# Epigonus draco, a New Species of Deepwater Cardinalfish (Perciformes: Epigonidae) from the Western Pacific

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A new epigonid fish, *Epigonus draco* n. sp., is described on the basis of six specimens (88.8–160.1 mm in standard length: SL) collected from the Philippines, Solomon Islands, and Vanuatu in the Western Pacific. This species belongs to a subgroup of *Epigonus*, known as the "*Epigonus constanciae* group," whose members have a pungent opercular spine, more than 40 pored lateral-line scales (47–49 to the end of the hypural+3–4 on the caudal fin), and VII-I, 10 dorsal-fin rays. The new species is distinguished from other congeners of the group in having the following combination of characters: absence of a maxillary mustache-like process, absence of ribs on the last abdominal vertebra, total gill rakers 22–23; pyloric caeca 7–9; pectoral-fin rays 19–20; scales below lateral line 9; vertebrae 10+15; uppermost margin of pectoral-fin base lower than horizontal line through center of eye; proximal radial of first anal-fin pterygiophore slender; and mouth cavity black. In addition, *Epigonus chilensis* Okamoto, 2012 is rediagnosed based on specimens from near its type locality.

Key Words: Epigonus constanciae group, Epigonus draco, Epigonus chilensis, opercular spine, Philippines, Solomon Islands, Vanuatu, Chile, new species, rediagnosis.

#### Introduction

Since the 1990s, 12 species of the deepwater cardinalfish genus Epigonus Rafinesque, 1810 have been described from the Pacific, Atlantic, and Indian Oceans by many ichthyologists (e.g., McCosker and Long 1997; Ida et al. 2007; Krupp et al. 2009; Okamoto and Motomura 2013; Parin et al. 2012). Of these, Okamoto et al. (2012) and Okamoto and Aungtonya (2013) considered Epigonus merleni McCosker and Long, 1997 and Epigonus trunovi Parin and Prokofiev in Parin et al., 2012 to be junior synonyms of other congeners. The genus currently comprises 35 valid species divided into four species groups: the E. constanciae group (17 species: Okamoto 2012; Okamoto and Aungtonya 2013); the E. oligolepis group (five species: Okamoto and Motomura 2011); the E. pandionis group (nine species: Okamoto and Motomura 2013); and the *E. telescopus* group (four species: Abramov 1992; Okamoto et al. 2012).

Recently, while investigating material of *Epigonus* from the Western Pacific deposited in the California Academy of Sciences and the French Muséum national d'Histoire naturelle, the author found six specimens with features that did not agree with those of any known species of this genus. In the present report, a new species belonging to the *E. constanciae* group is described based on these specimens.

### **Materials and Methods**

Meristic and morphometric methods followed Mayer (1974) and Okamoto (2011). The number of missing later-

al-line scales was estimated by counting scale pockets. The number of pored lateral-line scales on the caudal fin is represented as "+n". The first caudal vertebra is defined as the first vertebra bearing a distinct hemal spine. Measurements were made with calipers to the nearest 0.1 mm. Terminology and formula of the supraneural bones follow Mabee (1988) and Ahlstrom et al. (1976), respectively. Counts of supraneurals, vertebrae, and ribs were taken from radiographs. The term "maxillary mustache-like process" is used for a lateral process on the maxillary head (see Okamoto 2011: fig. 3; Okamoto 2012: fig. 2). The number of pyloric caeca and sex were determined by dissection of the right side of the abdomen. Standard length is abbreviated as SL. Institutional abbreviations for the depositories of the material examined are: CAS (California Academy of Sciences, San Francisco); CSIRO (Commonwealth Scientific and Industrial Research Organization, Marine and Atmospheric Research, Australian National Fish Collection, Tasmania); FAKU (Fish Collection of Kyoto University, Maizuru Fisheries Research Station, Kyoto); FUMT (Department of Fisheries, University of Tokyo); MNHN (Muséum national d'Histoire naturelle, Paris); PMBC (Phuket Marine Biological Center, Phuket); and USNM (Smithsonian Institution National Museum of Natural History, Suitland).

#### Epigonus draco n. sp.

[New English name: Dragon Deepwater Cardinalfish] (Figs 1–2; Table 1)

*Epigonus ctenolepis* (not of Mochizuki and Shirakihara, 1983): Iwamoto and McCosker 2014: 291, fig. 122 (between Luzon and Mindoro Islands, Philippines).