A new species of hill stream loach (Teleostei: Balitoridae)
from Central Kalimantan, with redescriptions of
Homaloptera tateregani Popta and Homaloptera stephensoni Hora

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Abstract

Homaloptera batek, new species, is a riffle specialist differentiated by its unique colour pattern for a species of
Homaloptera, consisting of a series of round blotches interspaced by smaller blotches in large individuals. The poorly
known species Homaloptera tateregani and H. stephensoni are redescribed; the former is restricted to the upper
Mahakam basin in East Kalimantan, whereas the latter is distributed throughout Borneo. The status of the genus
Pseudohomaloptera Silas is also considered.

Key words: Taxonomy, Balitoridae, Homaloptera, Borneo, Biodiversity

Introduction

The hill stream loaches of the genus Homaloptera live throughout Borneo’s freshwaters. They typically
inhabit fast-flowing waters and the riffle zones of upstream areas, but there are also related species in lotic
areas of lowland acid water swamps, e.g. Neohomaloptera johorensis. The taxonomy of Homaloptera is
currently in chaos (Kottelat, 1998; Tan & Ng, 2005). There has been no modern taxonomic treatment of the
fishes assigned to this genus, and the most recent treatment of Sawada (1982) concentrated mainly on
cobitids. Homaloptera is apparently polyphyletic (unpublished data); support of this hypothesis, however,
would require a larger and more comprehensive analysis (currently in progress).

During a recent aquatic faunal survey conducted at the headwaters of the Katingan River basin in Central
Kalimantan, a large series of distinctively marked hill stream loach of the genus Homaloptera was obtained.
This taxon was compared with known species and is morphologically similar to H. stephensoni and H.
tateregani. However, the unique body colour pattern of this taxon is diagnostic (amongst other characters),
and is described herein as a new species. The two rarely reported and poorly known species, viz. H.
stephensoni and H. tateregani are redescribed based on type (only H. tateregani) and fresh material.

Material and methods

Material examined in this study is deposited in the following institutions: Museum Zoologicum Bogoriense
(MZB), Cibinong, Indonesia; National Natuurhistorisch Museum (formerly Rijksmuseum van Natuurlijke
Historie) (RMNH) Leiden, The Netherlands; and Zoological Reference Collection, Raffles Museum of
Biodiversity Research, National University of Singapore (ZRC), Singapore.

Specimens recently collected for this study were obtained with push nets and scoop nets. These were fixed
in 10 % formalin solution and are stored in 75 % ethanol. Measurements were made point to point using