

Validity of the plesiopid fish *Plesiops nakaharae*
TANAKA, 1917, with a record of *Plesiops*
cephalotaenia from Japan

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ナカハラタナバタウオの種の有効性と日本から採集された
ヨサクタナバタウオについて

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INGER (1955) は、紀伊半島から田中 (1917) によって記載された *Plesiops nakaharae* を *P. corallicola* BLEEKER, 1853 の新参シノニムとした。しかし、*P. nakaharae* の完模式標本と INGER が *P. corallicola* として同定した標本を比較したところ、*P. nakaharae* は主鰓蓋骨に暗色眼状斑を持たないこと、上顎後端は眼の後縁下にほとんど達しないこと、前鰓蓋骨後縁部に沿って約4個の黒色小斑点が存在することによって *P. corallicola* とは明瞭に区別することができた。

一方、琉球列島のサンゴ礁より *P. cephalotaenia* INGER, 1955 を採集した。本種は益田ほか (1975) が *P. corallicola* としてすでに琉球列島から報告しているが、原記載以来、本種についての詳細な報告はなされていない。したがって、本報告では *P. nakaharae* と *P. cephalotaenia* の再記載を行ない、日本産タナバタウオ属5種についての検索表を作製した。

また、これら5種の和名については以下のとおりとした。*P. nakaharae* ナカハラタナバタウオ、*P. cephalotaenia* ヨサクタナバタウオ (新称)、*P. corallicola* ドンコタナバタウオ (新称)、*P. coeruleolineatus* RÜPPELL, 1835 タナバタウオ、*P. oxycephalus* BLEEKER, 1855 オキナワタナバタウオ。従来、*P. corallicola* にナカハラタナバタウオという和名があげられていたが、この和名は田中 (1917) が *P. nakaharae* に対して与えたものであるため、*P. corallicola* には新称を提唱した。

Japanese plesiopid fishes of the genus *Plesiops* have been recognized as consisting of the following three species: *P. coeruleolineatus* RÜPPELL, 1835, *P.*

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Manuscript received September 30, 1984. Contribution from the Yokosuka City Museum, No. 321.

oxycephalus BLEEKER, 1855 and *P. corallicola* BLEEKER, 1853 (AOYAGI, 1941; INGER, 1955). In INGER's (1955) revisional work on the genus, he regarded *P. nakaharae* originally described by TANAKA (1917) on the basis of a single specimen from central Japan as a junior synonym of *P. corallicola*. Recently we had an opportunity to compare the holotype and additional specimens of *P. nakaharae* with several specimens identified as *P. corallicola* by INGER (1955), and found that the former is separable from the latter by morphological and body color features. In addition to this knowledge, ten specimens of *P. cephalotaenia* INGER, 1955 were collected from coral reefs in the Ryukyu Islands, southern Japan.

Because of the scanty information on these two plesiopids since their original descriptions, we redescribe them in detail in the present study. A key to the Japanese species of the genus is also given.

Methods

Counting and measuring procedures followed those used by INGER (1955) and HUBBS and LAGLER (1958). Vertebrae, predorsal bones and vertical fin rays were counted on X-ray photographs.

Abbreviations for depositories of the specimens examined are; FUMT: Department of Fisheries, University Museum, University of Tokyo; FSKU: School of Fishery Sciences, Kitasato University; IORD: Institute of Oceanic Research and Development, Tokai University; USNM: U. S. National Museum of Natural History; YCM: Yokosuka City Museum; ZUMT: Department of Zoology, University Museum, University of Tokyo.

Plesiops nakaharae TANAKA, 1917

(Japanese name: nakahara-tanabatauo)

(Plate 6a, b)

Plesiops nakaharae TANAKA, 1917: 199 (type locality: Shima or Kii, central Japan).

Pharopteryx nakaharae: TANAKA, 1918: 497, pl. 137, fig. 383.

Material examined: ZUMT 8128, holotype, 103.3 mm SL (standard length), Shima or Kii, date uncertain; ZUMT 18923, 1 specimen, 102.6 mm SL, Okinoshima, Kochi Pref., date uncertain; ZUMT 42795, 1 specimen, 73.0 mm SL, Hachijo I., Izu Is., Sep., 1922; YCM-P 12278, 1 specimen, 79.6 mm SL, Futo, Izu Peninsula, Shizuoka Pref., Aug. 4, 1983; IORD 80-167, 80-168, 2 specimens, 110.0, 103.4 mm SL, Futo, 1980; FSKU 74071201, 1 specimen, 82.0 mm SL, Hachijo I., July 12, 1974; FUMT-P 1516, 3423, 2 specimens, 99.0, 96.2 mm SL, Nanchikatsuura, Wakayama Pref., date uncertain.

