



## Description of a new species of *Tilapia* Smith, 1840 (Teleostei: Cichlidae) from Ghana

ANDREAS R. DUNZ<sup>1,3</sup> & ULRICH K. SCHLIEWEN<sup>2</sup>

Department of Ichthyology, Bavarian State Collection of Zoology, Münchhausenstr. 21, 81247 München, Germany.

E-mail: <sup>1</sup>andreas.dunz@t-online.de; <sup>2</sup>schliewen@zsm.mwn.de

<sup>3</sup>Corresponding author

### Abstract

A new species of the genus *Tilapia* Smith, 1840 is described from the Pra River drainage in Ghana. *Tilapia pra* **sp. nov.** is distinguished from all *Tilapia* species except *T. sparrmanii*, *T. ruweti*, *T. guinasana*, *T. baloni*, *T. brevipimanus*, *T. mariae*, *T. cabrae* and *T. busumana* in having bicuspid posterior pharyngeal teeth on the lower pharyngeal jaw. It differs from *T. baloni* and *T. ruweti* in having more gill rakers on the first ceratobranchial (lower) gill-arch (10–12 vs. 6–9), from *T. guinasana* in having a higher number of upper lateral line scales (18–22 vs. 14–17) and from *T. sparrmanii* in a combination of a higher number of upper lateral line scales (18–22 vs. 14–19), a shorter anal fin base (15.0–18.6% vs. 18.0–23.8% of SL) and a lower number of vertical stripes (6–7 vs. 8–9). It differs from *T. mariae*, *T. cabrae* and *T. brevipimanus* in having robust, non-spatulate outer row jaw teeth (vs. gracile spatulate teeth) and from *T. busumana* in having a longer last dorsal-fin spine (16.2–21.3% vs. 11.6–14.9% of SL), and a smaller lower lip length (8.0–10.7% vs. 9.6–13.9% of SL) and lower jaw length (9.9–13.6% vs. 10.5–15.2% of SL). In addition, *T. pra* **sp. nov.** differs from *T. busumana* in ground coloration. *T. pra* **sp. nov.** possesses a light brown to greyish dorsum and a beige to yellow ventral area vs. a bluish-purple to blackish dorsum and darker on underside of head and body of *T. busumana*.

**Key words:** Ichthyofauna, freshwater, Kwahu plateau, Ashanti ecoregion

### Introduction

Members of the large African cichlid genus *Tilapia* Smith, 1840 (type species, *Tilapia sparrmanii*) inhabit most African rivers and lakes as well as the Jordan River drainage. Thys (1968) divided *Tilapia* into three “sections”: Section I (*Tilapia* sensu lato) with the four subgenera *Tilapia* Smith, 1840, *Trewavasia* Thys, 1969, *Pelmatolapia* Thys, 1969 and *Pelmatochromis* Steindachner, 1894; Section II including the subgenera *Heterotilapia* Regan, 1920, *Coptodon* Gervais, 1853 and *Dagetia* Thys, 1969; and Section III (*Sarotherodon* group sensu lato) with the seven subgenera (and three “groups” related to one of the subgenera) *Danakilia* Thys, 1969, *Neotilapia* Regan, 1920, *Alcolapia* Thys, 1969, *Nyasalapia* Thys, 1969, *Loruwiala* Thys, 1969, *Oreochromis* Günther, 1889 and *Sarotherodon* Rüppell, 1854, all mouth-brooders. Later, Trewavas (1983) removed all mouth-brooding species from *Tilapia*, and placed them into the genera *Sarotherodon* Rüppell, 1852 or *Oreochromis* Günther, 1889. It has long been known that morphological evidence for the monophyly of the substrate-spawning tilapias is lacking (Stiassny *et al.* 1992), and this was later substantiated by molecular analyses recovering *Tilapia* as paraphyletic (Klett & Meyer 2002; Schliewen & Stiassny 2003). Recently, in a comprehensive molecular analysis of the interrelationships of haplotilapiine cichlids (sensu Schliewen & Stiassny, 2003), Schwarzer *et al.* (2009) identified a novel clade of tilapias (austrotilapiines<sup>1</sup>)

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1. Schwarzer *et al.* (2009) have introduced informally family group names using inappropriately the suffix –ini for Etiini, Oreochromini, Austrotilapiini, Boreotilapiini. These names were neither meant to be available (see disclaimer in Schwarzer *et al.* (2009), nor are they taxonomically available according to the ICZN. We hereby suggest to refer to these groups as ettiines, oreochromines, austrotilapiines and boreotilapiines in order to avoid confusion with formal tribe names ending with “-ini”.