Two Species of Cavefishes from Northern Thailand in the Genera *Nemacheilus* and *Homaloptera* (Osteichthyes: Homalopteridae)

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ABSTRACT. Two new species of cavefishes from Mae Hong Son Province, northern Thailand represent the first record of cavefishes from that country. *Nemacheilus oedipus* n.sp. from Tham Nam Lang has degenerate eyes and is the first member of the Nemacheilinae with vestigial eyes and the seventh cavernicole. *Homaloptera thamicola* n.sp. from Tham Susa completely lacks eyes and is tentatively referred to *Homaloptera*, although it differs in details of mouth structure. It is the first blind cavernicolous representative of the Homalopterinae.


Cavefishes are known to occur in several areas of Asia, particularly in south-west Asia and in south China, areas which have extensive karstic formations. Although there are quite extensive karstic areas in Thailand, no cavefishes have been recorded from that country. In the last seven years I made several unsuccessful attempts to collect in a number of Thai caves. Despite this, I still think that some of the caves I visited without reward may have fishes. For example, the famous Chiang Dao caves, where I observed only shrimps (i.e., an unidentifiable juvenile of *Macrobrachium* which does not show any character that might indicate an adaptation to subterranean life; L.B. Holthuis, in litt.), are the subject of several tales involving cavefishes. According to inhabitants of Chiang Mai province, subterranean waters in Chiang Dao caves are inhabited by fishes which have numerous magical properties: they have no shadow and when they meet an obstacle, they can split, with each half going its own way and then fusing together once the obstacle is passed, etc. Unfortunately, I was unable to catch or see this very peculiar fish, if it exists, or any other cavefish in Thailand.

It was particularly pleasing when Dr. D. Hoese, of the Australian Museum, Sydney, sent me three specimens of two species of loaches which had recently been collected in caves in Thailand. Although it is doubtful that the “magic” fish is among them, they are nevertheless of interest, one of them being the first known cave species of Homalopterinae and the other one being a new *Nemacheilus* with vestigial eyes.

Methods

The methods for making measurements and counts follow Kottelat (1984) except for the nomenclature of the cephalic lateral line system which is that of Illick (1956). When measurements are expressed as percent of head length, dorsal head length along the sagittal plane is meant. In anal and dorsal fin ray counts, ½ refers to the last branched ray born by the same pteryglOphore as the penultimate ray.

Measurements refer to standard lengths (SL) and head length (HL).

*Nemacheilus oedipus* n.sp.

Fig. 1

**Type material.** HOLOTYPE: AMS I.25986-002, 70.4 mm SL; Thailand: Mae Hong Son Prov.: Tham Nam Lang [= Nam Lang Cave], 19°31’N 98°09’E; J. Dunkley, 7 May