

A first record of the vanishing silhouette goby *Silhouettea evanida* (Gobiidae) in Indonesian waters

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Received: 5 Jul. 2017
Accepted: 30 Nov. 2017
Editor: R. Causse

A first record of the vanishing silhouette goby *Silhouettea evanida* (Gobiidae) in Indonesian waters

by

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Resumé. – Premier signalement de l'espèce *Silhouettea evanida* (Gobiidae) dans les eaux indonésiennes.

En avril 2017, plusieurs individus de l'espèce *Silhouettea evanida* ont été identifiés et photographiés à l'embouchure de la rivière Sembilang, province de Sumatra du Sud, en Indonésie. Jusqu'à présent, il n'y a eu aucun signalement de *Silhouettea evanida* en Indonésie, et celui-ci représente une première occurrence pour le pays.

Key words. – Gobiidae – *Silhouettea evanida* – Indonesia – Sumatra – Sembilang River – Estuarine.

The Gobiidae family is one of the largest families of fish that comprises 258 genera and 1771 species (Larson and Miller, 1986; Nelson, 2006; Larson *et al.*, 2016; Eschmeyer, 2017). They are usually discrete species and most of them are of small size. One of them (*Trimmatom nanus* Winterbottom & Emery, 1981) matures at 8 mm (Larson and Murdy, 2001).

The taxonomy of gobies is complex and to distinguish some genera requires a microscope examination (Kottelat *et al.*, 1993). Up to date, descriptions and illustrations are scattered and sometimes hard to find (Larson and Lim, 2005). These difficulties have often been compounded when genera were erected with merely one reference to the type species, the descriptions of which are often inadequate and without figures (Gill *et al.*, 1992; Gill, 1993).

One of the smallest goby group is the genus *Silhouettea* (Larson and Miller, 1986; Randall, 2008). The genus *Silhouettea* was named for the type locality, the Silhouette Island in the Seychelles, east of Africa (Smith, 1959; Randall, 2008). This genus comprises several small tropical Indo-Pacific gobiid species usually found on sandy ground in shallow inshore and estuarine waters (Larson and Miller, 1986). One of the characters used to define the genus is that the species have more anal than dorsal soft rays (Larson and Murdy, 2001; Larson and Lim 2005; Randall, 2008). There are at least eight species present in the Indo-West Pacific (Larson and Lim, 2005).

The species *Silhouettea evanida* Larson & Miller, 1986 was originally described on the basis of specimens from the Northern Territory and Queensland, Australia (Larson and Miller, 1986). This species is a small, benthic, cryptic goby found in quiet shallows on a sand or sandy-mud substrate, for example beaches and mangrove creeks (Larson and Miller, 1986; Larson and Murdy, 2010).

The name of the species is derived from *evanidus*, meaning “disappearing” or “vanishing”, and refers to the ability for rapid concealment (Larson and Miller, 1986).

RESULTS AND DISCUSSION

The specimens of *S. evanida* were found during an aquatic biodiversity survey that took place between April 1st and 4th, 2017 in the estuary of the Sembilang River (02°00'36.6"S; 104°40'23.40"E), Banyuasin district, South Sumatra, Indonesia (Fig. 1). Two individuals (one male and one female), respectively of 20 and 22 mm SL (22 and 27 mm TL), were measured and photographed. These individuals were caught from the estuarine habitat on sandy substrate, surrounded by mangrove forest. This area is part of the Berbak-Sembilang National Park and, due to restrictions of our research permits, we had no authorization to bring any specimens outside the park.

The fish were initially identified as *S. evanida* by the following specific characters referring to the description by Larson and Miller (1986): body elongate, compressed; head about one quarter of SL; snout about equal to or slightly shorter than eye; eyes large, dorso-lateral; caudal rounded, about equal to head length; first dorsal fin origin opposite anterior part of pectoral and first spines extending over origin of second dorsal; second dorsal fin origin slightly behind anal origin; posterior tip of second dorsal may reach just over upper origin of caudal; anal fin origin in advance of second dorsal origin; pectoral fin tip reaches to below second dorsal origin; pelvic disc long, beyond anal origin; frenum well-developed; lateral blotches small; nape with transverse band of fine melanophores, narrower than pupil; branchiostegal membrane pale in both sexes (Fig. 2).

