

FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Eucosmini

TAXONOMIC COMMENTS: The genus <i>Pseudexentera</i> currently has 19 recognized species that are found primarily in North and Central America, with 17 recognized species in the US. They are typically found in forested settings and most fly very early in the year. Many are challenging to identify, particularly the species with fasciate forewing patterns that often show substantial intraspecific variation in patterning and have slight differences in genitalia (Miller, 1968; Gilligan et al., 2008). There has been a long history of misidentified species in the group (Miller, 1968) and there is still much confusion about external traits that are useful in sorting out certain closely related forms. DNA barcoding has not proven to be particularly useful in sorting out species since recognized species often have two or more BINS that contain multiple species names. This likely reflects weak genetic differentiation between certain forms and the large numbers of misidentified specimens in collections. Miller (1968) conducted a taxonomic revision and reviewed all of the recognized species in North America, but did not provide detailed descriptions of external coloration, patterning, or intraspecific variation within species. Here, we treat our assignment of the fasciate specimens to species as provisional since they are based on images or pinned specimens that have not been barcoded or dissected to examine genitalia. Even with the latter, specimens cannot always be confidently assigned to species.

5 25 Feb

Mar

5 25 15 Jun Jul

15 May

5 25 15 Aug Sep

15 Nov

5 25 Oct

FIELD GUIDE DESCRIPTIONS: ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Miller (1986) TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The colors of this species are predominantly light brown (Miller, 1986). The scales on the head, thorax, and abdomen vary from light brown to a mixture of white and brown scales. The ground of the forewing is pale brown to grayish-brown and often with an orangish-brown wash on portions of the costal half. The ground is overlain with two darker brown (umber) patches. The first is a basal mark that is located at about one-third the wing length. Its outer margin initially extends roughly perpendicular to the dorsal margin of the wing before curving outwardly at the middle and ending with a narrow taper near the midwing. The second is a smaller and often obscure subdorsal patch that occurs at around two-thirds. Both are more restricted in extent than the dark patches in other members of this genus. Our specimens are smooth-looking above, and the costa is marked with dark brown or black, posteriorly oblique, strigulae that are interspersed with white. The inner margin often has four or five dark brown spots near the middle of the wing. The speculum that adjoins the anal angle tends to be predominantly light gray, has varying levels of orangish-brown scaling, and often has two or three fine black horizontal lines. The hindwing is pale brown with the fringe paler. The front and middle legs are mixed with white and brown and the hind legs paler, while the tarsi of all legs are banded.

<i>Pseudexentera sepia</i> is very similar to <i>P. vaccinii</i>, but differs in having a reddish-brown ground color versus a grayish ground color in the latter.

DISTRIBUTION: The range encompasses much of the eastern US and extreme southern Canada from the southern New England states westward to Minnesota; it extends southward to eastern Texas then eastward to Florida. Miller (1986) identified specimens from Ohio, Illinois, Missouri, Mississippi, Pennsylvania, Quebec, and Wisconsin. As of 2022 we have scattered records from all three physiographic regions in the state.

FLIGHT COMMENT: The adults have been documented from January through May depending on latitude. Miller (1986) identified specimens that were collected from 19 February to 20 May. As of 2022 our records are from early March to mid-April.

HABITAT: Our records are mostly from areas with hardwood forests, including semiwooded residential neighborhoods.

FOOD: The larval host plants are unknown (Miller, 1986).

OBSERVATION METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR S3S4

STATE PROTECTION: Has no legal protection, although permits are required to collect it on state parks and other public lands.

COMMENTS: We have several documented populations from throughout the state, but currently do not have sufficiently detailed information on habitat requirements, hosts, and abundance to assess the conservation status of this species.

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Jan