



Clarias serniosus, a new walking catfish (Teleostei: Clariidae) from Laos

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Abstract

Clarias serniosus, a new Southeast Asian walking-catfish species, is described from the Bolavens Plateau in southern Laos. The new species is a member of the *C. batrachus* species complex, and can be distinguished from congeners in the complex in having a combination of: occipital process length 15–17 % HL, head length 28.2–28.6% SL, head width 18.5–19.2% SL, head depth 13.0–13.7% SL, distance between the occipital process and the base of the first dorsal-fin ray 8.5% SL, smooth anterior edge of pectoral spine, 67 dorsal-fin rays, body depth at anus 16.2–16.5% SL, and 57 total vertebrae.

Key words: Ostariophysi, Siluriformes, Southeast Asia

Introduction

The Old World catfish family Clariidae is found in freshwater habitats of the Afrotropical and Indomalayan regions. Within the family, the genus *Clarias* is the most speciose group (57 species; Ferraris, 2007; Ng *et al.*, 2011), with the majority of the species-level diversity being found in Africa. Recent studies (e.g. Lim & Ng, 1999; Teugels *et al.*, 2001; Sudarto *et al.*, 2003; Ng, 2004) have increased the species-level diversity in Asian *Clarias*, with additional diversity awaiting discovery (Ng & Kottelat, 2008).

Twenty species of Southeast Asian *Clarias* are currently recognized (Kottelat, 2013): *C. batrachus* (Linnaeus, 1758); *C. fuscus* La Cépède, 1803; *C. nieuhoftii* Valenciennes in Cuvier & Valenciennes, 1840; *C. meladerma* Bleeker, 1846; *C. leiakanthus* Bleeker, 1851; *C. macrocephalus* Günther, 1864; *C. olivaceus* Fowler, 1904; *C. batu* Lim & Ng, 1999; *C. anfractus* Ng, 1999; *C. planiceps* Ng, 1999; *C. microstomus* Ng, 2001; *C. intermedius* Teugels, Pouyaud & Sudarto, 2001; *C. insolitus* Ng, 2003; *C. nigricans* Ng, 2003; *C. kapuasensis* Sudarto, Teugels & Pouyaud, 2003; *C. pseudoleiakanthus* Sudarto, Teugels & Pouyaud, 2003; *C. sulcatus* Ng, 2004; *C. pseduonieuhoftii* Sudarto, Teugels & Pouyaud, 2004; *C. microspilus* Ng & Hadiaty, 2011; and *C. gracilentus* Ng, Dang & Nguyen, 2011. These species have been roughly divided into two species complexes based on their morphology, with the more elongate and anguilliform species (with 74–84 total vertebrae and 81–101 dorsal-fin rays) being placed in the *C. nieuhoftii* species complex and the less elongate species (with 54–71 total vertebrae and 53–77 dorsal-fin rays) in the *C. batrachus* species complex (Sudarto *et al.*, 2003; Ng *et al.*, 2011). The *C. batrachus* species complex presently consists of 16 Southeast Asian species (Ng *et al.*, 2011): *C. anfractus*, *C. batrachus*, *C. batu*, *C. fuscus*, *C. insolitus*, *C. intermedius*, *C. kapuasensis*, *C. leiakanthus*, *C. macrocephalus*, *C. meladerma*, *C. microspilus*, *C. microstomus*, *C. olivaceus*, *C. planiceps*, *C. pseudoleiakanthus*, and *C. sulcatus*.

During surveys of the Bolavens Plateau in southern Laos, the second author collected two specimens of *Clarias* superficially resembling *C. meladerma*. A comparison of these specimens with *C. meladerma* and other Southeast Asian congeners showed that they represent an unnamed species described herein as *Clarias serniosus*, new species.

Material was obtained by MK during a survey of Bolavens Plateau for Lao Consulting Group, Vientiane, managed by James Grindey. The collaboration of Thavone Phommavong (Living Aquatic Resources Research Center, Vientiane) greatly contributed to the success of the sampling.

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