

## Two new records of cyprinid fish (Cypriniformes Cyprinidae) from Thailand

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### ABSTRACT

In the present paper, two cyprinid fishes, *Boraras urophthalmoides* (Kottelat, 1991) and *Rasbosoma spilocerca* (Rainboth et Kottelat, 1987) are newly recorded from Bangpakong Basin, Southeast Thailand. Description and distribution data of the two cyprinid fish are provided here.

### KEY WORDS

*Boraras urophthalmoides*; *Rasbosoma spilocerca*; Cyprinidae; Thailand.

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### INTRODUCTION

Freshwater cyprinid fish genera *Boraras* Kottelat et Vidthayanon, 1993 and *Rasbosoma* Liao, Kulander et Fang, 2010 are scarcely distributed in Thailand. The genus *Boraras* has been reported for Southeast Asia only (Kottelat & Vidthayanon, 1993; Doi, 1997; Kottelat, 2001; Conway & Kottelat, 2011). According to the current taxonomic status of this genus, it comprises 6 valid species, *B. brigittae* (Vogt, 1978) and *B. merah* (Kottelat, 1991) from Borneo, Indonesia; *B. maculatus* (Duncker, 1904) from Malay Peninsula, Sumatra and Borneo, Indonesia; *B. micros* Kottelat et Vidthayanon, 1993 from Mekong Basin, Thailand and Laos; *B. naevus* Conway et Kottelat, 2011 from peninsular Thailand and *B. urophthalmoides* (Kottelat, 1991), from Sumatra, Malay Peninsula, Mekong Basin in Indochina, Lower Chao Phraya Basin and peninsular Thailand (Kottelat & Vidthayanon, 1993; Kottelat et al., 1993; Doi, 1997; Conway & Kottelat, 2011).

The genus *Rasbosoma* is distributed in Mekong

Basin only (Indochina). First record of *R. spilocerca* (Rainboth et Kottelat, 1987) in Thailand was reported by Rainboth & Kottelat (1987) under the name *Rasbora spilocerca* from Mekong Basin at Northeast Thailand (Ubon Province, Kalasin Province and Udon Thani Province). Currently, this species was considered a junior synonym of *Rasbosoma spilocerca* (Rainboth & Kottelat, 1987; Rainboth, 1996; Vidthayanon et al., 1997; Liao et al., 2010).

In a survey project of the authors in Upper Bangpakong Basin, Southeast Thailand during October and November 2012, we found several specimens of *B. urophthalmoides* and one specimen of *R. spilocerca* from temporary peat-swamp of the tributary of Bangpakong River, Pakpree District, Nakhon Nayok Province, Southeast Thailand. This is a new record of *B. urophthalmoides* and *R. spilocerca* in Bangpakong Basin, Thailand. Currently, the specimens of *B. urophthalmoides* and *R. spilocerca* are deposited into the Reference Collection of Aquatic Biology, Ramkhamhaeng University, Bangkok, Thailand.

ACRONYMS AND ABBREVIATIONS. Reference Collection of Aquatic Biology, Ramkhamhaeng University, Bangkok, Thailand = RU; standard length = SL; head length = HL.

## RESULTS

Order Cypriniformes Bleeker, 1859

Family Cyprinidae Cuvier, 1817

### *Boraras urophthalmoides* (Kottelat, 1991)

EXAMINED MATERIAL. RU 0093-0094, 35 specimens, 15-19 mm SL, Temporary peatswamp of Bangpakong Basin, Pakpree District, Nakhon Nayok Province, Southeastern Thailand (Fig. 1), X/XI. 2012, legit Nidsaraporn Petsut, Sitthi Kulabtong et Jiraweath Petsut.

DESCRIPTION. This species (Fig. 2) is distinguished from other species of genus *Boraras* by the combination of the following characters: large black prominent lateral stripe on each side of the body, the origin of which is behind the opercle and ending near the caudal peduncle; large black spot on each caudal fin base and anal fin base; the first dorsal-fin ray is black.

*B. urophthalmoides* is compressed, body depth is 26.6-29.3 %SL. Body width is 8.6-11.2 %SL. Scales in lateral series are medium to large, lateral series scales is made of 24-27 scales, predorsal scales are 10-12. Head length is 26.8-31.1 %SL.



Figure 1. Temporary peatswamp of Bangpakong Basin, Southeastern Thailand.

