



## Review of the arrowtooth eel genera *Dysomma* and *Dysommima* in Taiwan, with the description of a new species (Anguilliformes: Synphobranchidae: Ilyophinae)

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### Abstract

Species of the synphobranchid eel genera *Dysomma* and *Dysommima* from Taiwan are reviewed. A total of eight species in *Dysomma* and one species in *Dysommima* are recognized. A new *Dysomma* species is described based on four specimens collected from off Taiwan. It differs from its Taiwanese congeners in having 137–139 total vertebrae, pectoral fin well-developed, 2 intermaxillary teeth, 4 compound teeth on vomer, 40–48 total lateral-line pores, the last at about middle of body, and a uniform brownish color. A key to all species in these two genera in Taiwan is provided.

**Key words:** Pisces, Teleostei, taxonomy, *Dysomma taiwanensis* sp. nov., Taiwan

### Introduction

The eel genera *Dysomma* and *Dysommima* belong to the subfamily Ilyophinae, a small group of benthic eels that live mainly in the continental shelf and slope. Several species are widespread in tropical latitudes, whereas others are more or less restricted in distribution. There are currently 12 known species in *Dysomma* and one species in *Dysommima*.

In Taiwan, Chen & Weng (1967) first recorded *Dysomma anguillare* Barnard, 1923 and described a new species *Dysomma melanurum*. Mok in Shen *et al.* (1993) added two species, *Dysomma dolichosomatum* Karrer, 1983 and *Dysomma goslinei* Robins & Robins, 1976 to the Taiwanese fauna. Chen & Mok (1995) described a new species *Dysomma opisthoproctus*, and Chen & Mok (2001) described a new species *Dysomma longirostrum* and mentioned specimens of *Dysomma polycatodon* Karrer, 1983 and *Dysommima rugosa* Ginsburg, 1951 collected from Taiwan.

In a project to review the eel fauna of Taiwan, the first author collected large numbers of specimens from around Taiwan. Among these specimens, *D. anguillare* is the most common and abundant species, and *D. polycatodon* and *D. dolichosomatum* are also commonly seen. Four specimens similar in appearance to *D. anguillare* were found in the NMMB and USNM collections and are recognized as a new species.

This work gathers all information provided in previous publications and new data taken from the recently collected specimens. A total of eight species of *Dysomma* and one species of *Dysommima* are recognized from Taiwan, including one new species. A key to the Taiwanese species in these two genera is provided.

### Methods and materials

Total length (TL) and head length (HL) are used throughout. Methods for making measurements and counts, and terminology follow Böhlke (1989). Institutional codes follow Fricke & Eschmeyer (2015). Lateral-line pores are