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Rediscovery of the critically endangered cyprinid fish *Epalzeorhynchos bicolor* (Smith, 1931) from West Thailand (Cypriniformes Cyprinidae)

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ABSTRACT In the present paper, we report on the critically endangered cyprinid fish, *Epalzeorhynchos bicolor* (Smith, 1931) "rediscovered" in Maeklong Basin, West Thailand. Moreover, distribution data and biological observations of this species are also provided.

KEY WORDS *Epalzeorhynchos bicolor*; Cyprinidae; Maeklong Basin; Thailand.

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INTRODUCTION

The freshwater cyprinid fish genus *Epalzeorhynchos* Bleeker, 1855, order Cypriniformes Bleeker, 1859 and family Cyprinidae Cuvier, 1817, has been reported for Southeast Asia only (Kottelat & Whitten, 1996; Doi, 1997; Monkolprasit et al., 1997; Yang & Winterbottom, 1998).

According to the current taxonomic status of this genus, it comprises 4 valid species:

E. frenatum (Fowler, 1937) from Chao Phraya Basin, Maeklong Basin in Thailand and Mekong Basin in Indochina;

E. kalopterum (Bleeker, 1850) from South Thailand to Indonesia;

E. munense (Smith, 1934) from Mekong Basin in Indochina;

E. bicolor (Smith, 1931) from Central and West Thailand (Smith, 1931; Vidthayanon et al. 1997; Kottelat, 2013).

RESULTS

The cyprinid fish *Epalzeorhynchos bicolor* (Fig. 1) is an endemic fish of Thailand. The distribution of this species is reported only for Lower Chao Phraya Basin, Bangpakong Basin and Lower Maeklong Basin (Smith, 1931; Vidthayanon et al., 1997; Vidthayanon, 2005, 2011). It has been threatened by mass collecting for aquarium trade, pollution of many sources and habitats destruction (Vidthayanon, 2011) and, according to the IUCN Red List of Threatened Species (Vidthayanon, 2005, 2011), this fish is a threatened species. In 1996, it was even thought to be extinct in the wild since there was no documented evidence of it the last more than 50 years (Kottelat & Whitten, 1996).

Currently, the status of the species is poorly known. In 2011, Dr. Chavalit Vidthayanon assessed that the species is still extant in the Chao Phraya

Figure 1. *Epalzeorhynchos bicolor* from Maeklong Basin, West Thailand, standard length 66 mm.

Basin but strictly localized, nevertheless, its location is still unclear (personal comment). On the contrary, in the same year, the population of *E. bicolor* was reported to be extirpated in Maeklong Basin and Bangpakong Basin (Vidthayanon, 2011).

In a survey project of the first author at Lower Maeklong Basin, West Thailand (carried out during February 2013) the author found only one specimen of *E. bicolor* in the rocky dam around the mainstream of Maeklong River near the water gate of Maeklong Dam, Muang District, Kanchanaburi Province, Lower Maeklong Basin, West Thailand (Fig. 2).

This fish lives in gaps between the rocks and its habitat is characterized by large rocks and a sandy bottom. This area is fast flown by tides and the depth of water is more than 1 meter. In the same area, we found many other fish species, including:

CLUPEIFORMES CLUPEIDAE
Clupeichthys goniognathus Bleeker, 1855

OSTEOGLOSSIFORMES NOTOPTERIDAE
Notopterus notopterus (Pallas, 1769)

CYPRINIFORMES CYPRINIDAE
Rasbora aurotaenia Tirant, 1885
Barbonymus schwanenfeldii (Bleeker, 1854)
Cirrhinus molitorella (Valenciennes, 1844)
Opsarius koratensis (Smith, 1931)
Mystacoleucus marginatus (Valenciennes, 1842),
Osteochilus vittatus (Valenciennes, 1842)
Osteochilus microcephalus (Valenciennes, 1842)

CYPRINIFORMES BALITOLIDAE
Nemacheilus masyae Smith, 1933
Homaloptera smithi Hora, 1932

CYPRINIFORMES COBITIDAE
Acanthopsoides gracilentus (Smith, 1945)
Pangio oblonga (Valenciennes, 1846)

SILURIFORMES BAGRIDAE
Pseudomystus siamensis (Regan, 1913)

BELONIFORMES HEMIRAMPHIDAE
Dermogenys siamensis Fowler, 1934

SYNBRANCHIFORMES MASTACEMBELIDAE
Mastacembelus favus Hora, 1924

PERCIFORMES NANDIDAE
Pristolepis fasciata (Bleeker, 1851)

PERCIFORMES AMBASSIDAE
Parambassis siamensis (Fowler, 1937)

CONCLUSION

In conclusion, at present, the occurrence of *E. bicolor* in the wild is certainly confirmed in Lower Maeklong Basin, Kanchanaburi Province, West Thailand, whereas it is still unclear in the Chao Phraya Basin due to the lack, to date, of documented evidence.

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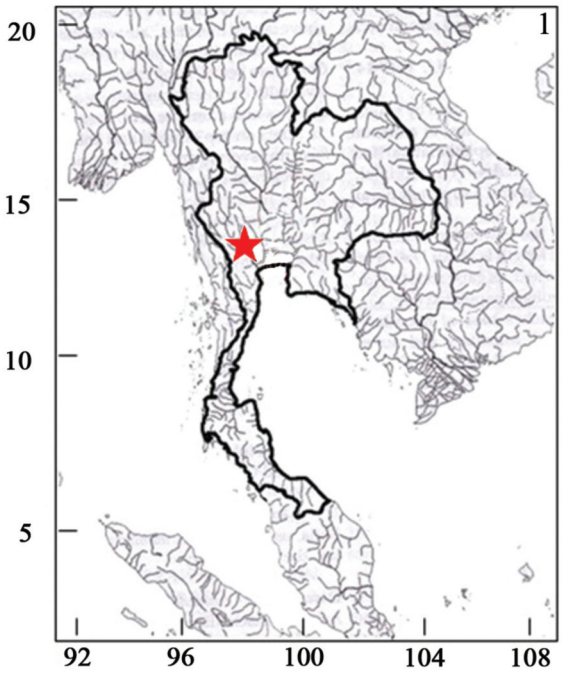

Figure 2. Study area: Lower Maeklong Basin, Kanchanaburi Province, West Thailand.

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