

Distribution of *Scombrolabrax heterolepis* Roule (Order Perciformes) in the Pacific and Indian Oceans

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Abstract The monotypic *Scombrolabrax heterolepis* has been reported from only 3 localities, all in the Atlantic Ocean. Here we report on 37 specimens of this species from at least 15 localities in the Indo-Pacific region. These localities are all in the tropics and within the latitudinal range of 21°N. and 11°S. These data suggest a circumglobal distribution for *Scombrolabrax*.

Scombrolabrax heterolepis (new Japanese name, Mukashi-kurotachi; Fig. 1) is a gempylid-like fish that "...could serve morphologically as an ancestral form for the trichiurids and, in most respects, for the Scombridae as well," (Gosline, 1968: 32). The species has been reported previously only from four locations in the Atlantic Ocean and Gulf of Mexico. Roule (1922) described the species on the basis of a 227 mm standard length (SL) specimen taken by fishermen in January 1915 south of Madeira (approximately lat. 32°N., long. 17°W.) at a depth of about 800–900 m. A second specimen (?278 mm

total length (TL)) was taken by fishermen in April 1952 off Cabo Finisterre, Spain (approximately lat. 43°N., long. 10°W.) at a depth of no more than 110 m (Arté, 1952). Grey (1960) described a 165 mm SL specimen taken in the Gulf of Mexico by the U. S. Fish and Wildlife Service research vessel "Oregon" on May 23, 1958 in a 12.5 m midwater trawl towed at 137–155 m. Gosline (1968) described the anatomy, including the osteology, of a 103 mm SL specimen (U. S. National Museum No. 187651) taken by the "Oregon" in the Gulf of Mexico.

About 25 other specimens that were taken

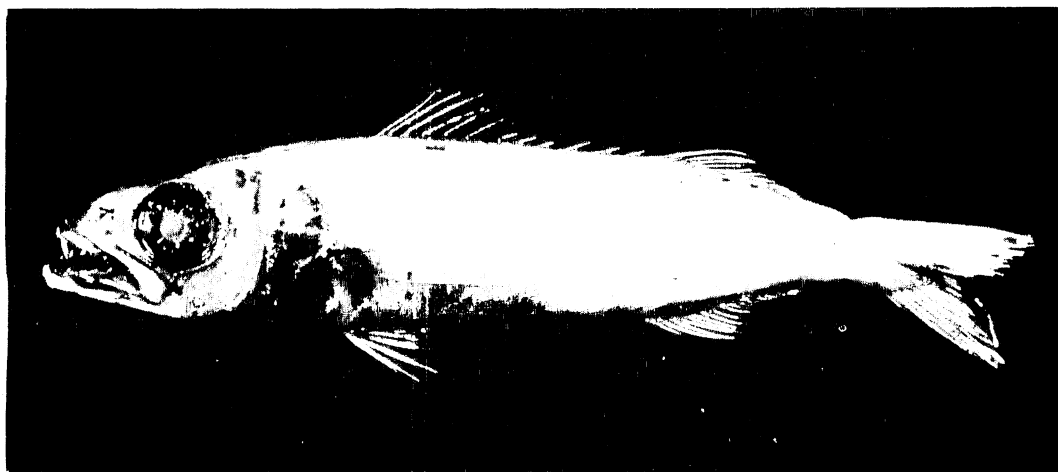


Fig. 1. *Scombrolabrax heterolepis*, 143 mm SL, caught southwest of Oahu, Hawaiian Islands, July 25, 1967. Bureau of Commercial Fisheries Laboratory, Honolulu, reference fish collection no. 2759.

by the "Oregon" in the Gulf of Mexico in the Mississippi delta region are deposited at the U. S. National Museum (U. S. National Museum Nos. 187648–187652), and there are perhaps additional specimens in other U. S. collections (personal communication, Bruce B. Collette, Bureau of Commercial Fisheries, Systematics Laboratory, U. S. National Museum). Thus, this species is not so rare as it was once thought to be. To our knowledge, however, no one has published an account of *Scombrolabrax* taken from the Pacific or Indian Oceans. The present paper draws attention to the existence of this species in the Indo-Pacific region, and suggests a circumglobal distribution for *Scombrolabrax*.

Table 1 presents data on the location of capture and the size of 37 *Scombrolabrax* taken in the Indo-Pacific region during the last two decades. These specimens are similar in morphology and meristics to the specimens

previously reported in the literature. Twenty-eight out of 37 specimens came from the stomachs of tunas and billfishes captured by longline fishing on cruises of vessels in connection with the Far Seas Fisheries Research Laboratory, Japan. The last specimen listed in Table 1 was caught in a 30.5 m headrope midwater trawl towed at a depth of 92–122 m., 56 km southwest of Oahu, Hawaiian Islands, where the depth to the bottom was about 3,700 m. The water temperature at trawling depths was 20.8°–21.5°C.