Diagnosis: Dorsal spines XII; pectoral rays 21 or 22; tubulated scales

on upper lateral line 19–23, mostly 20; tubulated scales on lower lateral line 12 or 13, mostly 13; mid-lateral scales 23; scales below upper lateral line 10 or 11; total gill rakers on first arch 13–16; four lowest pectoral rays with six or more branches each, usually eight branches; maxillary not or rarely reaching below posterior margin of eye; opercle without dark ocellus; about four small black spots along posterior border of preopercle; caudal fin black with a narrow white margin; standard length of adults usually beyond 90 mm.

Description: Proportional measurements are shown in Table 1. The following counts and description are based on the holotype. Characters for the non-type material differing from the holotype are given in parentheses.

Dorsal fin rays XII, 7; anal fin rays III, 8; pectoral fin rays 21 (21 or 22, mostly 22); pelvic fin rays I, 4; tubulated scales on upper lateral line 19 (19–23, mostly 20); tubulated scales on lower lateral line 13 (12 or 13, mostly 13); mid-lateral scales 23; scales above upper lateral line 3 (3 or 4, mostly 4); scales below upper lateral line 10 (10 or 11); gill rakers on first arch 6 (5–7)+8 (7–10), total 14 (13–16); vertebrae 10+15 (14 or 15, mostly 15); predorsal bones 2.

Body oblong, compressed; predorsal profile convex, rising gradually from snout, feebly concave before nape. Snout bluntly pointed, short, nearly equal to eye diameter. Mouth large, terminal, somewhat oblique; lower jaw slightly projecting than the upper. Maxillary slightly extending beyond posterior margin of pupil and rarely reaching just below posterior margin of eye. Both jaws with broad bands of villiform teeth. Vomer and palatine with patches of villiform teeth. Tongue smooth. Nostrils close-set in front of eye; the posterior elliptical; the anterior tubulated, with a prolonged flap posteriorly. Margins of opercular bones entire. Skin along preopercular margin fimbriate resembling serrations. Pseudobranchiae present.

Origin of dorsal fin above pectoral fin base or posterior tip of opercular margin; base of the spinous portion about 2.8 (2.5–2.7) times length of the soft portion; the spines (1st–12th) gradually increasing in length posteriorly; membrane of the spinous portion extending beyond tips of the spines, deeply notched between the spines; each notch before the second to sixth or eighth spines reaching near base of the spine, other notches gradually decreasing in depth to the last spine in the non-type specimens (in the holotype the membrane broken); soft dorsal fin pointed posteriorly; the fifth ray longest, extending beyond caudal fin base. Anal fin similar to the dorsal in shape; origin of the anal opposite tenth dorsal spine; the third spine longest; the sixth ray longest, subequal to the longest dorsal ray, extending beyond caudal fin base. Pectoral fin rounded, reaching below base of about ninth dorsal spine; the lowest four rays with eight or nine (six to eight) branches each (Fig. 1a); the next seven rays above with eight to fourteen branches each. Pelvic fin inserted before pectoral

