

**Occurrence of the Percichthyid Fish
Neoscombrops pacificus
near Samoa**

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(Received September 10, 1981)

Neoscombrops Gilchrist (1922), presently containing two species, has been provisionally allocated to the Percichthyidae. Studies on taxonomy and relationships among primitive percoid fishes are presently underway by the second author and have led to the description of the second species of *Neoscombrops*, *N. pacificus*, by Mochizuki (1979) based on six specimens from Japan. Its companion species, *N. annectens* Gilchrist (1922) is known only from about ten specimens taken in tropically influenced waters of the southwestern Indian

Ocean near the coast of Africa in the region of Natal and Mozambique.

The recent acquisition of three additional specimens of *Neoscombrops* from the Samoan Islands region, remote from both Japanese and South African waters, has prompted us to investigate their taxonomic status. In spite of some nuances between the Samoan *Neoscombrops* specimens and *N. pacificus* from Japan, we have concluded that they are conspecific thus bringing to nine the total known specimens of this rarely collected fish.

Neoscombrops pacificus Mochizuki
(Fig. 1)

Neoscombrops pacificus Mochizuki, 1979: 247~252, fig. 1A (Type locality, Aogashima Island and Okinawa Island).

Neoscombrops annectens: Mochizuki, 1973: 207~

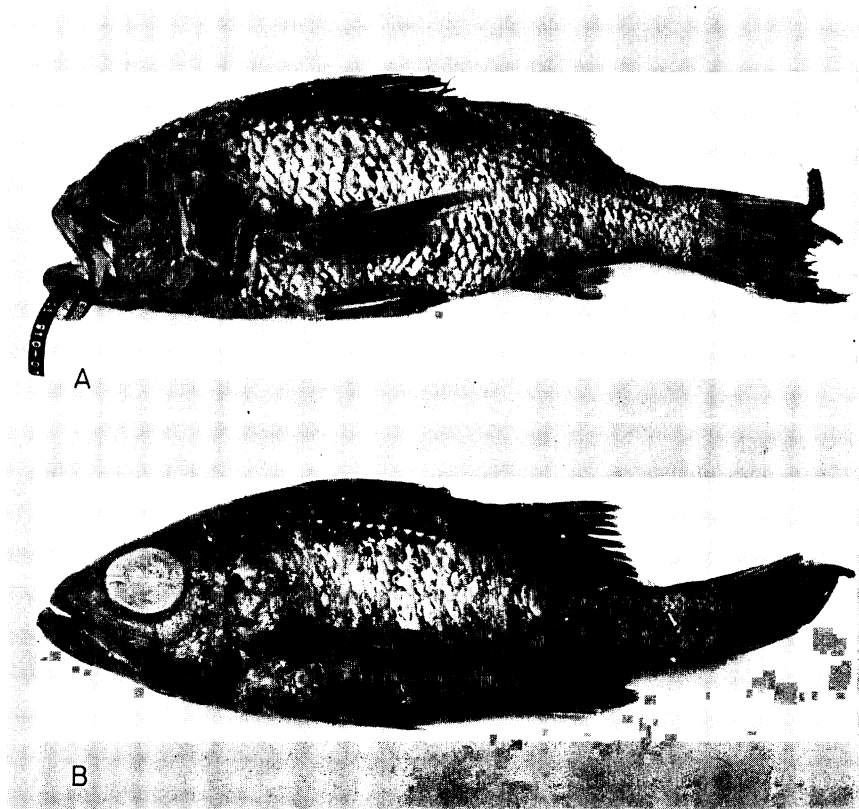


Fig. 1. *Neoscombrops pacificus* from Samoa. A: USNM 220883, 332 mm SL. B: NMFS REF P-0149, 312 mm SL, female.

210, fig. 1 (Aogashima I.); Masuda et al., 1975: 209, fig. 41-F (Okinawa).

Materials. BPBM (Bishop Museum, Honolulu, Hawaii) 27767, 330 mm SL, American Samoa, Tutuila Island off Leone, 140 m depth, handline, 13 August 1981, R. C. Wass (from fisherman). NMFS (National Marine Fisheries Service, Honolulu, Hawaii) REF P-0149, female, 312 mm SL, caught at 14°21'S, 170°42'W (south of Samoan Islands) between 90 and 275 m

depth by drifting hook and line at 18: 15~20: 12, 22 September 1979, R/V Townsend Cromwell cruise 79~04. USNM (U.S. National Museum of Natural History) 220883, 332 mm SL, caught off Taema Bank 16~19 km south of Tutuila Island, American Samoa, between 60 and 90 m depth by squid-baited handline at night, 12 June 1978, W. C. and L. B. Starnes (Pago Pago fish market).

Description. Counts and proportional

Table 1. Counts and proportional measurements of *Neoscombrops pacificus* from Samoa and Japan.

