



## Two new fish species of the subfamily Anthiinae (Perciformes, Serranidae) from the Marquesas

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### Abstract

Two new species of anthiine fishes are described from the Marquesas Islands, French Polynesia. *Plectranthias flammeus* was found at depths from 20–45 m and is characterized by dorsal rays X, 14 or 15, with spines 1–6 bearing fleshy white tabs at their tips, longest fleshy tab on spine 4; 14 unbranched pectoral rays; lateral line incomplete with 16–17 tubed scales; preopercle with 8–10 small spines along posterior margin and 2 antrorse spines on ventral margin; broad, fiery red-orange streak across lower cheek; head and body with irregularly spaced maroon-ringed yellow blotches on a white background; pair of small dark oblong spots (red with black centers in life) on the bases of the middle rays of the caudal fin. *Pseudanthias oumati* was found on the outer reef slope of Fatu Hiva at a depth of 50–55 m and is characterized by 3rd dorsal spine elongate and tipped with fleshy yellow filament extending beyond tip of spine; lateral-line scales 43; gill rakers 10 + 28; no papillae on posterior edge of orbit; front of upper lip not thickened (male condition unknown); caudal fin lunate; color of female yellow, all fins yellow with narrow magenta margin (except pectoral fin, which lacks magenta); no stripe from snout to pectoral base; small scales located on basal quarter of soft-dorsal fin from segmented rays 1–12; dorsal profile of head slightly concave.

**Key words:** perchlet, anthias, *Plectranthias flammeus*, *Pseudanthias oumati*, French Polynesia, endemic

### Introduction

The Marquesas Islands, the northernmost archipelago in French Polynesia, are home to a diverse and highly endemic (11.6%) fish fauna (Randall & Earle, 2000). We conducted an extensive survey of the Marquesan ichthyofauna in 2011, during which every island in the group was visited and sampled. Preliminary results indicate approximately 526 fish species occur at the Marquesas, including about 68 endemic species (many of them undescribed). If these results hold, the percentage of endemism for the Marquesas will increase to 12.9%. Specimens of as many as 22 or more possibly undescribed species were collected including a single specimen of a small yellow anthias and four specimens of a colorful small perchlet, which are described herein. The perchlet, named herein as the Flame Perchlet, was reported for the first time by Bacchet *et al.* (2006) based on an underwater photograph taken at the Marquesas at a depth of 35–45 m, but no specimens had been collected. The new yellow anthias species was unknown before our expedition.

Randall (1980), in the only major revision of the genus *Plectranthias*, recognized 30 valid species. Wu *et al.* (2011) summarized the taxonomic changes following Randall’s (1980) revision and described two new species. Anderson and Heemstra (2012) point out that 18 new species of *Plectranthias* have been described since 1980, and discuss the need to review the generic placement of some species. There are currently four recognized species of *Plectranthias* known from French Polynesia: *P. nanus* Randall, 1980, *P. winniensis* Tyler, 1966, *P. kamii* Randall, 1980, and *P. rubrifasciatus* Fourmanoir & Randall, 1979. In addition, Patrick Plantard photographed a specimen (Fig. 1) of yet another French Polynesian species of *Plectranthias* (about 6 to 7 cm long; an undescribed species similar to *Plectranthias inermis* Randall, 1980) in a cave off Rangiroa at a depth of 65 m, but was unable to collect the specimen.