

## **Article**



## Clarias gracilentus, a new walking catfish (Teleostei: Clariidae) from Vietnam and Cambodia

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## **Abstract**

Clarias gracilentus, a new Southeast Asian walking catfish species, is described from Phu Quoc Island (Vietnam) off the coast of southeastern Cambodia and from mainland southeastern Cambodia. The new species is a member of the *C. nieuhofii* species complex, and can be distinguished from congeners in the complex in having a combination of: head width 11.9–12.9% SL, distance between the occipital process and the base of the first dorsal-fin ray 5.3–8.4% SL, pectoral-fin length 8.5–10.1% SL, body depth at anus 8.2–11.7% SL, pelvic-fin length 4.3–5.5% SL, length of anal-fin base 60.0–63.9% SL, eye diameter 5.4–7.2% HL, interorbital distance 42.7–48.0% HL, occipital-process length 7.8–14.7% HL, 96–101 dorsal-fin rays, 84–89 anal-fin rays and 80–84 total vertebrae.

Key words: Ostariophysi, Siluriformes, Southeast Asia

## Introduction

The genus *Clarias* is the most diverse group (56 species; Ferraris, 2007) within the moderately diverse Old World catfish family Clariidae (113 species in 16 genera: Ferraris, 2007). Members of the genus are naturally distributed in inland water bodies in both Africa and Asia, with the bulk of the species being found in the former. Recent studies (e.g. Lim & Ng, 1999; Teugels *et al.*, 2001; Sudarto *et al.*, 2003; Ng, 2004) have resulted in the discovery of greater diversity in Asian *Clarias*, particularly in Southeast Asia, although taxonomic problems within the group remain whose resolution is likely to result in the discovery of additional new species (Ng & Kottelat, 2008).

Nineteen species of Southeast Asian Clarias are currently recognized: C. anfractus Ng, 1999; C. batrachus (Linnaeus, 1758); C. batu Lim & Ng, 1999; C. fuscus La Cepède, 1803; C. insolitus Ng, 2003; C. intermedius Teugels, Pouyaud & Sudarto, 2001; C. kapuasensis Sudarto, Teugels & Pouyaud, 2003; C. leiacanthus Bleeker, 1851; C. macrocephalus Günther, 1864; C. meladerma Bleeker, 1846; C. microspilus Ng & Hadiaty, 2011; C. microstomus Ng, 2001; C. nieuhofii Valenciennes in Cuvier & Valenciennes, 1840; C. nigricans Ng, 2003; C. olivaceus Fowler, 1904; C. planiceps Ng, 1999; C. pseudoleiacanthus Sudarto, Teugels & Pouyaud, 2003; C. pseudonieuhofii Sudarto, Teugels & Pouyaud, 2004; C. sulcatus Ng, 2004. These species have been roughly divided into two species complexes based on their body forms, with the more elongate and anguilliform species being placed in the C. nieuhofii species complex (Sudarto et al., 2003). The taxonomy of the elongate Clarias species in the C. nieuhofii species complex is sometimes confusing and a brief review is provided in the discussion. The C. nieuhofii species complex presently consists of three species (Ng, 2003; Sudarto et al., 2004): C. nieuhofii, C. nigricans and C. pseudonieuhofii.

During ichthyological surveys of Phu Quoc Island off the coast of southern Cambodia, specimens of a *Clarias* species superficially resembling *C. nieuhofii* were collected by the third author. A detailed study of this material and comparison with other Southeast Asian *Clarias* revealed them to belong to an undescribed species that is also found in the adjacent portion of the Indochinese mainland (southern Cambodia). This unnamed species is described in this study as *Clarias gracilentus*, new species.

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