



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.

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

ID COMMENTS: In this species the head, palps and antennae vary from grayish-brown to light brown. The thorax tends to be two-toned, with the anterior portion warm brown to light chestnut brown and the posterior half with dark brown to blackish scale patches that form an X-shaped pattern. The posterior arms of the X often continues for a short distance onto the dorsal bases of the wings. The ground of the forewing varies from grayish to light brown and has varying levels of darker dusting. In addition to the dorsal basel line that is a continuation of the arms of the X-pattern on the thorax, there are two conspicuous dark marks. The first is a dorsal patch that begins on the dorsal margin at around one-third and curves posteriorly. The patch is widest at the dorsal margin and narrows slightly before tapering and terminating near the middle of the wing. The posterior margin often contrasts sharply the adjoining ground where there tends to be a thin zone with little or no dark dusting.

The second mark is a smaller dorsal patch just before the tornus at around four-fifths. It can sometimes be obscure and extends from the dorsal margin before terminating well before reaching the middle of the wing. As with the first patch, the posterior margin often contrast sharply with the adjoining ground. Many specimens have a region of irregular blackish patterning about midway between the dorsal patch and the costa that may extend posteriorly into the subterminal region. The costa has a series of short, dark, posteriorly oblique streaks that are interspersed with whitish marks, along with a dark spot at the apex. The fringe tends to be concolorous with the ground. The hindwing is light to medium brown with a paler fringe that has dark basal line.

DISTRIBUTION: <i>Pseudexentera hodsoni</i> is restricted to the eastern US where the range extends from Pennsylvania westward to Illinois, and southward to Florida, Mississippi, Louisiana, and eastern Texas. Miller (1986) documented species from Pennsylvania, Florida, Illinois, Louisiana, Mississippi, Missouri, Texas.

FLIGHT COMMENT: The adults fly relatively early in the year and have been observed from January through May in different areas of the range, with a seasonal peak typically in February through April. As of 2023, our records range from early-February to mid-April, with a seasonal peak in March and early-April.

HABITAT: Most of our records are from semi-wooded residential neighborhoods.

FOOD: Host records are fragmentary, but the larvae appear to specialize on oaks, including Live Oak (<i>Quercus virginiana</i>) and red oaks (Miller, 1986).

OBSERVATION_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR[S4S5]

STATE PROTECTION:

COMMENTS: This species appears to be secure in North Carolina, with most of our records from residential settings.