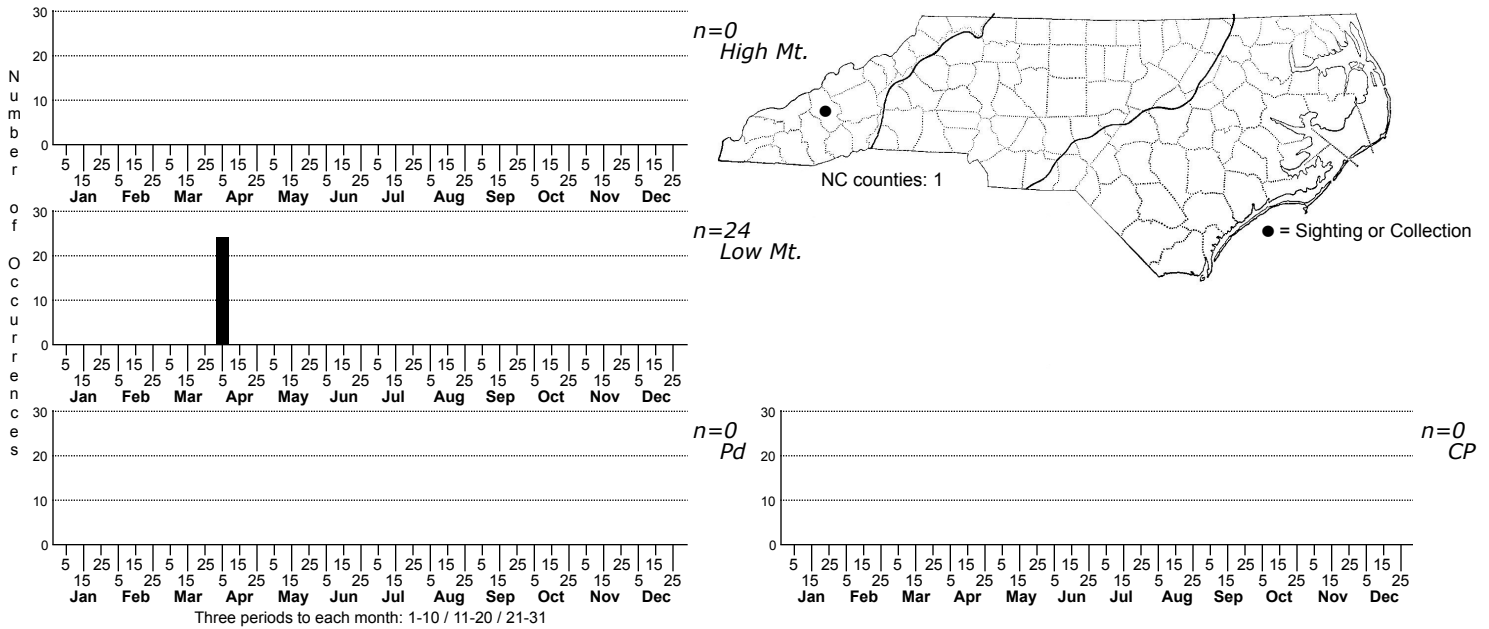


## *Mixibius saracenus*



FAMILY: Hypsibiidae SUBFAMILY: Incerta subfamilia

TAXONOMIC COMMENTS: Species was identified by Roberto Bertolani. Matches European species morphologically, DNA sequences from Italian populations exist in GenBank, need fresh material from Smokies for further comparison.

SPECIES COMMENTS: Freshwater. This is a new record for the U.S.

ID COMMENTS: This genus is characterized by dual claw morphology: external claws of the Isohypsibius type; internal claws of modified Isohypsibius type with the secondary branch and the basal portion forming an angle slightly larger than 90°. Buccopharyngeal apparatus of the Mixibius type (Fig. 15D) with hooked pharyngeal apophyses. Placoids present, lunules absent in the known species.

Size up to 254 μm, colorless, eyes absent, cuticle smooth. The mouth opens in an antero-ventral position and is lacking buccal lamellae. Buccal tube 26 μm long and 5 μm wide (in an example of 210 μm); insertion appendages of the stylet muscles in the shape of crests. Pharynx very large, elongated oval, with apophyses and two rod-shaped macroplacoids, of which the first, which is longer than the second, has a central constriction. Microplacoid absent. The doubleclaws of each leg are rather different from each other. The basal portion is very long and narrow, especially on the external claws, and the principal branch of this claw is longer and much more narrow than the corresponding of the internal claw. The accessory points are clearly visible on the principal branch of the claws of the 4th pair, less evident on the other claws. There are no lunules present and a cuticular thickening is lacking on all the legs. The species is aquatic, and was found in the stream of Saracena, near Maletto (Sicily) and later Ceraino, near Verona (Adige).  
-Ramazzotti & Maucci 1983

DISTRIBUTION: Please refer to the dot map.

HABITAT: Freshwater streams.

OBSERVATION METHODS: PC and DIC.