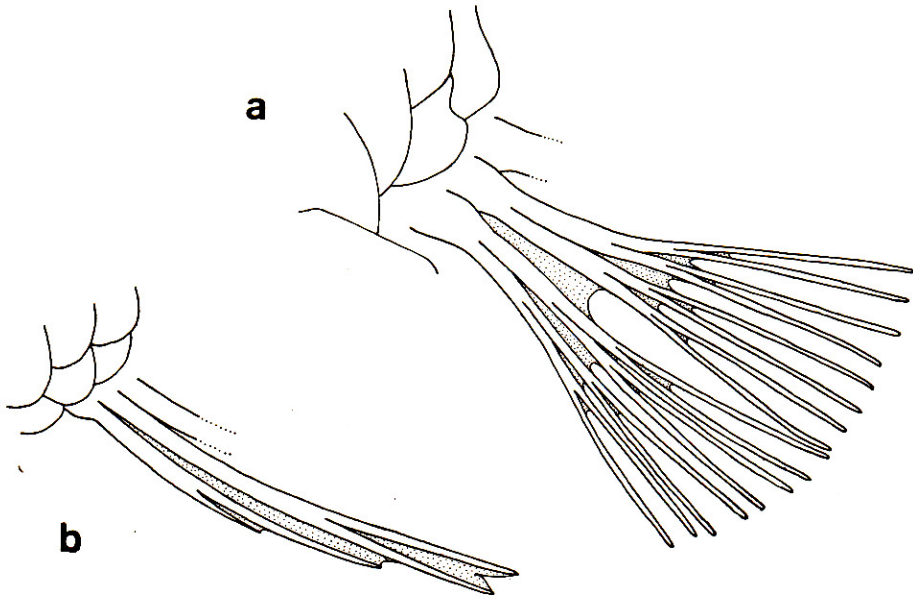


Fig. 1. Two lowest pectoral rays of *P. nakaharae* (a) and *P. cephalotaenia* (b).

fin base; the first ray thickened, elongated, reaching at least anal fin origin; three inner rays not thickened. Caudal fin rounded.

Body scales cycloid anteriorly, ctenoid posteriorly. Head naked except for nape, cheek, opercle, subopercle and interopercle; cheek with four rarely five rows of cycloid scales; opercle with about six large cycloid scales. Anal and posterior half of dorsal fins with basal sheath of cycloid scales. Pectoral and caudal fins with cycloid and ctenoid scales near their bases, respectively. Pelvic fin without scales. Lateral line interrupted; the upper running close to the dorsal fin base and ending just below last dorsal ray; the lower running along middle of body from below base of about second-from-last dorsal spine to caudal fin base.

Color: *in alcohol.* Head and body dark brown. Almost all scales on body with dark marginal area and an indistinct basal dark spot. About four small black spots along posterior border of preopercle; similar black spots on opercle, subopercle, interopercle, angular and posterior half of upper jaw. No dark ocellus on opercle. Post-orbital part of head with three squarish black bars; one at upper posterior corner, the second at just below center of posterior border and the third at lower posterior corner of eye, none of these reaching preopercle. Lower part of gill membrane blackish. Vertical fins dark brown or blackish with a narrow white margin. Pectoral and pelvic fins dark brown.

Distribution: This species is known only from the Pacific coast of central Japan, from the Izu Islands to Kochi.

Remarks: INGER (1955) included *P. nakaharae* in the junior synonym of *P. corallicola* on the basis of their body size, coloration and counts such as gill rakers, lateral-line scales and dorsal fin rays. When *P. nakaharae* is compared with USNM specimens identified as *P. corallicola* by him, however, the former is distinguishable from the latter in having the following characters: opercle without dark ocellus which is an important diagnostic character of the latter; maxillary not or rarely reaching below posterior margin of eye (extending beyond there in the latter); about four small black spots along posterior border of preopercle (absent in the latter).

P. nakaharae is similar to *P. nigricans* RÜPPELL, 1828 and *P. multisquamata* INGER, 1955, the latter both of which are distributed in the Red Sea and Natal, South Africa respectively, in several morphological characters and body coloration and size (see INGER, 1955). According to diagnoses and descriptions of the latter two species by INGER (1955), however, *P. nakaharae* is distinguishable from them by the combination of several counts. Namely, it is separable from *P. nigricans* by fewer tubulated scales on lower lateral line (12 or 13 vs. 14 to 17), more numerous scales below upper lateral line (10 or 11 vs. 8 or 9), fewer total gill rakers on first arch (13 to 16 vs. 18 or 19) and fewer scale rows on cheek (4 or 5 vs. about 7). *P. nakaharae* is also separated from *P. multisquamata* by the following counts: tubulated scales on upper lateral line (19 to 23 vs. 25 to 30); mid-lateral scales (23 vs. 28 to 34); scales above upper lateral line (3 or 4 vs. 5); total gill rakers on first arch (13 to 16 vs. 16 to 19).

***Plesiops cephalotaenia* INGER, 1955**

(New Japanese name: yosaku-tanabatauo)

(Plate 6c)

Plesiops cephalotaenia INGER, 1955: 272, fig. 4 (type locality: Sitankai, Sulu Archipelago, Philippine Islands).

