

First Record of the Neoscopelid Fish, *Scopelengys tristis* from Japan

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A single specimen of *Scopelengys tristis* Alcock, 1890 in the family Neoscopelidae of the order Myctophiformes was collected off the west coast of Kyushu Island, Japan, by the research vessel Kaiyo-maru, during the survey of the deepwater in the northeastern part of the East China Sea. This genus and species is hitherto unrecorded from adjacent waters around Japan.

The fish was captured on February 13, 1975, in the net no. T 111 which was lowered into sea at 2:48 pm at 30°38.4'N, 128°41.2'E and taken out of water at 3:10 pm, at 31°38.6'N, 128°40.3'E. The net was operated at the depth of 660 m for the distance of about 1.8 km at the speed of 3.5 knot. The water temperature at the surface was 19.8°C, and 6.18°C at the depth of 660 m. The salt concentration was 42‰ at the depth.

The fish was identified as *Scopelengys tristis* on the basis of following characters which agree with diagnosis of the species, and match well with descriptions of specimens by Alcock (1890), Garman (1899), Miller (1947), and Butler and Ahlstrom (1976).

The specimen has a large head and small eyes as in Fig. 1, and has no photophores. The dorsal fin originates above the insertion of the pelvic fin. The adipose fin is located above the posterior end of the anal fin. The width of the posterior end of the maxillary is greater than the diameter of the eye. It

has 8 branchiostegal rays, and its vomer has two oval patches of villiform teeth with the naked median line. It has no tooth patches on the pterygoids.

The dorsal fin has 11 rays (including a small anterior one); the anal fin has 14 rays (including 2 small anterior ones); the pectoral fin has 14 rays; the pelvic fin has 8 rays on both sides; the number of principal rays of the caudal fin is 10+9=19. Scales are lost and not countable. The first gill arches of both sides have 14 gill rakers (4+1+9). The number of vertebrae is 31.

Measurements (in mm) of body parts and their percentages in the standard length are as follows. The standard length 178 mm, head length 49.7 (27.9%), body depth 41.6 (23.4%), snout length 14.1 (7.9%) upper jaw length 26.4 (14.8%), eye diameter 6.6 (3.7%), inter-orbital width 9.4 (5.3%), depth of caudal peduncle 17.0 (9.6%), tip of snout to origin of dorsal fin 71.0 (39.9%), tip of snout to adipose fin 142.0 (79.8%) tip of snout to origin of anal fin 119.0 (66.9%), tip of snout to insertion of pectoral fin 46.0 (25.8%), tip of snout to insertion of pelvic fin 72.8 (40.9%), length of pectoral fin 48.5 (27.2%), length of dorsal fin base 34.8 (19.6%), length of anal fin base 36.8 (20.7%).

Scopelengys tristis has been known (Fig. 2) from Arabian Sea (Alcock, 1890; Norman, 1939; Kotthaus, 1967), the eastern Pacific from Santa Barbara, California to mid-Chile (Garman, 1899 as *S. disper*; Mead, 1963; Berry and Perkins, 1967; Bussing, 1965; Brawer, 1973; Brown, 1974; Fitch and Lavenberg, 1968), North of Madeira in the Atlantic



Fig. 1. A specimen of *Scopelengys tristis* Alcock taken off the western coast of Kyushu, Japan. Far Seas Fisheries Research Laboratory L948: female, 178 mm in standard length.

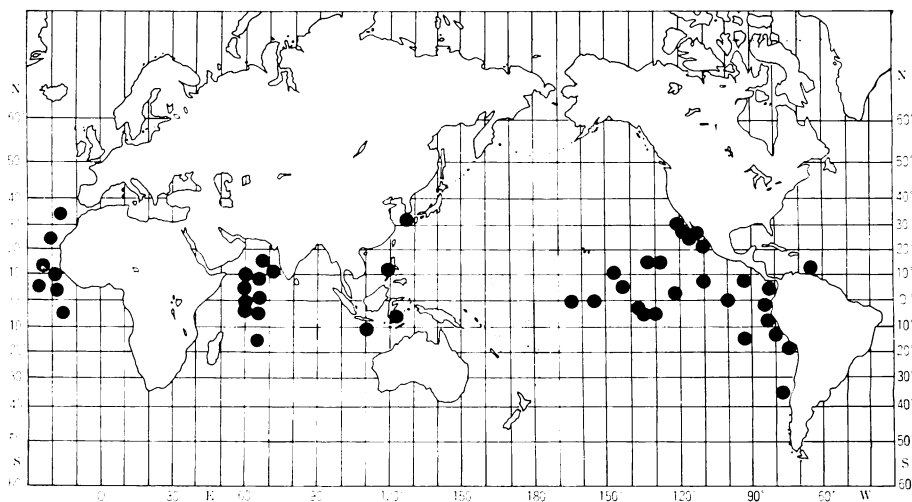


Fig. 2. Recorded localities for *Scopelengys tristis*.

Ocean (Nielsen, 1973), Java Trench off Indonesia (Mead, 1963), and now from Japan. Addition to these, Butler and Ahlstrom (1976) plotted following areas on their distribution map: Indian Ocean, Atlantic Ocean, eastern and middle Pacific Ocean, the Philippines, and Indonesia. They also described the second species for the genus, *Scopelengys clarki*, from the central Pacific.

With the addition of this species, following 4 species of the family Neoscopelidae are now known to be distributed around Japan.

- Neoscopelus macrolepidotus* Johnson, 1863
"sotooriiwashi"
- Neoscopelus microchir* Matsubara, 1943
"sangoiwashi"
- Neoscopelus porosus* Arai, 1969
"shichigoiwashi"
- Scopelengys tristis* Alcock, 1890
"kurogoiwashi"

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literature for the distribution of *Scopelengys tristis*.

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日本初記録のソトオリイワシ科魚類クロゴイワシ
(新称) について

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水産庁調査船開洋丸が 1975 年 2 月 13 日九州西方海域にて採集した深海性魚類の中に日本ならびに北太平洋西部から未記録のハダカイワシ目ソトオリイワシ科 Necoscopelidae のクロゴイワシ (新称) *Scopelengys tristis* Alcock, 1890 が 1 尾含まれていた。標本の標準体長は 178 mm で雌である。クロゴイワシはソトオリイワシ科の *Solivomer* に近縁で、発光器がなく体色は黒い (新和名は黒衣に由来する)。口は大きく眼は小さい。脂鱗は臀鱗の後端上方に位置する。歯は絨毛状で鋤骨歯群は左右に分離している。鰓条骨数は 8 本である。クロゴイワシはインド洋, 太平洋ならびに大西洋から報告されており, 世界の暖~熱帯の深海に棲息することが知られている。本種を加えると日本産ソトオリイワシ科魚類はソトオリイワシ, サンゴイワシ, シチゴイワシ, クロゴイワシの 4 種となる。

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