Description of three new species of the genus *Chromaphyosemion* Radda, 1971 (Cyprinodontiformes: Nothobranchiidae) from the coastal plains of Cameroon with a preliminary review of the *Chromaphyosemion splendopleure* complex

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Abstract

Three new species of the genus *Chromaphyosemion* Radda, 1971 are described from the coastal plains of Cameroon. They are distinguished from the phylogenetically and geographically close congeneric species through diagnostic characters of male color patterns. Some remarks on recently described species are made and a phylogenetic hypothesis of all currently known described species and all but two undescribed forms of the genus *Chromaphyosemion* based on mitochondrial DNA sequences is given. The molecular data support the monophyly of this genus as previously stated on the basis of morphological data and allow a review of the *Chromaphyosemion splendopleure* complex, a taxonomically confusing group. All newly described species are endemic to Cameroon, contributing to the high diversity and endemcity of the nothobranchiids in this country.

Resumé


Key words: *Chromaphyosemion koungueense* sp. nov., *Chromaphyosemion omega* sp. nov., *Chromaphyosemion meli-noeides* sp. nov., *Chromaphyosemion splendopleure* complex, systematics, molecular phylogeny, color patterns, taxonomy

Introduction

The genus *Chromaphyosemion* Radda, 1971 (Cyprinodontiformes: Nothobranchiidae) is distributed in the coastal plains from southern Togo to northern Gabon. Its center of diversity lies within Cameroon, a pattern similar to that observed in other groups of nothobranchiids (*Epiplatys sexfasciatus* group, *Aphyosemion calli-urum* group), lampeyes of the genus *Procatopus* Boulenger, 1904 (Cyprinodontiformes, Poeciliidae), and in cichlids of the genus *Benitochromis* Lamboj, 2001. Most of the species of these groups are endemic to Camerooon, which also has the richest cyprinodontiform fauna in Africa with a high proportion of endemics (species numbers and distribution data from Huber 2000 and for the cichlids Lamboj 2004).

*Chromaphyosemion* is diagnosed as a monophylum by characteristic features which are unique in nothobranchiids including color patterns with two parallel black stripes on the sides, a unique black ventral head