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Typhlichthys eigenmanni Charlton, 1933, an available name for a blind cavefish (Teleostei: Amblyopsidae), differentiated on the basis of characters of the central nervous system

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Abstract

Typhlichthys eigenmanni Charlton, 1933 was described inadvertently in a richly illustrated publication on the comparative anatomy of the central nervous system of blind cavefishes. Characters described by Charlton (1933) are sufficient to differentiate the species from *Amblyopsis rosae* (Eigenmann, 1898), with which he compared it in a detailed examination of the optic tectum, the primary visual center of the brain. These characters are: 1) a relatively narrow optic nerve, 2) a relatively large *tractus mesencephalo-cerebellaris anterior*; 3) the rostral bundle of the *fibrae tectales nervi optici* ascending in front of the *nucleus dorsali thalami* as opposed to coursing around its anterior pole; and, 4) relatively small *brachia tecti*. Efforts to locate Charlton's type specimens of *T. eigenmanni*, likely histological slides, have not been successful. The type locality is Ha Ha Tonka State Park, Camden Co., Missouri. Putative topotypes are catalogued in collections of the University of Michigan, Museum of Zoology. *Typhlichthys eigenmanni* Charlton, 1933 is a subjective synonym of *T. subterraneus* Girard, 1859, the Southern Cavefish.

Key words: blind cavefishes, *Typhlichthys eigenmanni*, Amplyopsidae, optic tectum, vouchers, Missouri

Introduction

"Typhlichthys eigenmanni Hubbs," with no year of description and no characters distinguishing it from other blind cavefishes of the family Amplyopsidae from Missouri, was listed by Hubbs (1938:265) in a table. Typhlichthys eigenmanni Hubbs 1938 has subsequently been treated as a nomen nudum by Woods & Inger (1957), Pfleiger (1971), Eschmeyer (1998, 2006), Poly & Proudlove (2004), among others. The purpose of this paper is to demonstrate that Typhlichthys eigenmanni Charlton, 1933 is an available name for a blind cavefish, and to draw attention to comparative anatomical characters of the