Characters	USNM 220883	NMFS REF P-0149	BPBM 27767	Holotype ¹⁾	Paratypes (5) ¹⁾
Standard length in mm	332	312	330	312	205~339
Counts					
Dorsal fin rays	IX-1, 10	IX-1, 10	IX-1, 10	IX-1, 10	IX-1, 10
Anal fin rays	I, 6 ²⁾	III, 7	III, 7	III, 7	III, 7
Pectoral fin rays	15	15	15	15	15
Pelvic fin rays	I, 5	I, 5	I, 5	I, 5	I, 5
Branched caudal fin rays	8+7	8+7	8+7	8+7	8+7
Lateral line scales ³⁾	49+5	47+6	51+4	50+4	49~51+4~5=54~56
Transverse scales	5/12	5/12	5/12	5/ca. 12	5/11~ca. 13
Gill rakers (upper+middle+lower)	5+1+14	4+1+13	5+1+13	6+1+15	5~8+1+14~15
Vertebrae	10+15	10+15	10+15	10+15	10+15
Predorsal bones	3	3	3	3	3
Branchiostegals	7	7	7	7	7
Canines on lower jaw (left/right)	22/20	22/23	19/22	19/18	19~22/16~21
Measurements in standard length					
Head length	2.55	2.44	2.53	2.84	2.60~2.78
Body depth	2.96	2.78	2.89	2.69	2.59~3.25
Body width	5.62	5.57	5.40	5.29	5.14~6.68
Snout length	10.71	9.18	10.31	9.75	9.26~9.76
Eye diameter	8.51	7.80	8.45	9.75	7.58~10.10
Interorbital space	11.45	11.14	11.37	10.40	9.78~12.06
Upper jaw length	5.27	5.29	5.59	6.12	5.37~5.95
Caudal peduncle depth	8.10	7.80	8.39	8.67	7.89~8.48
Snout to origin of dorsal fin base	2.32	2.31	2.46	2.44	2.29~2.51
Snout to end of dorsal fin base	1.19	1.18	1.20	1.25	1.21~1.25
Snout to origin of anal fin base	1.48	1.34	1.33	1.41	1.31~1.44
Snout to end of anal fin base	1.21	1.20	1.22	1.24	1.19~1.25
Snout to pectoral insertion	2.57	2.69	2.76	2.86	2.69~2.98
Snout to pelvic insertion	2.26	2.42	2.51	2.54	2.28~2.61
Length of pectoral fin	2.91	2.86	2.68	3.22	2.98~3.19
Length of pelvic fin	—	4.52	4.78	5.29	4.64~5.40
Measurements in head length					
Snout length	3.61	3.76	3.78	3.43	3.45~3.75
Eye diameter	2.78	3.20	2.98	3.44	2.88~3.68
Measurements in eye diameter					
Third dorsal spine length	0.67	0.75	0.80	—	0.83
Third anal spine length	— ²⁾	—	0.91	0.70	0.78~0.94

¹⁾ From Mochizuki (1979); ²⁾ deformed; ³⁾ to hypural+on caudal fin.

measurements are given in Table 1. Aspects of morphology are evident in Fig. 1. The description corresponds generally to that given for Japanese specimens by Mochizuki (1979) except that the head length of Samoan specimens exceeds in all cases those of Japanese specimens and the preopercles have smooth margins, whereas Japanese specimens have weak serrations on the posteroventral margin of that bone. In light of the overall variation intrinsic in these fishes, we have concluded that these differences do not seem to be important.

Biological notes. NMFS specimen, a female, has well developed ovaries containing many white opaque eggs, 0.3~0.8 mm (mean 0.57) in diameter. All specimens for which the method of capture is known were taken on squid baits at depths of 60~500 m. All Samoan specimens were taken in the evening hours at relatively shallow depths (60~140 m).

Remarks. All specimens of *Neoscombrops pacificus* have been collected near islands at distances from continents in the Pacific Ocean (i.e. Samoan Islands, Aogashima I., Okinawa), suggesting that it is widespread in the western Pacific Ocean with perhaps an anticontinental insular distribution. It is probably not uncommon on rocky slopes of islands and sea-mounts; it is obviously relatively common near Samoa. Its distributional relationship to *N. annectens* in the Indopacific is speculative with the dearth of material at hand.

Acknowledgments

We express deep thanks to Susan Jewett and Janet Gomon of USNM for X-ray and curation of specimens and to John Randall (BPBM) and Robert B. Moffitt (NMFS-Hawaii) for specimen loan. Lynn B. Starnes and Richard T. Bryant are thanked for field and photographic assistance respectively. The first author is

grateful to Mr. and Mrs. Peter Batty and Richard C. Wass for hospitalities extended while collecting in Samoa.

Literature cited

- Gilchrist, J. D. F. 1922. Deep-sea fishes procured by the S. S. "Pickle" (Part I). Rep. Fish. Mar. Biol. Surv. Union South Africa, 2, Spec. Rep., 3: 41~79, pls. vii~xii.
- Masuda, H., C. Araga and T. Yoshino. 1975. Coastal fishes of Southern Japan. Tokai Univ. Press, Tokyo, 379 pp, 151 figs.
- Mochizuki, K. 1973. The first record of the scombroid fish *Neoscombrops annectens* from Japan. Japan. J. Ichthyol., 20(4): 204~207, fig. 1.
- Mochizuki, K. 1979. A new percichthyid fish, *Neoscombrops pacificus*, from Japan, with a re-description of *N. annectens* from South Africa. Japan. J. Ichthyol. 26(3): 247~252, figs. 1~2.

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サモアからのバケムツの新記録

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サモア近海から釣り得られた3標本をもとに、バケムツ *Neoscombrops pacificus* を記録した。これは、日本近海（青ヶ島・沖繩島）以外での本種の初めての記録である。これらは日本産のものとは比べ、頭長が日本産のものの変異の範囲をややはずれており、さらに、前鰓蓋骨隅角部に微小鋸歯がない（日本産にはある）等の差異が認められた。しかし、これらの差異は重要なものではないと考え、日本産のものと同種であると判断した。日本産のものを含めた本種の採集地から、本種は、少なくとも西部太平洋域の外洋性の島又は海山に広く分布しているのではないかと推定した。

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