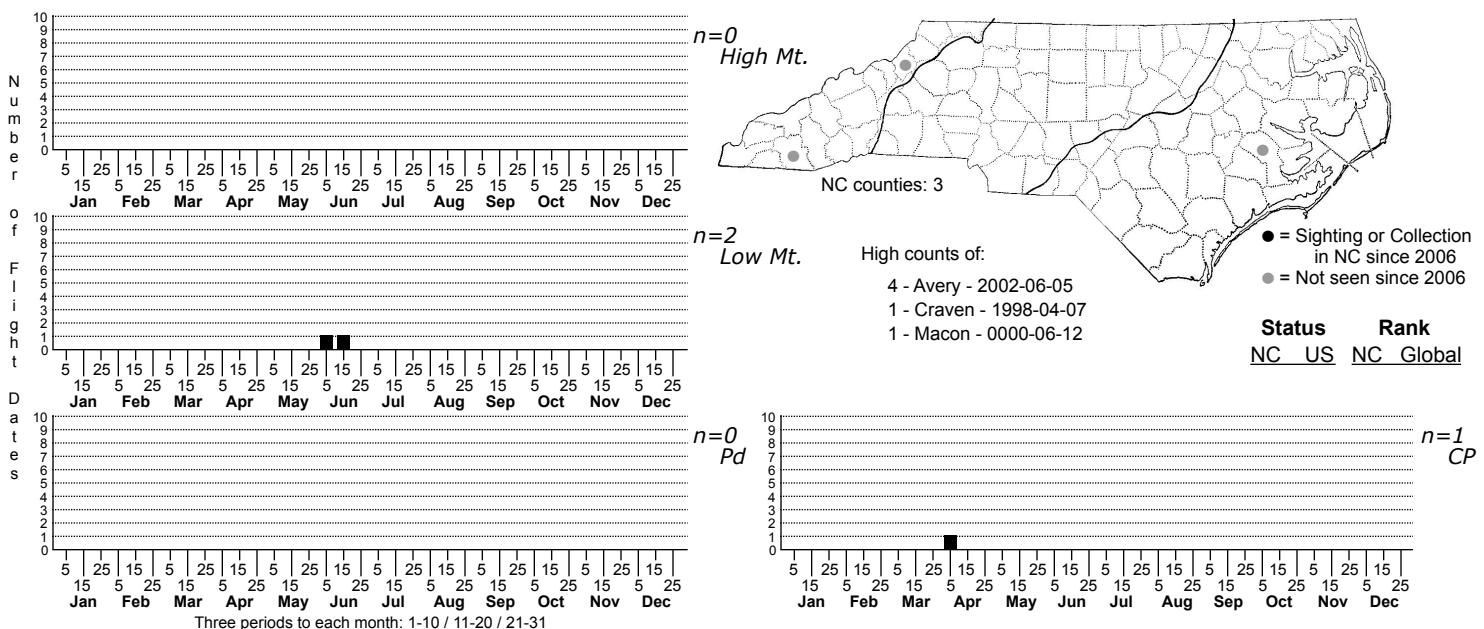


# Paralobesia magnoliana None



FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Olethreutini

TAXONOMIC COMMENTS: *Paralobesia* is a genus of small tortricid moths, with the majority of species found in the Nearctic Region. Royals et al. (2019) recently completed a much-needed revision of the genus, which now includes 43 species. Only 19 species were described prior to their work, and there appear to be a few remaining undescribed species in North America where there is insufficient material or data to formally describe them (Royals et al., 2019). We currently have 12 described species in North Carolina, as well as one undescribed species (J.B. Sullivan, pers. comm.). Many are very similar in external coloration and patterning, and are best identified using either genitalia or rearing from host-specific plants.

## FIELD GUIDE DESCRIPTIONS:

### ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Royals et al. (2019)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: *Paralobesia liriodendrana* and *P. magnoliana* were previously treated as a single species, but are now considered to be two cryptic species that cannot be distinguished based on external coloration and patterning (Royals et al., 2019). The following description applies to both species and is based in part on that of Royals et al. (2019). The vertex is pale reddish-brown and the labial palps pale-brown to reddish-brown. The thorax is mottled with reddish-orange and tan scales, and the posterior crest is mottled with dark-brown and orange scales. The ground color of the forewing is bluish-gray and is most prominent on the basal half of the wing where it is typically separated by a thin, outwardly angulated band at around one-fourth the wing length. The most prominent mark is a large median fascia that extends from the costa to the inner margin, with the dorsal half greatly expanded distally. The median fascia varies from uniformly dark brown to two-toned, with the dorsal half lighter and tending towards reddish-brown. The median fascia is followed by a prominent subterminal band (blotch) that is centered near the middle of the wing, along with several smaller blotches between it and the apical third of the costa. In North Carolina specimens, these tend to be lighter than the median fascia and are margined with light reddish-tan scales. The fringe is light reddish-brown, and the hindwing is uniformly brown to dark brown. The abdomen is grayish-brown above.

This species is best confirmed by using genitalia or DNA barcoding given that it is indistinguishable from *P. magnoliana*. *Paralobesia viteana* is also very similar, but has a bluish-gray fringe (Forbes, 1923) versus the light reddish-brown fringe of *P. liriodendrana* and *P. magnoliana*. In addition, the costal remnant of the post-median fascia (the small, dark costal mark between the median fascia and the subterminal band) is reduced in size relative to that of *P. liriodendrana* complex, which is larger and more rectangular-shaped.

*Paralobesia liriodendrana* and *P. magnoliana* appear to have essentially identical life histories, with the larvae feeding in a partial leaf-fold that is often made along the midrib of either *Liriodendron* or *Magnolia* leaves. Because these two species currently cannot be separated based on larval morphology, host plants, or other aspects of the larval life history, we are currently placing submissions of leaf-folds in the 'Paralobesia liriodendrana\_magnoliana' account. *Paralobesia magnoliana* appears to be relatively rare in North Carolina, and the vast majority of these leaf-fold records are likely those of *P. liriodendrana*.

DISTRIBUTION: There are only a few scattered records for this species, with the range extending from southwestern Mississippi and the Florida Panhandle northward through North Carolina, Virginia and Maryland to New Jersey (Royals et al., 2019). As of 2024, we have two records from the Blue Ridge and one from the Coast.

FLIGHT COMMENT: Royals et al. (2019) identified specimens that were collected from late-March to mid-August in different areas of the range. As of 2024, our very limited records are from early-April through mid-June.

HABITAT: Local populations are restricted to mesic hardwood forests, semi-wooded residential communities, and other wooded habitats that have *Liriodendron* and *Magnolia* species present.

FOOD: Although host records are sparse, the larvae presumably only feed on members of the Magnoliaceae. The documented hosts include Tuliptree (*Liriodendron tulipifera*) and Sweetbay Magnolia (*Magnolia virginiana*) (Eiseman, 2022).

OBSERVATION METHODS: The adults appear to be only weakly attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR [S2S3]

## STATE PROTECTION:

COMMENTS: The species is probably more common than our records suggest since it was only recently resurrected as a full species and identification requires genitalia.