

Record of a Rare Ophidiid Fish, *Barathrites iris* (Actinopterygii: Teleostei: Ophidiiformes), from off Southern Japan

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Two specimens of a rare ophidiid fish, *Barathrites iris* Zugmayer, 1911, were collected from the abyssal Pacific Ocean, off Kagoshima Prefecture, southern Japan. They agree with the diagnosis of *Barathrites* in having two pelvic-fin rays, five to six long gill rakers on the anterior gill arch, and a small head (33.5–33.8% of pre-anal-fin length) and eye (1.6–1.8% standard length, SL). Additionally, they can be separated from *B. parri* Nybelin, 1957, the only other known species of the genus, by their lack of basibranchial tooth patches, smaller eye (10.7–12.3% head length), and shorter pre-dorsal-fin region (17.1–18.9% SL). Previously *B. iris* was said to differ from *B. parri* in the number of branchiostegal rays (six versus seven, respectively), but one of the present specimens of *B. iris* (413 mm SL) has seven branchiostegal rays on the left side and six on the right. Earlier workers have suggested the occurrence of *Barathrites* in the Pacific Ocean, but no documented records from this ocean appear to exist. This study confirms the occurrence of *Barathrites* and its type species *B. iris* in the Pacific Ocean.

Key Words: Pacific Ocean, Japan, *Barathrites iris*, Ophidiidae, abyssal fish.

Introduction

When the senior author joined a deep-sea workshop held at the National Museum of Nature and Science, Tokyo (NSMT) (1–10 February 2010), he had the opportunity to examine two ophidiid specimens collected from abyssal depths off Kagoshima Prefecture, southern Japan. They proved to belong to the rare genus *Barathrites* Zugmayer, 1911, which includes two valid species, *Barathrites iris* Zugmayer, 1911 and *Barathrites parri* Nybelin, 1957. The generic assignment was based on the two pelvic-fin rays, five to six developed gill rakers on the first arch, and small head (33.5–33.8% of pre-anal-fin length) of the present specimens (Nielsen *et al.* 1999). More precisely, they were identified as *B. iris*, which can be distinguished from *B. parri* by the absence in the former of basibranchial tooth patches as well as a smaller eye and a shorter pre-dorsal-fin region. The two species have been reliably reported only from tropical and subtropical regions of the Atlantic Ocean (Nielsen *et al.* 1999; Mincarone *et al.* 2008). This study confirms the occurrence of *Barathrites iris* in the Pacific Ocean, with a description of the specimens.

Methods

Counts and measurements mainly follow Hubbs and

Lagler (1958). Counts of basibranchial tooth patches and gill rakers, and the pre-dorsal-fin and pre-anal-fin lengths follow Nielsen *et al.* (1999). Vertebrae and dorsal-, anal-, and caudal-fin rays were counted from radiographs. Body depth was measured at the dorsal-fin origin and at the anal-fin origin. Standard length and head length are abbreviated as SL and HL, respectively.

Barathrites Zugmayer, 1911

[New Japanese name: Kogashira-ashiro-zoku]

Barathrites iris Zugmayer, 1911

[New Japanese name: Kogashira-ashiro]

(Figs 1–2; Tables 1–2)

Barathrites iris Zugmayer, 1911: 193 (type locality: southwest of Azores, 31°44'N, 42°39'W); Belloc 1949: 14, pl. 3 (list of type specimens); Nybelin 1957: 282, pl. 6 (key and description, off Surinam, Atlantic); Cohen and Nielsen 1978: 25 (short description, tropical Atlantic and Pacific?); Nielsen 1986: 1159 (key and short description, northern mid-Atlantic); Arruda 1997: 109 (list, southwest of Azores); Nielsen *et al.* 1999: 53 (key and list, Atlantic); Nielsen and Robins 2003: 968 (key and list, Atlantic); Garrido-Linares and Acero P. 2006: 293 (list, Atlantic).

Barathrites abyssorum Roule, 1916: 17 (type locality: Monaco Trench, Atlantic); Belloc 1949: 14 (list of type specimens); Nybelin 1957: 284, 333 (key and description,