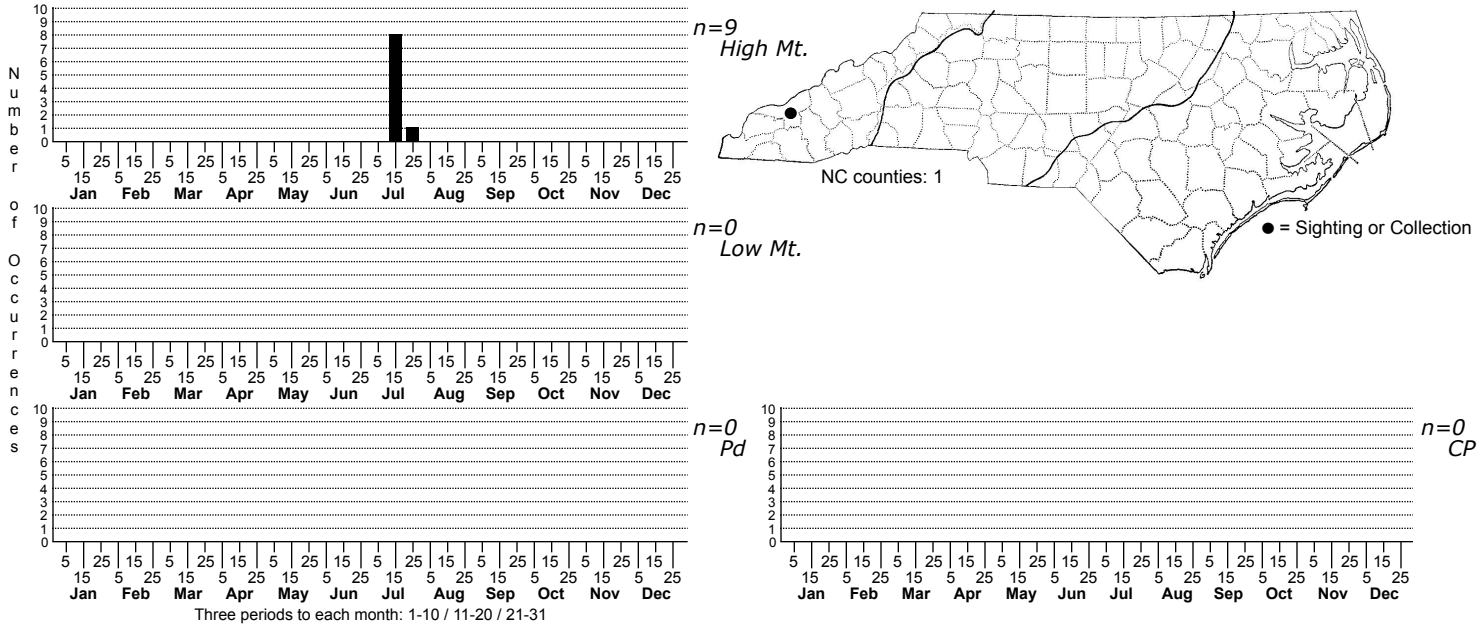
Calohypsibius schusteri



FAMILY: Calohypsibiidae

TAXONOMIC COMMENTS: Easily distinguished from Calohypsibius ornatus by tubercles and lack of long cuticular spines.

SPECIES COMMENTS: Terrestrial. This species was discovered by Diane Nelson and her student Karen McGlothlin in Roan Mountain, TN. It has been reported only from TN, NC, and Costa Rica.

ID COMMENTS: Eye spots absent. Cuticle colorless, with distinct sculpture. Irregular, rhomboidal, knob-like tubercles cover the entire dorsal and lateral cuticle and extend onto the ventral surface. Larger tubercles are in 10 transverse rows with smaller tubercles between rows and on all legs. Tops of tubercles appear star-shaped when viewed with phase microscopy. The height of the tubercles increases in size posteriorly, with caudal tubercles about 2-2.5 µm in height and about 2 µm in width at the top of the tubercle. Buccal tube narrow, 17.5 µm long by 1 µm wide. Wall of buccal tube thickened posterior to insertion of stylet supports. Distance from end of buccal tube to insertion of stylet supports 7.5 µm, approximately 45% of the length of buccal tube. Spherical pharyngeal bulb (16 x 15 µm) with well developed apophyses and two granular macroplacoids; placoids approximately equal in length, 1.5 µm. Length of placoid row from apophysis to end of second macroplacoid, 4.5 µm. Microplacoid and septum absent. Two double claws on each leg Calohypsibius-type, with the primary branch of the external claw rigidly attached to the secondary branch; claw sequence 2-1-2-1. On legs I-III, distance from base of external claw to tip of primary branch about 3.5-4 µm. Claws on legs IV slightly larger, but not accurately measurable on holotype. Angle between primary and secondary branch approximately 44 degrees. Primary and secondary branches of external claws with widely separared tip, 4.5 µm apart. -Nelson & McGlothlin 1996

DISTRIBUTION: Please refer to the dot map.

HABITAT: Predominantly on tree moss, but also occurs in other terrestrial habitats.

OBSERVATION METHODS: PC, DIC, SEM.