



Paralobesia monotropana None

FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Olethreutini

TAXONOMIC_COMMENTS: <i>Paralobesia</i> 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: Royals et al. (2019)

ID COMMENTS: The following description is primarily from that of Royals et al. (2019). The vertex is pale reddish-brown and the labial palps palebrown to reddish-brown. The second segment of the palp is rough scaled, while the third is smooth scaled. 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, dark band at around one-fourth the wing length. The most prominent mark is a large median fascia that extends from the costa to near 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, dark 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. All of these are margined with light reddish-tan scales. The costal remnant of the post-median fascia (the first dark costal mark that follows the median fascia) is well developed and more-or-less rectangular-shaped. It or other dark marks along the costa are often connected to the dark subterminal band by a narrow neck. The costal strigulae consist of 3-9 pairs that are expressed as pale brown dashes along the costa. The legs are pale brown with white annulations on the tibia and tarsal segments. The hindwing is uniform dark brown with paler scales at the base, and the abdomen varies from pale to dark brown. This species is generally similar to some of our other <i> Paralobesia</i> such as <i>P. liriodendrana</i> and is best confirmed by either rearing the adults or using genitalia or DNA barcoding.

DISTRIBUTION: <i>Paralobesia monotropana /i> is widely distributed in eastern North America. Specimens that were identified by Royals et al. (2019) were from southeastern Canada (Ontario; Quebec; New Brunswick; Newfoundland; Labrador; Nova Scotia), and the U.S. from Maine southwestward to central Alabama and northern Mississippi, and westward to Ohio and Illinois. As of 2024, we have a single record from a lowerelevation site in the central Blue Ridge.

FLIGHT COMMENT: Royals et al. (2019) reported a flight season from early-June to late-August based on the specimens that they examined from throughout the range. Our one larval record as of 2024 was from late-July, with a reared adult emerging in mid-August.

HABITAT: Local populations are associated with hardwood forests, mixed pine-hardwood forests, and edge habitats where the hosts species are present.

FOOD: This species appears to largely specialize on Indian-pipe (<i>Monotropa uniflora</i>), but also has been found in the flower heads of Staghorn Sumac (<i>Rhus typhina</i>; Royals et al., 2019). Jim Petranka reared three adults from larvae that were feeding on Indian Pipe, which is our only host record for North Carolina as of 2024.

OBSERVATION METHODS: Most of the records to date are for specimens that have been reared from Indian Pipe.

NATURAL HERITAGE PROGRAM RANKS: GNR[SU]

STATE PROTECTION:

COMMENTS: As of 2024, we have only one record for the state from Madison County. This species in all likelihood has been under collected due to its use of Indian Pipes as a host species.