Plesiops corallicola (non BLEEKER): MASUDA *et al.*, 1975: 53 fig. C, 224.

Material examined: IORD 76-439, 1 specimen, 41.0 mm SL, Amitori Bay, Iriomote I., Ryukyu Is., Apr. 17, 1976; IORD 83-231 to 83-233, 4 specimens, 32.2-46.8 mm SL, Amitori Bay, Aug. 8, 1983; IORD 83-253, 1 specimen, 43.3 mm SL, Amitori Bay, Aug. 9, 1983; FSKU 70052001, 1 specimen, 42.0 mm SL, Seragaki, Okinawa I., Ryukyu Is., May 20, 1970; FSKU 71071901, 1 specimen, 57.0 mm SL, Arakawa, Ishigaki I., Ryukyu Is., July 19, 1971; FSKU 71080701, 1 specimen, 54.0 mm SL, Kabira Bay, Ishigaki I., Aug. 7, 1971; FUMT-P 4879, 1 specimen, 46.2 mm SL, Minatogawa, Okinawa I., Apr., 1980.

Diagnosis: This diagnosis is based on both type (INGER, 1955) and Japanese specimens. Dorsal spines XII; pectoral fin rays 18-20; tubulated scales on upper lateral line 17-21; tubulated scales on lower lateral line 6-12; mid-lateral

scales 21-25; two lowest pectoral rays with two branches each, rarely unbranched; middle post-orbital black stripe continuous from just below center of posterior border of eye to end of opercle, but no opercular ocellus; caudal fin dark, without crescentic, light band; standard length under 70 mm.

Description: Proportional measurements are shown in Table 1.

Dorsal fin rays XII, 7 or 8, mostly XII, 7; anal fin rays III, 8-10, mostly III, 8; pectoral fin rays 19 or 20; pelvic fin rays I, 4; tubulated scales on upper lateral line 19, rarely 20; tubulated scales on lower lateral line 10 or 11, mostly 11; mid-lateral scales 23 or 24; scales above upper lateral line 3, rarely 4; scales below upper lateral line 9, rarely 10; gill rakers on first arch 5 or 6+7-10, total 12-15; vertebrae 10+15; predorsal bones 2.

Body oval, compressed; predorsal profile slightly convex. Snout bluntly pointed, shorter than eye diameter. Mouth large, terminal, somewhat oblique. Maxillary reaching below posterior margin of eye. Both jaws with villiform teeth in bands, the outer series somewhat enlarged, rather conical. Vomer and palatine with patches of villiform teeth. Tongue smooth. Nostrils close-set in front of eye; the posterior elliptical; the anterior tubulated. Margins of opercular bones entire. Pseudobranchiae present.

Origin of dorsal fin above pectoral fin base or posterior tip of opercular margin; the spines (1st-12th) gradually increasing in length posteriorly; membrane of the spinous portion extending beyond tips of the spines, notched between the spines; each notch before the second to eighth spines reaching about halfway to base of the spine, other notches gradually decreasing in depth to the last spine; soft dorsal fin bluntly pointed posteriorly; the fourth and/or fifth rays longest, extending beyond caudal fin base. Origin of anal fin opposite tenth dorsal spine; the third spine longest; the fifth and/or sixth rays longest, extending beyond caudal fin base. Pectoral fin rounded, reaching below base of tenth or eleventh dorsal spine; the lowest four rays with two branches each, rarely unbranched (Fig. 1b); the next four rays above with two to four branches each. Pelvic fin inserted before pectoral fin base; the first ray thickened, elongated, reaching at least beyond anal fin origin; three inner rays not thickened. Caudal fin rounded.

Scales above upper lateral line cycloid; scales around pectoral fin base and on breast cycloid; all other body scales ctenoid. Head naked except for nape, cheek, opercle, subopercle and interopercle; cheek with four rows of cycloid scales; opercle with about six large cycloid scales. Dorsal and anal fins with basal sheath of cycloid scales. Pectoral and caudal fins with cycloid and ctenoid scales near their bases, respectively. Pelvic fin without scales. Lateral line interrupted; the upper running close to the dorsal fin base and ending just below last dorsal ray; the lower running along middle of body from below base of about first dorsal ray to caudal fin base.

