

Article



A valid priacanthid species, *Pristigenys refulgens* (Valenciennes 1862), and a redescription of *P. niphonia* (Cuvier in Cuvier & Valenciennes 1829) in the Indo-West Pacific (Perciformes: Priacanthidae)

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Abstract

Pristigenys refulgens (Valenciennes 1862) is herein redescribed as a valid species although it has long been synonymized under *P. niphonia* (Cuvier in Cuvier & Valenciennes 1829). Pristigenys refulgens differs from the latter in having lower gill raker counts, fewer lateral-line scales and spinules on body scales, shape of the caudal fin, and in fin and body coloration. Pristigenys refulgens is currently known from the Indian and western Pacific oceans from South Africa and the Red Sea eastward to Indonesia and Japan, while *P. niphonia* is confined to the western Pacific from Japan to northern Australia, and possibly eastward to Samoa. A neotype for Pristigenys niphonia is herein designated. A key is provided for the Indo-West Pacific Pristigenys species.

Key words: Perciformes, Priacanthidae, Taxonomy, Redescription, Pristigenys refulgens, P. niphonia

Introduction

A comprehensive worldwide revision of the family Priacanthidae was accomplished by Starnes (1988) wherein he allied species formerly allocated to *Pseudopriacanthus* Bleeker to the fossil genus *Pristigenys* Agassiz (Fritzsche & Johnson 1981), and recognized four valid species in the genus: *Pristigenys alta* (Gill 1862) from western Atlantic, *P. meyeri* (Günther 1872) from western Pacific, *P. niphonia* (Cuvier in Cuvier & Valenciennes 1829) from the Indo-West Pacific, and *P. serrula* (Gilbert 1891) from eastern Pacific. Based on limited material available at the time, he concluded that another priacanthid described from the Indian Ocean region, *Pristigenys refulgens* (Valenciennes 1862; Seychelles Islands), was probably a junior synonym of *P. niphonia*. However, more recently acquired materials have facilitated a reinvestigation and reevaluation of that decision. In particular, the acquisition of several more color photographs of live or freshly collected specimens has confirmed the existence of two color forms that prompted a successful search for correlated characters and thus revealed polytypy among those populations formerly regarded collectively as *P. niphonia*.

The two different color types of *P. niphonia* have been reported from the East Asian Shelf (Yoshino 1975: pl. 40-L; Shen 1993: pls. 80-5, 80-6; Kyushin *et al.* 1982: unnumbered smaller photograph) and the adjacent Ryukyu Islands, Japan (Yoshino 1984: pl. 128-G; Starnes 1988: pl. I-b, photographed by H. Masuda). One form lacks a wide black margin on the posterior dorsal, anal, and caudal fins while the second form is well marked with black margins on these fins. Careful examination showed the black margined form is generally distributed in the Indo-