



Two new species of *Foa* (Apogonidae) from the Pacific Plate, with redescriptions of *Foa brachygramma* and *Foa fo*

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Abstract

Species of the Indo-Pacific apogonid fish genus *Foa* known from the Pacific Plate are reviewed. The type species of *Foa*, *F. brachygramma*, is redescribed including information on the distribution of lateralis canal pores and free neuromasts on the head, body and caudal fin. This species, formerly ascribed as having a wide Indo-Pacific distribution, is restricted to the Hawaiian Islands. *Foa fo*, type locality Philippines, with an apparent Indo-Pacific distribution (but not the Hawaiian Islands), has 12–15 gill rakers (14–16 for *F. brachygramma*), and four or five irregular dark bars and whitish spots on the head and body (*F. brachygramma* has dark edging on the scales and lacks whitish spots). A lectotype from the Philippines is selected for *Foa fo*. *Foa leisi* is described as a new species from French Polynesia, olivaceous with three faint brown bars on body, one under each dorsal fin and on anterior on caudal peduncle; head and anterior body with dark-edged whitish spots. *Foa nivosa* is described as new species from Palau, Marshall Islands and Fiji, pale yellowish tan with numerous red-edged whitish spots, smaller on head. The axial skeletons are compared for *Foa brachygramma*, *F. fo*, *F. hyalina*, *F. leisi*, and *F. nivosa*. *Foa madagascariensis* and its synonym *Apogonichthys zuluensis* are not treated here, but Petit's species is recognized as valid. The following characters can be used to identify species: color patterns, pored lateral-line scales as they vary with standard length, number of gill rakers and rudiments, mandibular pore and certain free neuromast patterns.

Key words: *Foa*, *Foa brachygramma*, *Foa fo*, *Foa leisi*, *Foa nivosa*, *Foa madagascariensis* new species, cardinalfish

Introduction

The species of the apogonid fish genus *Foa* have had a confused nomenclatural history. Jenkins (1903: 447–448) described the first as *Fowleria brachygramma* from Honolulu. His illustration of the holotype was mislabeled Fig. 20 instead of Fig. 19 (reproduced here as Fig. 1 A). In a paper on Philippine fishes, Jordan and Seale (3 July 1905) erected the new genus *Foa*, attributing it to Jordan and Evermann, without giving a reference and not designating a type species. They followed with a new species description of *Foa fo* from a 1.5 inch specimen from Negros and a second specimen (no size given) from Cavite, Luzon. Their figure 5, labeled as *Foa brachygramma*, is in a position that could be interpreted as being the new species *Foa fo*, given the treatment of other new species in their paper. However, their figure is the same illustration used by Jenkins (1903) for his description of the Hawaiian *Foa brachygramma*, not *Foa fo* from the Philippines. Jordan and Evermann's *Shore Fishes of the Hawaiian Islands* (1905), published 26 days later, also erected *Foa* as a new genus, followed by a description of the type species *Foa brachygramma* (Jenkins); their figure 82, listed as “from the type. is the same as Jenkins' original figure. In part II of the same Bulletin, Gilbert (1905: 617) recorded Hawaiian specimens of *F. brachygramma* from trawl hauls in 42–128 m. There was no published illustration for either of the original Philippine syntypes of *Foa fo*.

In a review of the fishes of Samoa, Jordan and Seale (1906) listed *Fowleria brachygramma* as the type species of *Foa* Jordan and Evermann. They described *Foa fo* again as a new species, but with a type specimen from Apia, Samoa (USNM 51735), adding “We have also 2 specimens from the Philippines. We reproduce their Fig. 42 of the Samoan fish as Fig. 1 B, clearly a different species from *Foa brachygramma*. The Samoan specimen was not part