Color: *in alcohol.* Head and body dark brown or black. Body with about eight or nine obscure dark longitudinal stripes. Post-orbital part of head with three black stripes; one from upper posterior corner of eye, reaching near upper border of opercle; the second stripe usually continuous from just below center of posterior border of eye to end of opercle; the third stripe continuous from lower posterior corner of eye to near preopercular angle. Gill membrane blackish. All fins dark brown or blackish; spinous dorsal fin with a slightly wider obscure dusky band and a white margin; pelvic fin with small dark spots; caudal fin sometimes with a very narrow white margin.

Distribution: This species is known from eastern Borneo and New Guinea, throughout the Philippine Islands to the Ryukyu Islands.

Remarks: The morphology of the Japanese specimens agrees well with the paratypes (Tables 1, 2) and original description of *P. cephalotaenia* (INGER, 1955). *P. corallicola* previously recorded from the Ryukyu Islands by MASUDA *et al.* (1975) with a color photograph and brief species account is misidentification of *P. cephalotaenia*.

A key to species of Japanese *Plesiops*

(modified from INGER (1955))

- A1: Dorsal spines XI; total gill rakers usually 12 or fewer
 *P. coeruleolineatus* (Plate 7a)
 (Japanese name: tanabatauo)
- A2: Dorsal spines XII; total gill rakers usually more than 12 B
- B1: Four lowest pectoral rays with more than two branches each, usually
 with four or more branches (see Fig. 1a) C
- B2: Four lowest pectoral rays with two branches each, rarely unbranched
 (see Fig. 1b) D
- C1: Opercle with a dark ocellus; maxillary extending beyond posterior
 margin of eye; no small black spots along posterior border of pre-
 opercle **P. corallicola* (Plate 7b)
 (New Japanese name: donko-tanabatauo)
- *According to SCHULTZ (1943: 111) and INGER (1955: 266), *Pseudochromichthys riukianus* originally described by SCHMIDT (1931) from Itoman, Okinawa Island, is a junior synonym of *P. corallicola*.
- C2: No dark ocellus on opercle; maxillary not or rarely reaching below
 posterior margin of eye; about four small black spots along posterior
 border of preopercle *P. nakaharae* (Plate 6a,b)
 (Japanese name: nakahara-tanabatauo)
- D1: Caudal fin with a broad, crescentic pale band; no post-orbital black
 bars crossing preopercle; body usually scattered with small black
 spots, but no obscure dark longitudinal stripes

Table 1. Proportional measurements of *Plesioptys nakaharuae* and *P. cephalotoaenia*.

Characters	<i>P. nakaharuae</i>				<i>P. cephalotoaenia</i>					
	Holotype	Non-type specimens			Japanese specimens			*Paratypes		
	ZUMT8128	Range	Mean	N	Range	Mean	N	Range	Mean	N
Standard length in mm	103.3	73.0-110.0	93.2	8	32.2-57.0	44.0	10	35.2-52.7	42.6	4
Measurements in standard length										
Head length	2.79	2.60-2.82	2.70	8	2.34-2.56	2.46	10	2.51-2.62	2.54	4
Body depth	3.18	2.85-3.54	3.21	7	2.71-3.10	2.89	10	2.64-2.90	2.77	2
Caudal peduncle length	5.49	5.21-5.86	5.59	8	5.41-5.94	5.75	10	5.49-5.87	5.68	4
Caudal peduncle depth	6.54	6.11-6.98	6.46	8	6.44-7.00	6.72	10	6.52-6.76	6.61	4
Length of dorsal fin base	2.00	1.81-1.94	1.87	8	1.75-1.96	1.86	10	1.76-1.88	1.81	4
Length of anal fin base	5.17	4.64-5.46	5.13	8	4.56-5.18	4.89	10	4.50-5.03	4.75	4
Snout to origin of dorsal fin base	2.83	2.70-2.89	2.79	8	2.45-2.60	2.50	9	2.50-2.64	2.57	4
Snout to origin of anal fin base	1.46	1.41-1.55	1.48	8	1.44-1.56	1.52	9	1.47-1.57	1.52	4
Snout to pectoral insertion	2.72	2.56-2.75	2.68	8	2.40-2.55	2.48	10	2.47-2.61	2.54	4
Snout to pelvic insertion	2.87	2.68-2.90	2.81	8	2.46-2.83	2.72	9	2.71-2.85	2.79	3
Length of pectoral fin	4.05	3.81-4.29	4.06	6	3.37-3.68	3.54	9	3.10-3.38	3.27	3
Length of pelvic fin	broken	2.60-3.04	2.76	7	1.91-2.34	2.09	6	1.82-2.21	2.03	3
Measurements in head length										
Snout length	4.63	4.61-4.92	4.77	8	4.35-5.10	4.79	10	4.67-5.15	4.95	4
Eye diameter	4.87	4.43-5.03	4.77	8	3.42-4.00	3.79	10	3.50-3.61	3.56	4
Interorbital space	5.44	5.00-6.42	5.67	7	7.65-8.80	8.29	10	7.78-8.78	8.45	4
Upper jaw length	2.11	1.99-2.13	2.09	8	1.91-2.19	2.08	10	1.98-2.15	2.04	4
Length of longest dorsal spine	broken	2.42-3.00	2.62	8	2.06-2.30	2.15	10	1.94-2.05	2.01	4
Length of longest dorsal ray	1.48	1.52-1.80	1.65	7	1.47-1.72	1.59	9	1.47-1.59	1.53	4
Length of third anal spine	3.25	2.85-3.46	3.21	8	2.28-2.59	2.45	10	2.24-2.55	2.33	4
Length of longest anal ray	1.39	1.51-1.75	1.65	6	1.36-1.59	1.50	8	1.34-1.48	1.39	3