The eye is large, eye diameter is 35.7-37.9 %HL (8.6-11.1 %SL). Post orbital length is 43.8-46.4 %HL (10.1-14.6 %SL), snout length is short, with 17.9-20.1 %HL (5.0-7.1 %SL) and interorbital width is 46.9-50.4 %HL (10.9-11.8 %SL). Dorsal fin origin is anterior to the anal fin origin, predorsal fin length is 57.7-62.8 %SL, prepectoral fin length is 30.6-32.2 %SL, prepelvic fin length is 46.5-51.1 %SL and preanal fin length is 64.1-66.9 %SL. Caudal peduncle depth is 10.0-10.9 %SL. Pectoral fin is short not reaching beyond the anus, pectoral fin length is 14.3-16.2 %SL with 8-9 branched fin rays. Pelvic fin is short not reaching beyond the anus, pelvic fin length is 8.0-9.2 %SL with 7 branched fin rays. Anal fin base is longer than dorsal fin base, anal fin base length is 10.6-13.4 %SL, dorsal fin shows 2 unbranched rays and 7 branched rays and anal fin 3 unbranched rays and 5 branched rays. Dorsal fin base length is 8.3-9.5 %SL.

Coloration in fresh specimens is fade red, purple or orange along the body. On the side of body is clearly silver or light black showing a prominent lateral stripe from behind the opercle to pre-caudal peduncle. The stripe has a small orange frame. The spot on caudal fin base is silver or light black, with a small orange frame. The black spot on anal fin base is not clear. Anterior of dorsal fin is fade black and red, anal fin is transparent with fade black on the anterior part, caudal fin is transparent with red or orange on caudal fin base, pectoral fin and pelvic fin are transparent. Coloration in preserved specimens lost all of red, orange and purple on the body, caudal peduncle and all fins. On the side is clearly black with a prominent lateral stripe from behind the opercle to pre-caudal peduncle, large black spots on the caudal fin base and anal fin base.

DISTRIBUTION. This species is known from Sumatra, Malay Peninsula, Mekong Basin in Indochina, Lower Chao Phraya Basin and peninsular Thailand. New record for Bangpakong Basin.

### *Rasbosa spilocerca* (Rainboth et Kottelat, 1987)

EXAMINED MATERIAL. RU 0090, 1 specimens, 24 mm SL, Temporary peatswamp of Bangpakong Basin, Pakpree District, Nakhon Nayok Province, Southeast Thailand, X/XI. 2012, legit Nidsaraporn Petsut, Sitthi Kulabtong et Jiraweath Petsut (Fig. 1).

DESCRIPTION. *R. spilocerca* is distinguished from



Figure 2. *Boraras urophthalmoides*, 15 mm SL from Bangpakong Basin, Thailand. Figure 3. *Rasbosoma spilocerca*, 24 mm SL from Bangpakong Basin, Thailand.

other species of rasborins by the tip of the outer arm of suspensorium bent inward, forming a short horizontal process (Kottelat & Vidthayanon, 1993). Lateral line scales incomplete and 9-10 circumpectuncular scales. Clearly black spot on dorsal fin, anal fin and caudal fin base.

*R. spilocerca* (Fig. 3) is compressed, body depth is 25.4 %SL. Body width is 10.8 %SL. Scales in lateral series are large, lateral series scales are 28, predorsal scales 12. Head length is 24.6 %SL. The eye is large, eye diameter is 31.4 %HL (7.8 %SL). Post orbital length is 45.4 %HL (11.5 %SL), snout length is short, with 22.9 %HL (5.6 %SL) and interorbital width is 48.6 % HL. Dorsal fin origin is posterior to the pelvic fin origin, predorsal fin length is 54.2

%SL, prepectoral fin length is 24.7 %SL, prepelvic fin length is 50.7 %SL and preanal fin length is 67.6 %SL. Caudal peduncle depth is 11.3 %SL. Pectoral fin is short not reaching beyond the anus, pectoral fin length is 15.5 %SL with 8 branched fin rays. Pelvic fin is short not reaching beyond the anus, pelvic fin length is 16.9 %SL bearing 7 branched fin rays. Anal fin base length is 9.9 %SL, dorsal fin with 3 unbranched rays and 7 branched rays. Dorsal fin base length is 12.1 %SL.

Coloration in fresh specimens is transparent along the body. On the side of body is clearly black with a lateral stripe from behind the opercle to pre-caudal peduncle and black spots on dorsal fin, anal fin and caudal fin base.

DISTRIBUTION. This species is recorded only in Mekong Basin, Indochina. New record for Bangpakong Basin.

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