The records of collection of *Scombrolabrax* in the Indo-Pacific region are shown in figure 2. In the Indian Ocean, specimens have been collected only near lat. 10°S. In the Pacific Ocean, on the other hand, *Scombrolabrax* is known to exist in the large area bounded approximately by lat. 11°S. and 21°N., long. 132°W. and 140°E. It is very possible that additional collecting effort will considerably

Table 1. Specimens of *Scombrolabrax heterolepis* from the Indo-Pacific region.*

Date	Locality	Number of specimens	Predator or net**	Standard length (cm)	Ship
Early 1950's	Indo-Pacific	1	Unknown	23.0	Unknown
June 10, 1950	1°42'N., 153°16'E.	1	YF	7.3	Unknown
Jan. 12, 1953	9°39'S., 122°19'E.	3	Unknown	7.5–7.9	Niishio Maru
Feb. 13, 1953	2°14'S., 128°52'E.	1	YF	8.1	Kuroshio Maru
Feb. 4, 1956	9°14'S., 96°05'E.	1	BE	8.9	Keiten Maru
Feb. 10, 1956	9°12'S., 95°57'E.	1	YF	9.9	Keiten Maru
Feb. 10, 1956	9°12'S., 95°57'E.	1	BE	9.4	Keiten Maru
Feb. 10, 1956	9°12'S., 95°57'E.	3	BE	8.3–9.0	Keiten Maru
Feb. 11, 1956	9°42'S., 95°01'E.	2	BE	7.2–9.4	Keiten Maru
Feb. 13, 1956	9°29'S., 95°57'E.	3	BE	8.0–8.6	Keiten Maru
June–Aug. 1960	East Indian Ocean	2	Unknown	8.8–17.0	Tosakaiken Maru
June 11, 1961	3°33'N., 158°20'E.	2	BE	7.4–9.0	Chosui Maru
July 28, 1962	2°30'N., 145°15'E.	4	YF	4.2–10.0	Chosui Maru
Mar. 25, 1963	10°21'S., 76°59'E.	1	Unknown	Incomplete	Mito Maru
Nov. 28, 1963	11°41'N., 140°10'E.	4	YF	6.7–7.4	Shunyo Maru
Feb. 13, 1964	6°30'S., 131°40'W.	1	SB	9.0	Shoyo Maru
Oct. 6, 1966	11°00'S., 144°20'E.	4	BM	6.6–10.0	Genyo Maru
Nov.–Dec. 1966	13°–16°N., 158°–180°W.	1	Unknown	Unknown	Unknown
July 25, 1967	20°59'N., 158°34'W.	1***	Midwater trawl	14.3	Townsend Cromwell

* Specimens are deposited at the Far Seas Fisheries Research Laboratory, Shizuoka-ekn, Japan and at the U. S. Bureau of Commercial Fisheries Biological Laboratory, Honolulu, Hawaii, U.S.A.

** BE = bigeye tuna (*Thunnus obesus*), BM = black marlin (*Makaira indica*), SB = shortbill spearfish (*Tetrapturus angustirostris*), YF = yellowfin tuna (*Thunnus albacares*).

*** Fig. 1. is the photograph of this specimen.

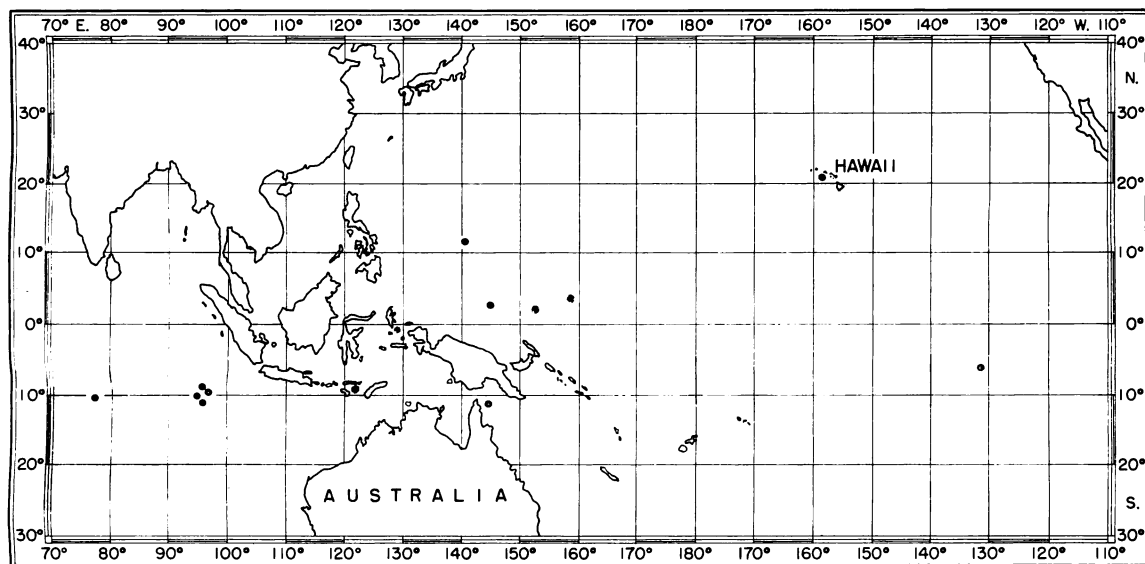


Fig. 2. Distribution of *Scombrlabrax heterolepis* in the Indian and Pacific Oceans from 1950-67 collections.

expand the distribution of *Scombrlabrax* in the Indo-Pacific region.

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ムカシクロタチ(新称)(スズキ目魚類)のインド洋ならびに太平洋における分布

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ムカシクロタチ(新称, *Scombrlabrax heterolepis*)はクロタチカマス科やサバ科の原始的な祖先に近い型の魚とされているが、これまでに大西洋の2地点ならびにメキシコ湾から報告されているにすぎない。筆者等は印度洋ならびに太平洋の15地点以上の場所から37尾の標本を得たので、その分布を発表する。これらの標本のうち28尾はマグロ類およびカジキ類の胃中から発見されたものである。これらの記録から本種はインド洋では南緯10度附近、太平洋では北緯21度から南緯11度に至る広い範囲に分布していることがわかった。

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