* Specimens examined are listed as comparative material at the end of this paper.

..... ***P. oxycephalus* (Plate 7c)
(Japanese name: okinawa-tanabatau)

**Although AOYAGI (1941) separated this species into two subspecies, *P. oxycephalus oxycephalus* and *P. oxycephalus okinawaensis*, by the differences in color of opercle and pelvic fin, we regard these differences as only an intraspecific variation.

D2: Caudal fin black, sometimes with a very narrow white margin; middle post-orbital bar crossing preopercle; body with about eight or nine obscure dark longitudinal stripes, but no black spots

..... *P. cephalotaenia* (Plate 6c)
(New Japanese name: yosaku-tanabatau)

Table 2. Frequency distribution of selected counts of Japanese specimens and paratypes of *Plesiops cephalotaenia*.

Material	Dorsal fin rays			Anal fin rays			Pectoral fin rays			
	XII	7	8	III	8	9	10	18	19	20
Japanese specimens	10	9	1	10	8	1	1		5	5
Paratypes	4	4		4	3	1		1	3	

Material	Tubulated scales on upper lateral line		Tubulated scales on lower lateral line				Mid-lateral scales	
	19	20	8	9	10	11	23	24
Japanese specimens	7	3			1	7	6	3
Paratypes	4		1	1	2		2	2

Material	Gill rakers on first arch									
	Upper limb		Lower limb				Total			
	5	6	7	8	9	10	12	13	14	15
Japanese specimens	9	1	3	3	3	1	3	3	2	2
Paratypes	3	1		4				3	1	

Comparative material: *P. cephalotaenia*: USNM 146466, paratypes, 4 specimens, 35.2–52.7 mm SL, Masbate, Cataingan Bay, Philippines, Apr. 18, 1908.

P. coeruleolineatus: YCM-P 2915-1, 1 specimen, 47.2 mm SL, Taketomi I., Ryukyu Is., May, 1976; YCM-P 2697, 1 specimen, 44.0 mm SL, Kabira Bay, Ishigaki I., Ryukyu Is., April or May, 1976; IORD 83-229, 1 specimen, 47.0 mm SL, Amitori Bay, Iriomote I., Ryukyu Is., Aug. 8, 1983; FSKU 58071501-58071504, 4 specimens, 51.0–68.0 mm SL, Tokunoshima, Kagoshima Pref., July 15, 1958; FSKU 72060001, 1 specimen, Susami, Wakayama Pref., June, 1972; FSKU

