



Monopterus ichthyophoides, a new species of scaled swamp eel (Teleostei: Synbranchiformes: Synbranchidae) from Mizoram, India

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Abstract

Monopterus ichthyophoides is described from specimens collected from the Sawleng River and a public well at Luangmual, both in the Barak River drainage in Mizoram, India. The new species differs from all other synbranchids in having only two, instead of five or six branchiostegal rays. It belongs to the *Amphipnous* species group characterized by possession of scales on the body and can be readily distinguished from all other species of this group by the lower number of vertebrae (114–117 vs 126–188).

Key words: taxonomy, freshwater fishes, Indo-Burma biodiversity hotspot

Introduction

The family Synbranchidae or swamp eels, comprise around 22 species of elongate eel-like fishes lacking pectoral, pelvic, dorsal, and anal fins as adults. They are distributed in Central and South America, West Africa, over large parts of southern and Southeast Asia and in northern Australia (Berra 2001). The last revision of the family performed 35 years ago (Rosen & Greenwood 1976), has not lead to a fully satisfactory resolution of either synbranchid species-level taxonomy or phylogeny (see Bailey & Gans 1998). Since Rosen & Greenwood (1976), seven new synbranchid species have been described, one of which belongs to a putatively monophyletic group referred to as “the ‘Amphipnous’ group” by Bailey & Gans (1998:2) within the Asian synbranchid genus *Monopterus* Lacepède. The species of the *Amphipnous* group, *Monopterus desilvai* Bailey & Gans, along with *M. cuchia* (Hamilton), *M. fossorius* (Nayar), and *M. indicus* (Silas & Dawson) are distinguished from all other synbranchids by the presence of scales and a pair of supratharyngeal pouches (uncertain in *M. desilvai*) that act as an accessory air breathing organ (Rosen & Greenwood 1976, Bailey & Gans 1998).

During recent herpetological fieldwork in Mizoram, four specimens were collected of what seemed at first glance to be caecilian larvae, but upon closer inspection turned out to be a scaled species of synbranchid, belonging to the *Amphipnous* group. A comparison with the other four species of this group showed that it is a new species, which is described in the present paper.

Material and methods

Measurements were taken with digital callipers to the nearest 0.1 mm, or with an ocular micrometer fitted to a stereomicroscope. Obtaining accurate measurements in synbranchids is often difficult because specimens are frequently preserved in a bent and twisted state. Standard length is not applicable to most synbranchids because the caudal fin and its supporting skeleton is generally absent except in the most basal species, *Macrotrema caligans* Cantor (see Rosen & Greenwood, 1976); therefore total length (TL) was used. Head length was measured from the tip of the snout to a vertical through the posterior end of the ventrally located gill slit. The gill arches of one of the