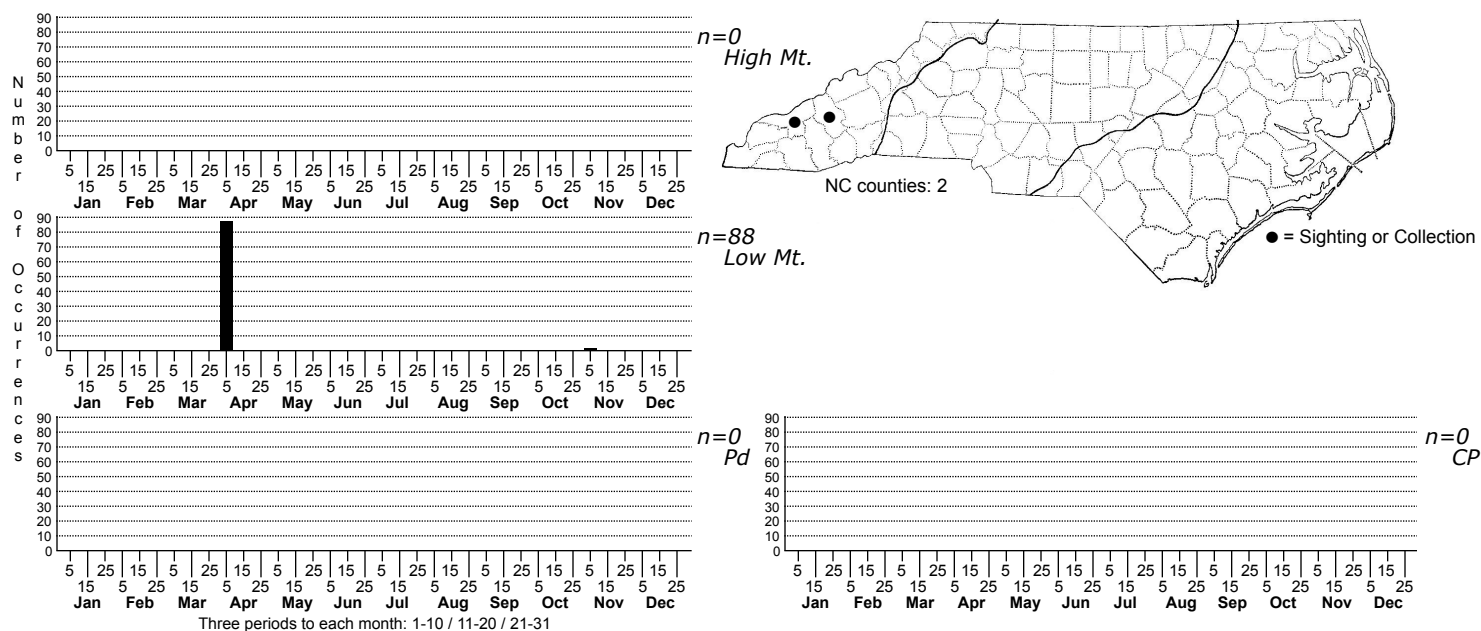


## *Thulinus augusti*



FAMILY: Doryphoribiidae

TAXONOMIC COMMENTS: Transferred to *Thulinus* and species redescribed by Bertolani et al. 1999. The genus was transferred to Doryphoribiidae by Gasiorek et al. 2019.

SPECIES COMMENTS: Freshwater. Morphologically indistinguishable from the species first described from Scotland. 18S rDNA sequences are available at GenBank, but DNA from specimens from type locality was not available at the time of this study.

ID COMMENTS: Cuticle smooth and without pigmentation. Eye spots are absent in the mounted material. The buccal aperture is surrounded by 6 lobes usually subdivided into 12-16 sublobes, of various shapes and sizes. Peribuccal lamellae should be present, but are not identifiable in the type material because of the presence of the very dark sublobes. The anterior part of the buccal cavity, immediately posterior to the peribuccal lamellae, lacks a band of granules. A wide posterior band of fine granulation is present, followed by a single row of rounded mucrones. The buccal tube is wide. Both the dorsal and ventral stylet muscle apophyses (buccal apophyses) at the anterior end of the buccal tube are crest-shaped but not well developed, as in the other species of the genus. The apophysis at the base of the buccal tube (pharyngeal apophysis) is long and thin and well developed. There are three long and thin macroplacoids in the oval pharyngeal bulb. The first and second macroplacoids are closer together than the second and third macroplacoids. The second macroplacoid is the shortest, the first macroplacoid the longest. There is no microplacoid or septulum. The curvature of the placoid rows forms a shape similar to a Grecian urn. The claws are of the Isohypsibius-type. The basal tracts of the external claws are long and thin, but after tapering towards the base they expand to form a base approximately double the width of the constricted basal tract. The internal claws of leg pairs I to III have relatively long basal tracts which taper to a blunt, slightly expanded base. Lunules are absent on all claws. On the first three pairs of legs a cuticular bar is present below the claws. This bar is as developed as the similar structure found in *Thulinus ruffoi*, even if it is obscured by the position of the leg or claws. There is no similar bar on the fourth pair of legs.

-Bertolani, Nelson, & Marley 1999

DISTRIBUTION: Please refer to the dot map.

HABITAT: Freshwater streams.

OBSERVATION METHODS: PC and DIC.