by Victor A. Honda

Valid name *Naso unicornis* (Forsskål 1775) (Fig. 70)

Synonymy
Chaetodon unicornis Forsskål 1775
Monoceros biaculeatus Bloch and Schneider 1801
Monoceros raii Bloch and Schneider 1801
Naso fronticornis Lacepède 1802
Aspisurus unicornis Rüppell 1828
Naseus fronticornis Cuvier and Valenciennes 1835
Naseus olivaceus Cuvier and Valenciennes 1835
Harpurus monoceros Foster and Lichtenstein 1844
Priodon anginosus Bleeker 1854
Naseus unicornis Günther 1861
Monoceros marginatus Seale 1901
Acanthurus unicornis Jordan and Evermann 1905
Naseus (tapeinosoma ?) Weber 1913
Monoceros unicornis Barnard 1925
Prionolepis hewitti Smith 1935
(from De Beaufort and Chapman 1951)

Common and vernacular names Surgeonfish; unicornfish; long-snouted unicornfish; kala

Distribution

Occurs throughout the main islands. Present on all islands in the NWHI from Nihoa to Kure Atoll (Okamoto and Kawamoto 1980) and Bank 8 (JAMARC 1973). Inhabits subsurge areas (about 30 m) of moderate to dense coral growth, including fringing reefs, deepwater reef patches, reef filled bays, and coral rich parts of the lagoon (Jones 1968).

Distinguishing characteristics

D. V-VI, 27-31; A. II, 26-30; Gr. 4+9 (Masuda et al. 1975). Body short, deep, compressed, elevated anteriorly, highest at beginning of dorsal fin; snout pointed, usually projecting beyond frontal horn; horn projecting forward and downward from the preopercular region, varying greatly with age, most prominent in adult and scarcely developed in young; teeth small, bluntly pointed canines not serrated, close set, slightly recurved; short, nearly vertical shallow groove anterior to eye below nostrils. Origin of dorsal over upper end of gill opening; dorsal spines strong, rough, the first two in head, others successively short; dorsal ray slender, weak; origin of anal under base of sixth dorsal spine; anal spines and rays short; caudal deeply lunate; skin uniform, rough velvety; caudal peduncle with two low spiniferous plates on each side (Jordan and Evermann 1905).

In life, dirty olive, paler below; top of head and horn dark olivaceous; caudal spines pale blue; dorsal fin pale blue, crossed by six narrow pale yellow lines curving upward and backward, edge of fin narrowly blue; anal similarly marked.

Life history

Juveniles have rows of dark spots on a light-colored body. At about 12 cm SL, the horn becomes evident. Metamorphosis takes place at about 65 mm SL and the young are occasionally caught in tide pools (Gosline and Brock 1960). The lunate caudal fin of the adult undergoes a change with growth as the upper lobe elongates into a filament (Aoyagi 1943). Kala, a browser, is a true herbivore. It feeds by biting and tearing off bits of multicellular benthic algae without ingesting any of the inorganic substrate (Jones 1968).

Gear and catch

Kala is taken mainly by gill nets; traps and bag nets contribute smaller amounts. In 1961-79, the annual commercial catch of kala varied between 5,878 and 17,799 kg and averaged 10,081 kg.

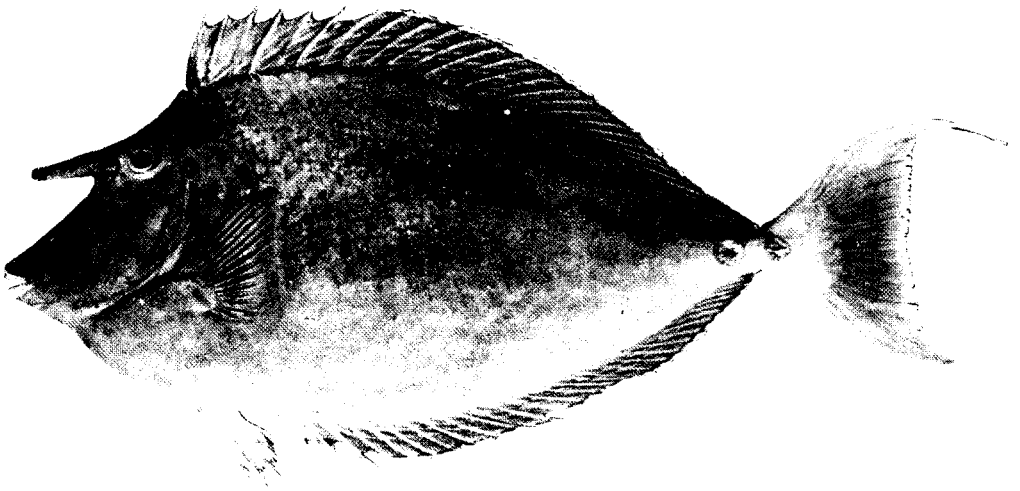

Figure 70.—*Naso unicornis*.