Aside from Australian waters, this species has been reported from Phuket waters and mangrove estuary at Sikao, Thailand (Tongnunui *et al.*, 2002; Froese and Pauly, 2017; GBIF, 2017). There is no previous report on the occurrence of *S. evanida* in any country between Thailand and Australia (Larson and Murdy, 2010; Froese and Pauly, 2017; GBIF, 2017). Kottelat (2013) only listed this species within the *Silhouettea* genus that occurs in inland waters (freshwaters, mangroves and estuaries) of Southeast Asia. The record of *S. evanida* in the Sembilang River estuary constitutes a first country record in Indonesian waters.

The IUCN Red List of Threatened Species assessed the status of this species as Data Deficient (Larson and Murdy, 2010) as

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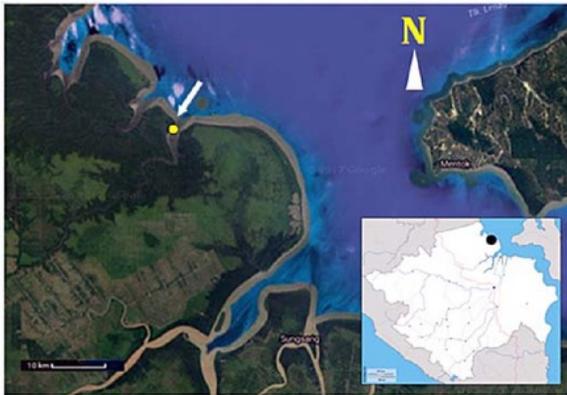


Figure 1. – Map showing location of *Silhouettea evanida* in Sembilang River, Banyuasin district, South Sumatra province, Indonesia.

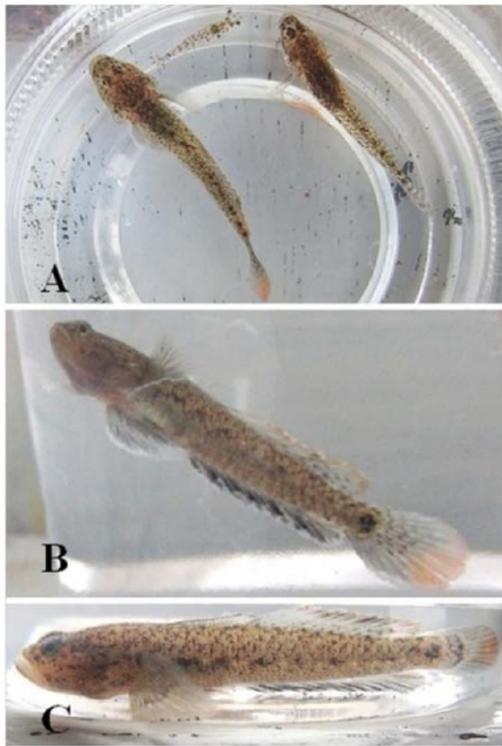


Figure 2. – Living specimens of *Silhouettea evanida* caught in Sembilang River, Banyuasin district, South Sumatra province, Indonesia. A Dorsal view; B: Female, 22 mm SL; C: Male, 20 mm SL.

there is very little available information on distribution, abundance or potential threats for this species and further research would be needed on *S. evanida*.

Acknowledgements. – We thank the Department of Biology of Sriwijaya University and GIZ Bioclimate for funding our visit to Sembilang National Park. The fourth and fifth authors thank Sriwijaya University for grant of

Hibah Penelitian Unggulan Profesi Universitas Sriwijaya 2017. We are very grateful to Dr. Helen Larson (Museum and Art Gallery of the Northern Territory, Darwin, Australia) who helped us with the identification. Finally, we would like to thank Dr. Stephen Debus (University of New England, Australia), Ann Marie Gage (Idea Wild, US) and anonymous reviewers who provided essential suggestions for this paper.

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★Helen K. Larson, Peter J. Miller. "Two new species of *Silhouettea* (Gobiidae) from northern Australia", Japanese Journal of Ichthyology, 1986 10%

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