73101303, 1 specimen, 40.2 mm SL, Kabira Bay, Oct. 13, 1973; FSKU 79092703-79092705, 79092709, 4 specimens, 46.0-63.0 mm SL, Kamiyaku, Yaku I., Kagoshima Pref., Sep. 27, 1979; FUMT-P 3859, 1 specimen, 50.8 mm SL, Shionomisaki, Wakayama Pref., Aug. 12, 1982; FUMT-P 4044, 3 specimens, 44.3-48.3 mm SL, Minatogawa, Okinawa I., Ryukyu Is., Aug.-Sep., 1979; ZUMT 54367, type specimen of *P. semeion* TANAKA, 1 specimen, 58.5 mm SL, Tanabe, Wakayama Pref., date uncertain; ZUMT 54386, 1 specimen, 48.5 mm SL, Manazuru Peninsula, Kanagawa Pref., Sep. 8, 1959; USNM 132757, 1 specimen, 57.7 mm SL, Kin Bay, Okinawa I., Sep. 1, 1945.

P. corallicola: IORD 76-199, 1 specimen, 144.0 mm SL, Amitori Bay, Feb. 17, 1976; USNM 115390, 5 specimens, 82.0-92.0 mm SL, Hull I., Phoenix Is., July 8-12, 1939; USNM 139856, 3 specimens, 54.3-89.2 mm SL, Rota, Mariana Is., Nov. 11, 1945; USNM 140712, 4 specimens, 64.0-107.8 mm SL, Bikini Atoll, Marshall Is., July 18, 1947; USNM 146468, 2 specimens, 51.3, 60.7 mm SL, Mindoro, Philippine Is., Dec. 12-13, 1908; USNM 154389, 4 specimens, 53.5-90.0 mm SL, Yap, Caroline Is., Sep. 5-11, 1949.

P. oxycephalus: YCM-P 12981, probably type specimens of *P. oxycephalus okinawaensis*, 5 specimens, 46.0-79.0 mm SL, Okinawa I., July, 1939; IORD 76-774, 1 specimen, 53.5 mm SL, Amitori Bay, Aug. 24, 1976; FSKU 71071902, 71071904, 2 specimens, 72.0, 55.0 mm SL, Arakawa, Ishigaki I., July 19, 1971; FUMT-P 4332, 4 specimens, 50.6-68.0 mm SL, Minatogawa, Apr., 1980.

Acknowledgments

We wish to express our gratitude to the followings: Yoshiaki TOMINAGA and Kenji MOCHIZUKI of the University Museum, University of Tokyo, for the examination of the specimens; Robert H. GIBBS, Jr., Susan L. JEWETT and Lynn P. NORROD of the U. S. National Museum of Natural History for loaning the specimens; Hiroyuki YOKOCHI, Akihiro ISHIMARU and Hiroyoshi KOHNO of the Iriomote Marine Research Station, Tokai University; Hajime MASUDA and Takashi ONO of the Diving Laboratory of Tokai University for assistance in obtaining specimens; Hitoshi IDA of the School of Fishery Sciences, Kitasato University, for suggestions and critical reading of the manuscript; Reiko FUSEJIMA for rephrasing the English; Masahiro AIZAWA of the University Museum, University of Tokyo, and Toshiko AOYAGI for giving information on material of plesiopids.

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Explanation of plates 6-7

Plate 6

Two species of *Plesiops* from Japan.

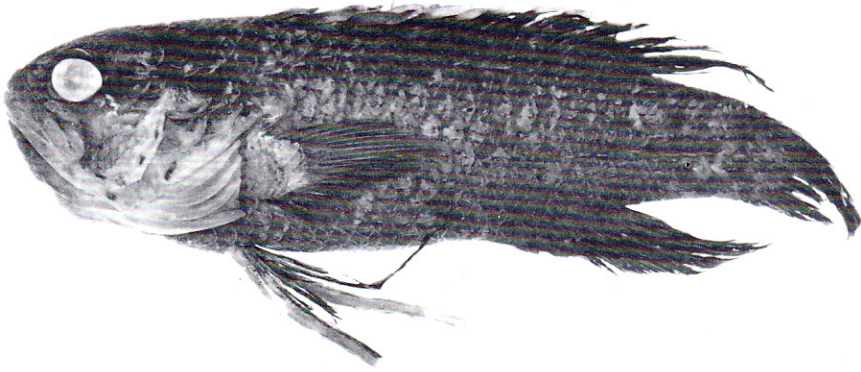
- a. *Plesiops nakaharae*, holotype, ZUMT 8128, 103.3 mm SL
- b. *Plesiops nakaharae*, IORD 80-168, 103.4 mm SL
- c. *Plesiops cephalotaenia*, IORD 76-439, 41.0 mm SL

