

by Michael P. Seki

Valid name *Caranx melampygus* Cuvier and Valenciennes 1833 (Fig. 52)
Synonymy *Caranx bixanthopterus* Rüppell 1835
Caranx stellatus Eydoux and Souleyet 1841
Caranx medusicola Jordan and Starks 1895
 (from Berry 1965)

Common and vernacular names Bluefin trevally; blue crevally; omilu

Distribution

Found throughout the Hawaiian Archipelago, captured from Necker Island to Pearl and Hermes Reef in the NWHI at depths from 2 to 183 m.

The adults of this species roam the inner and outer coral or rocky reefs singly or in small groups. The juveniles generally school in the shallow reef areas.

Distinguishing characteristics

D. VIII, I, 20-24 (usually 18-20); A. II, I, 17-20 (usually 18-19). Caudal forked and pectorals falcate (Williams 1958; Fischer and Whitehead 1974; Berry et al. 1981).

Two detached spines on the anal fin and scutes on the straight portion of the lateral line.

In life is usually greenish blue dorsally becoming silvery ventrally with many small blue-black spots covering the body, primarily on upper sides. The species may vary in color; sometimes a uniform bluish black with infrequent spotting.

Specimens from the NMFS surveys in the NWHI ranged from 9.3 to 71.0 cm FL.

Life history

The species is predominantly piscivorous (Randall 1980). Omilu feed most frequently in the early morning and late afternoon to evening mainly on fish and crustaceans (Hobson 1974). In the NWHI, omilu is primarily a diurnal piscivore (Okamoto and Kawamoto 1980).

No reproductive studies have been conducted on the omilu. Off East Africa, however, *C. melampygus* reached maturity at 30-40 cm (Williams 1965).

A length-weight relationship of 24 omilu ranging from 9.3 to 71.0 cm FL was:

$$W = 2.42 \times 10^{-5} L^{2.9412},$$

where W = weight (kg) and L = fork length (mm).

Gear and catch

Omilu is taken primarily by handline and traps. In 1961-79, the annual landings fluctuated between 410 and 4,292 kg, averaging 1,400 kg in the main islands. Omilu is considered as an incidental species among bottom fishing boats operating in the NWHI.

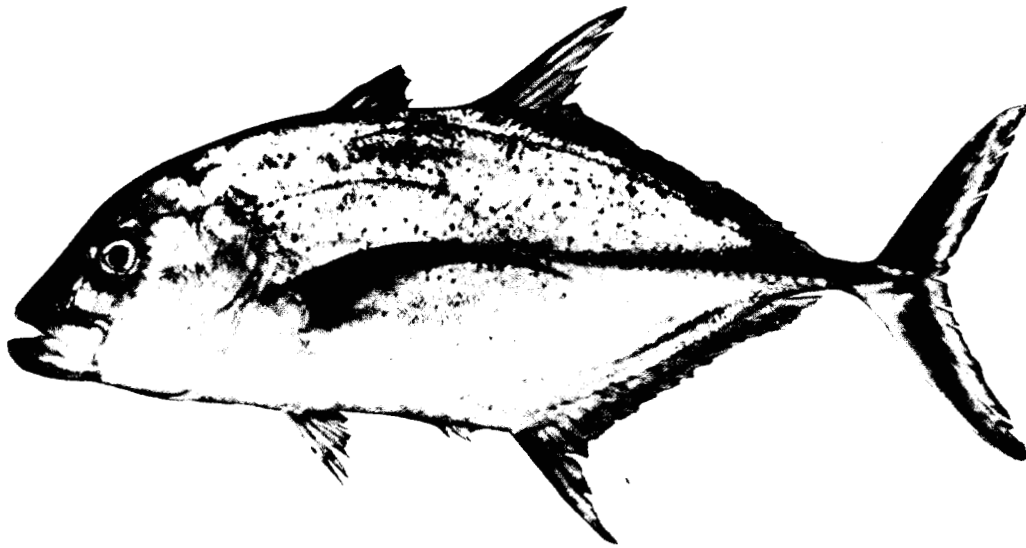


Figure 52.—*Caranx melampygus*.

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Valid name *Elagatis bipinnulata* (Quoy and Gaimard 1824) (Fig. 55)
Synonymy *Seriola bipinnulata* Quoy and Gaimard 1824
Elagatis bipinnulatus Bennett 1840
Seriolichthys bipinnulatus Bleeker 1854
Seriolichthys lineolatus Day 1867
 (from Weber and De Beaufort 1931)

Common and vernacular names Rainbow runner; Hawaiian salmon; kamanu

Distribution

Circumtropical in warm temperate seas of the world (IGFA 1981). Distributed throughout the Hawaiian Archipelago.

Adult fish solitary, inhabiting surface waters of the open sea. Young have been known to frequent flotsam and may occur in small schools (Johnson 1978; IGFA 1981).

Distinguishing characteristics

D. VI, I, 25-30; A. I, I, 18-22 (the two detached terminal two-rayed finlets are included in the counts for both the dorsal and anal fins); Gr. 9-12+25-29. Lack scutes along the lateral line. Body slender, elongate, covered with ctenoid scales. Head and snout pointed, mouth small. Pectoral and pelvic fins short, about the same length; caudal fin forked (Fischer 1978; Johnson 1978).

In life, greenish blue dorsally becoming whitish silver ventrally, tinged with yellow. Two distinct blue bands, with a yellow band between them, run the length of the sides of the fish. The upper blue band begins just behind the eye, the lower at the snout, and both extend to the caudal peduncle. Fins greenish yellow.

The largest recorded specimen is 15.2 kg (IGFA 1981). Specimens taken in the NWHI ranged in size from 42.5 to 97.2 cm FL (2.5 to 10.2 kg).

Life history

In the tropical and subtropical Indo-Pacific, rainbow runner spawns throughout the year with a seasonal peak in March (Okiyama 1970). The larvae are the most abundant of the epipelagic carangids. Together with juveniles, the larvae are frequently associated with the pelagic sargassum community (Aprieto 1974).

Adults feed on crustaceans and fish (Fischer 1978). Copepods (mostly calanoid and *Corycaeus*) are the most important items in the diet of postlarvae and juveniles (Okiyama 1970).

A length-weight relationship of fish from Hawaiian waters is not available. For specimens from Guam and the Commonwealth of the Northern Marianas ranging from 40.2 to 89.1 cm FL, the relationship was:

$$W = 2.32 \times 10^{-4} L^{2.24},$$

where W = weight (kg) and L = fork length (mm).

Gear and catch

Rainbow runner is taken by trolling and occasionally by live bait, pole-and-line boats. Although it is an excellent food fish, the species does not contribute significantly to the commercial landings in Hawaii. In 1975-79, annual landings varied from 808 to 1,655 kg, averaging 1,196 kg.

There is no fishery for this species in the NWHI.



Figure 55.—*Elagatis bipinnulata*.