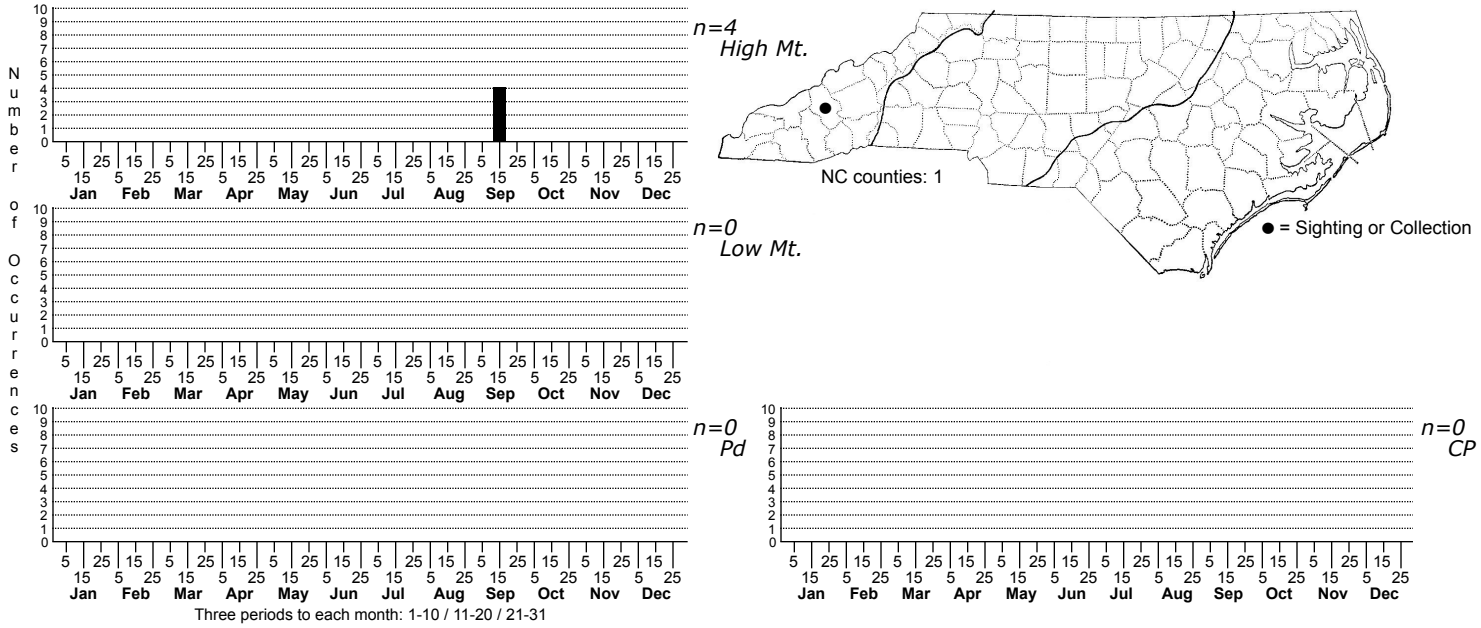
Ramazzottius belubellus



FAMILY: Ramazzottiidae

TAXONOMIC COMMENTS: A new species discovered in GSMNP. At present (October 2023), samples are being analyzed in Lukasz Michalczyk's lab to search for additional material.

SPECIES COMMENTS: Terrestrial. This is one of the most remarkable and beautiful eutardigrades ever described. The species epithet translates to "beautiful beast". Only 4 specimens from 1 sample have ever been found despite numerous attempts to find more. Known only from GSMNP.

ID COMMENTS: Adult body color unknown due to mounting in polyvinyl alcohol (Figs 1-2). Dorsal cuticle with very evident sharp triangular, bulbous spines (very wide at the base: basal width = 2.0-6.0 mm on the dorsal side of the body and about 1.0 mm on the legs, spine height = 1.5-4.0 mm in all measured specimens), clearly larger on the posterior part of the body (Figs 3-4). Spines not arranged in bands but covering the entire dorsum. Fine granulation absent on legs but small tubercles (about 1.0 mm high) present on the external parts of all legs (Fig. 5). Ventral side of the body and internal parts of all legs smooth. Eyes absent. Two elliptical organs on the posterior dorso-lateral sides of head not visible with PCM (but possibly present as in all members of genus Ramazzottius). Mouth opening antero-ventral. Buccal-pharyngeal apparatus of the Ramazzottius type (Fig. 6), with blunt-hook shaped apophyses for insertion of the stylet muscles, asymmetrical in size and shape with respect to the frontal plane. Oral cavity armature absent or not visible with PCM. Buccal tube with one bend in posterior part of tube (visible only in lateral view, Fig. 2). Pharyngeal bulb slightly oval with apophyses and two macroplacoids (Fig. 6). Microplacoid and septulum absent. Pharyngeal apophyses very large (almost as large as macroplacoids) and triangular in shape. Macroplacoids slightly oval, without constrictions, both equal in length or the first macroplacoid slightly longer than the second. Claws of the Ramazzottius type (Fig. 7). Primary branches of external claws long and thin, not connected with the secondary branches. Accessory points present on primary branches of all external and internal claws. Lunules and other cuticular thickenings on legs absent. Eggs unknown.
-Bartels et al. 2011

DISTRIBUTION: Please refer to the dot map.

HABITAT: Licchens on trees.

OBSERVATION METHODS: DIC and PC.