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Valid name *Beryx splendens* Lowe 1833 (Fig. 47)
Synonymy None
Common names Alfonsines; alfonsin; alfonsino

Distribution

Caught only at Hancock Seamounts and Banks 10 and 11 in the NWHI between depths of 258 and 302 m.⁷

Distinguishing characteristics

D. IV, 13-15, A. IV, 26-29; P1. 17-18. Body elongate, compressed, bright red, and covered with moderate-sized ctenoid scales which are rather stiff and prickly giving the body a rough texture. Head large, compressed, eyes large. Snout blunt, mouth sharply oblique, and the lower jaw protruding beyond the snout. Small teeth in bands on jaw. Inside of mouth scarlet. A small spine anterior to the orbit projecting posteriorly.

A congener, *B. decadactylus* Cuvier and Valenciennes 1829, also occurs in Hawaiian waters from Hancock Seamounts to the major islands in the southeast end of the chain. Meristic counts are: D. IV, 16-20, A. III-IV, 27-30; P1. 16-18; P2. I, 9-10. *Beryx decadactylus* differs morphologically from *B. splendens* by having much larger and rougher scales, stronger more prominent preorbital spine, and deeper body. Body color of *B. decadactylus* is brighter than that of *B. splendens*.

Life history

Alfonsin spawn in August-October and the free floating eggs hatch in about 1 day. Newly hatched larvae are planktonic and float for about 2-3 days before they begin to swim on the fourth day (Onishi 1967; Chikuni 1971). In the western Pacific, the distribution of this species is highly dependent on the Kuroshio and its fractional systems.

Berycoid fishes assume a demersal existence at age 1 year or younger. Japanese studies indicate that they migrate from coastal waters to offshore grounds and that fish size increases with depth and decreases with increasing latitude (Kanagawa Prefectural Fisheries Experimental Station 1971). Alfonsin migrate vertically in the evening (Masuda et al. 1975) presumably to feed on surface dwelling organisms. Stomach analysis of fish taken over the Emperor Seamounts disclosed that small fish predominated in the diet; crustaceans including decapods, mysids, and euphausiids constituted almost all the remainder (Aomori Prefectural Fisheries Experimental Station 1976).

Alfonsin captured by NMFS at Hancock Seamounts ranged from 15.3 to 35.3 cm fork length (FL), whereas over all the central North Pacific seamounts, the size range was 13.0 to 46.0 cm FL (Takahashi and Sasaki 1977). Apparently, the number of age groups in the catch varies from year to year and among seamounts. In 1972, for example, fish captured at the Milwaukee Seamount group had modes at 21.0 and 38.0 cm; whereas fish taken at Colahan Seamount had one mode at 19.0 cm. The age-length relationship for alfonsin is as follows: age 1 = 8.8 cm; age 2 = 19.1 cm; age 3 = 25.8 cm; age 4 = 30.8 cm; and age 5 = 32.8 cm (Ikenouye 1969).

Gear and catch

In addition to bottom trawls, in which it is mostly a by-catch of fishing for pelagic armorhead, alfonsin is also taken by bottom longline and handline. The species rarely enters baited traps.

Annual catches of alfonsin in the Japanese trawl fishery at Hancock Seamounts in 1969-81 varied from 0 to 54 MT and averaged 8 MT. On seamounts located outside the Hawaiian Archipelago, the annual catches of alfonsin varied from 0 to as much as 8,628 MT, averaging about 2,151 MT.

⁷Townsend Cromwell cruise report TC-83-02, *Beryx splendens* were taken at Banks 10 and 11 in depths ranging from 274 to 549 m.

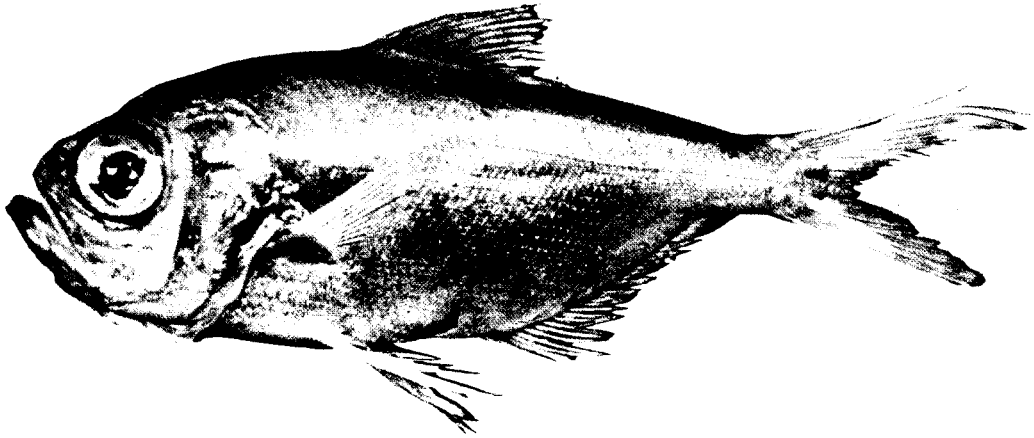


Figure 47.—*Beryx splendens*.