Pelochrista dorsisignatana Triangle-backed Pelochrista



FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Eucosmini

TAXONOMIC_COMMENTS: <i>Pelochrista</i> is a large Holarctic genus of tortricids with around 75% of the 226 described species being native to North America (Wright and Gilligan, 2017). The highest species richness occurs in the western half of North America. The genus has a long and confusing taxonomic history, with many of the species formerly placed in the genus <i>Eucosma</i>. Gilligan et al. (2014) conducted a comprehensive phylogenetic analysis of <i>Pelochrista</i>, <i>Eucosma</i>, and related genera and redefined the genus <i>Eucosma</i> es and <i>Pelochrista</i> based on differences in female genitalia. The great majority of <i>Pelochrista</i> species are known only from adults, which likely reflects the fact that the larvae of most species bore into stem bases and roots and are concealed from view. Members of the Asteraceae are the likely hosts for most species (Wright and Gilligan, 2017), but much work need to be done to identifying the hosts.

FIELD GUIDE DESCRIPTIONS: Covell (1984); Beadle and Leckie (2012) ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The head, palps, antennae, and thorax are pale gray to reddish-brown and are concolorous with the forewing ground color, which is overlaid with fine brown to reddish-brown striations and reticulations. The forewing has three prominent reddish brown to blackish brown marks that are thinly edged with white. The first is a wide, semi-oval band that extends from the inner margin at about one-third the wing length and terminates near the middle of the wing. Following this is an equally wide or wider band that begins on the costa just beyond the middle and extends obliquely outwardly where it typically stops just before reaching the inner margin. The region near the costa usually appears faded relative to the remainder of the band. The last mark is a much narrower and lighter postmedian band that begins at the tornus and slants inwardly; it often breaks up just before reaching the costa. The pale strigulae on the distal one-half of costa are either absent or faint and are concolorous with the ground color. The ocellus is absent, and the termen has a narrow salt-and-pepper-colored band that extends from the tornus to the apex. The hindwing is light brown to brownish-gray with a slightly paler fringe.

<i>Pelochrista dorsisignatana</i> and <math><i>P. similiana</i> are two closely related species. In the latter, the subbasal and median bands are connected versus being widely separated in <i>P. dorsisignatana</i> (Miller 1985). <i>Pelochrista oraria</i> is also somewhat similar, but it is larger, is restricted to coastal and maritime habitats, and has a median band with an oblique branch that tapers to the apex.

DISTRIBUTION: <i>Pelochrista dorsisignatana</i> has a transcontinental distributed across North America. it ranges across much of southern Canada from British Columbia to Prince Edward Island. In the US it is found throughout the central and eastern states to as far south as the Gulf of Mexico, and in Colorado, the Pacific Northwest, and northern California. As of 2024, all of our records are from the Piedmont and Blue Ridge.

FLIGHT COMMENT: Local populations appear to be univoltine. The adults have been observed from July through November in different regions of the country, with a seasonal peak in most areas from August through October. As of 2024, our records extend from mid-July through early-November, with a seasonal peak in September and October.

HABITAT: Local populations as associated with goldenrod stands and are found in open or partially shaded habitats with goldenrods.

FOOD: Fernald (1882) reported that the larvae feed in the roots of Canada Goldenrod ($\langle i \rangle$ Solidago canadensis $\langle i \rangle$) and Capek (1969) observed them feeding on the lower shoots, roots, and emerging buds of both Canada Goldenrod and Giant Goldenrod ($\langle i \rangle$ S. gigantea $\langle i \rangle$).

OBSERVATION_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR S3-S5

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

COMMENTS: Populations appear to be secure within the state, particularly given that early successional habitats that support the host plants are plentiful.

The Moths of North Carolina - Early Draft