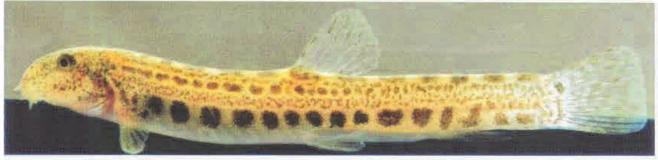


Cobitis vettonica; Alagon, Spain; ~70 mm SL.



Cobitis zanandreai; Fondi lagoon, Italy; ~55 mm SL.

Habitat. In deep, large streams with clear water, and sand to rock bottom.

Biology. Spawns in April - June.

Conservation status. EN Blab(ii,iii,v)+ 2ab(ii, iii,v); very restricted area of occurrence, agricultural water pollution, drought and introduced predators.

**Remarks.** This species is mainly distinguished by mtDNA characters and difficult to distinguish from C. *paludica* in the field. Characters given in the key may be of limited use.

Further reading. Doadrio & Perdices, 1997: 53 (description); Carmona et al., 1999: 377 (habitat); Doadrio, 2001: 220 (distribution).

## Cobitis zanandreai

Common name. Volturno spined loach.

Diagnosis. Distinguished from other species of

Cobitis in Italy by: ■ zone Z4 not reaching caudal base, replaced by irregular spots, indistinguishable from those of zones Z2 and Z3 immediately in front of caudal / ● small black spot on upper caudal base often barely visible / ● depth of caudal peduncle about 1.3 times in its length. Size up to 75 mm SL in females, 60 mm SL in males.

**Distribution.** Southern Italy: Volturno drainage near Caserta and Fondi lagoon.

**Habitat.** Stream with sand bottom, drainage channels and irrigation ponds; lacustrine.

Biology. No data.

Conservation status. VU D2; due to very restricted area of occurrence, habitat alteration and changes of land-use.

Further reading. Cavicchioli, 1965: 1152 (description); Perdices & Doadrio, 2001: 472 (genetics).



