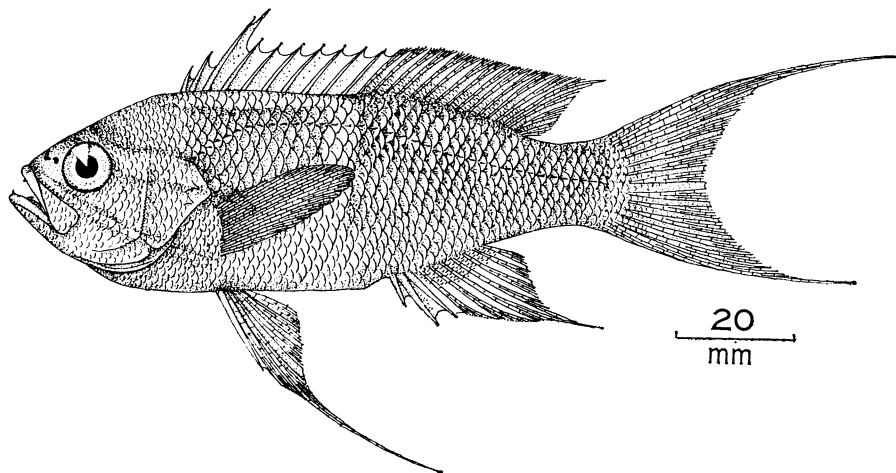


Fig. 1. *Anthias (Pseudanthias) leucozonus*, sp. nov. Holotype, male, 99 mm SL, ZUMT 54295.



Fig. 2. Underwater photograph of *Anthias* (*Pseudanthias*) *leucozonus*, taken at a depth of about 40 m on a rocky reef off Futo, Izu Peninsula, Shizuoka Pref., on February 27, 1977, by Mr. Nozomi Sugimura.

nated, outer rays produced; spinous dorsal fin not scaled; predorsal bones 3; color pattern in life described below.

**Description.** Dorsal fin rays X, 16; anal fin rays III, 7; pectoral fin rays 19; pelvic fin rays I, 5; branched caudal fin rays 13; lateral line scales 37 (38); gill rakers on first arch 12+26 (12+25); vertebrae 11+15; predorsal bones 3.

Body elongate, compressed; greatest body depth 2.91 (2.87) in SL; width just behind gill opening 5.63 (5.55) in SL; dorsal and ventral contours evenly and gently curved; head length 3.14 (3.19) in SL; diameter of orbit 3.94 (3.86) in head; snout short, 4.85 (4.50) in head; inter-orbital space convex and slightly broader than eye diameter, 3.50 (3.29) in head; length of caudal peduncle 1.58 (1.44) in head; depth of the same 2.25 (2.08).

Mouth oblique and moderately large; lower jaw slightly projecting when mouth closed; upper jaw length 2.06 (1.93) in head; maxilla expanding distally, reaching below middle of orbit, its greatest depth 1.33 (1.37) in orbit; no supramaxilla. Nostrils close together, directly in front of eye; anterior nostril in short tube with a produced posterior flap; posterior one larger, ovoid in shape. Teeth on upper jaw in two series, outer ones enlarged, inner ones

minute; a pair of canines on each side of tip of upper jaw, and posteriorly another pair of canines directed backward; lower jaw with a band of enlarged teeth; a pair of canines on tip of lower jaw, and posteriorly one or two canines on each side; small teeth on vomer and palatines, the band of teeth on vomer triangular in shape; tongue smooth. Posterior border of preopercle finely serrate; opercle with three flat spines, middle one longest; subopercle and interopercle slightly serrate. Gill rakers numerous, much longer than gill filaments.

Dorsal fin unnotched, inserted slightly anterior to upper end of gill opening; third dorsal spine produced, its length 1.91 (2.37) in head; fourth dorsal spine 2.74 (2.70); fourth through tenth subequal; longest dorsal soft ray (12th) 1.66 (1.54) in head; anal fin originating below the base of third dorsal soft ray; length of first anal spine 5.08 (4.50), second anal spine 2.63 (2.55), third anal spine 2.63 (2.78) and longest anal soft ray (4th) 2.68 (3.48) in head; third and fourth anal soft rays slightly filamentous; posterior tip of dorsal and anal fins lunate. Pectoral fin subsymmetrical, shorter than head, reaching vertical through vent, its length 3.71 (3.74) in SL; the rays mostly branched. Pelvic fin inserted slightly anterior to lower base of pectoral,

second ray greatly prolonged, reaching beyond spinous portion of anal fin, its length 2.02 (2.21) in SL; caudal fin deeply emarginated, the lobes filamentous.

Scales rather large, ctenoid; 5 in a series from origin of dorsal to lateral line, 3 in a series from middle of spinous dorsal to lateral line and 17 (18) from origin of anal to lateral line; head closely scaled except for lips; soft dorsal and anal covered with small scales basally. Lateral line normally curved, nearly concurrent with back and extending along middle of caudal peduncle to base of caudal fin.

Color in life: Body reddish orange with a whitish vertical bar on body side below the base of ninth and tenth dorsal spines; a horizontal red stripe begins on the nape just in front of dorsal fin extending to the base of posterior spinous dorsal and another oblique red stripe runs from upper margin of orbit to the upper part of pectoral base; a pale violet oblique line extends from lower margin of eye to lower part of pectoral base; dorsal, anal and caudal reddish orange, their margins violet; pectoral pale red, with an orange blotch at the base; pelvic fins purple, anterior part orange red. Color in formalin: body pale, scales of dorsal part of body dark basally; a pale vertical bar on body side below base of last dorsal spine; a pale horizontal stripe on the base of spinous dorsal. (Color of female bears some resemblance to that of male).

**Remarks.** The present new species is closely related to *Anthias (Pseudanthias) elongatus* (Franz, 1910) from Japan, but differs from it in having smaller number of lateral-line scales (37~38 instead of 40~46) and different coloration. *A. leucozonus* is also similar to *A. cichlops*

(Bleeker, 1853), but is different in having a produced third dorsal spine, smaller number of lateral-line scales (37~38 instead of 41~45) and different coloration.

**Etymology.** The Latin *leucozonus* refers to the white vertical bar on the body.

#### Acknowledgment

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- (MK: 2-11-22 Tataru, Hofu 747, Japan; HM: 5-22-33-1502, Higashigotanda, Shinagawa-ku, Tokyo 141, Japan)

#### 相模湾から得られた新種シロオビハナダイ

片山正夫・益田 一

伊豆海洋公園富戸沖の水深 40 m の岩礁地帯から得られたスズキ科ハナダイ亜科の 1 新種シロオビハナダイ *Anthias (Pseudanthias) leucozonus* を記載した。本種は背鰭第 10 棘基底から体側に白色横帯があること、側線鱗数が少ないこと、背鰭第 3 棘が延長していることなどで同属の既知種と識別される。

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