Plate 7

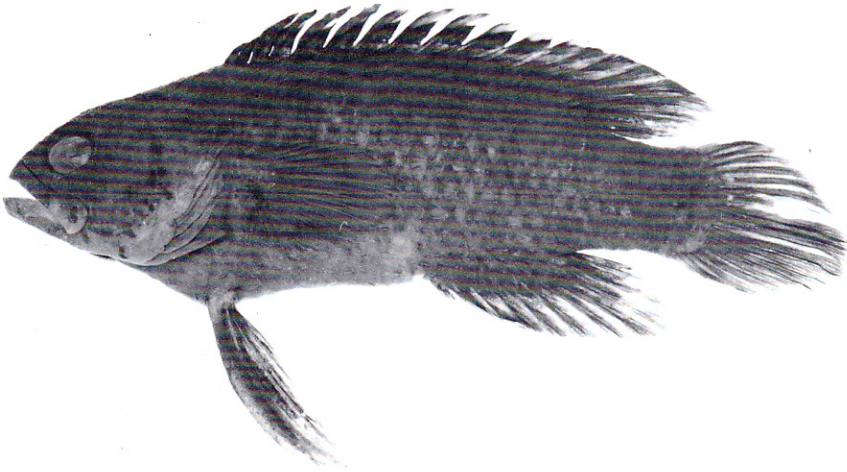
Three species of *Plesiops* from Japan.

- a. *Plesiops coeruleolineatus*, FSKU 79092705, 56.0 mm SL
- b. *Plesiops corallicola*, IORD 76-199, 144.0 mm SL
- c. *Plesiops oxycephalus*, FUMT-P 4332-9, 50.6 mm SL

a



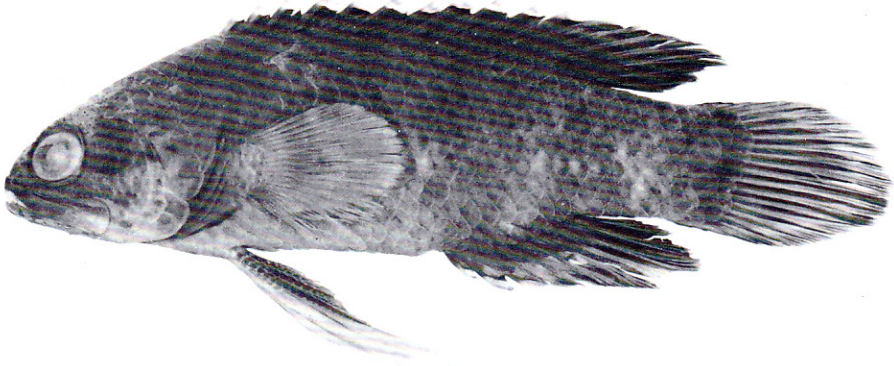
b



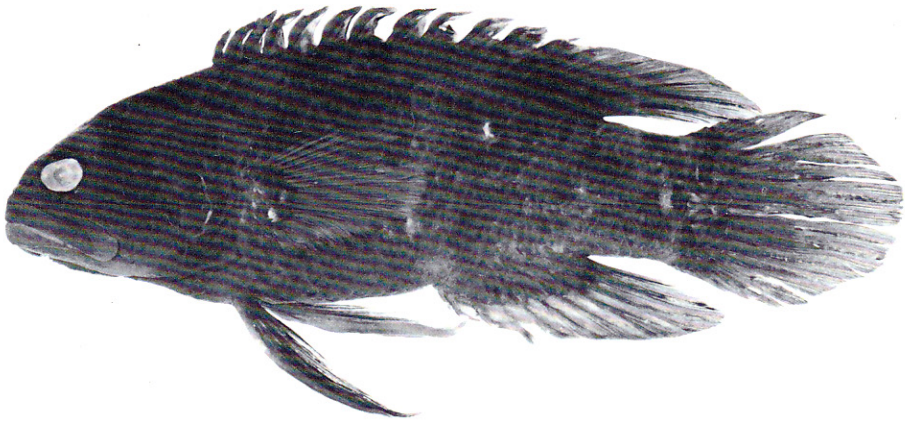
c



a



b



c

