Rhopobota naevana Holly Tortrix



FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Eucosmini TAXONOMIC_COMMENTS: The genus <i>Rhopobota</i> consists of eight recognized species that occur worldwide, with only three species occurring in North America. The forewing of all three species has a distinctly pointed aspect due to emargination of the termen just below the apex.

FIELD GUIDE DESCRIPTIONS: ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Kearfott (1907a) TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following is based in part on the description by Kearfott (1907a). The head is dull gray and shaded with brown above the eyes. The palps are dark gray on the outside and the antenna dull fuscous. The thorax varies from dull gray to brownish. The forewing ground color is grayish to grayish brown with darker brownish speckling and is overlain with two dark brown fascia. The first is outwardly angulated and begins near the middle of the inner margin. It typically begins as a broad band on the dorsal half and narrows towards the costa. The second is similar and at around three-fourths where it extends from before the anal angle to the middle of the wing before narrowing and projecting basally towards the costa. The interfascial area between the two is often noticeably lighter than the general ground color. The costa is marked with a series of faint whitish strigulae that are intermixed with brown dots or streaks. The dark streaks become more pronounced on the apical half and end before a dark apical spot that is hook-shaped outwardly. The ocellus is poorly defined and consists of a grayish region that covers the outer third of the wing. It is slightly strigulated with vertical rows of brown scales. The fringe on the forewing is dull fuscous, and the hindwing is smoky brown and somewhat darker toward the apex.

This species is variable and specimens often deviate from the description above (Kearfott, 1907a). In particular, specimens often have patches of heavy black dusting on the forewing and may have a well-formed basal patch. Some forms superficially resemble both <i>R. finitimana</i> and <i>R. dietziana</i> i> and genitalia may be needed in some cases to separate the species. <i>R hopobota finitimana</i> has a solid basal patch and a brown head and scape, while <i>R. dietziana</i> has whitish coloration on the scape and head. Both species tend to have a lighter interfacial area than <i>R. naevana</i>, which has a more drab overall appearance.

DISTRIBUTION: <i>Rhopobota naevana</i> appears to be Holarctic where it occurs in Canada, Europe, Japan, Pakistan, and the US. It was probably introduced into western North America in the early 1900's (Gilligan et al., 2020). In eastern North America it occurs in the New England states and adjoining areas of Canada southward to South Carolina and westward to Kentucky and Illinois. As of 2022, our records are from the Coastal Plain and Blue Ridge.

FLIGHT COMMENT: Local populations are typically bivoltine, with the adults flying from May through September in different areas of the range. As of 2022, our records extend from late May through mid-July.

HABITAT: Local populations occur in a diverse array of communities that support the host plants, particularly blueberries in North Carolina. Examples of the diversity of communities that are used in North Carolina include maritime communities on barrier islands, Longleaf Pine communities in the Sandhills, and fens, heath thickets, and northern hardwood forests in the Blue Ridge.

FOOD: The common name 'Holly Tortrix Moth' is a bit of a misnomer given that the larvae are polyphagous and feed on a variety of trees and shrubs (Kearfott, 1907a; Pohl et al., 2005; Robinson et al., 2010). However, it commonly use hollies and cranberries in the US, and can become a pest in commercial cranberry operations. The known host genera include holly (<i>Ilex</i>), hawthorn (<i>Crataegus</i>), ash (<i>Fraxinus</i>), cherry (<i>Prunus</i>), pear (<i>Pyrus</i>), mountain-ash (<i>Sorbus</i>), meadowsweet (<i>Spiraea</i>), lilac (<i>Syringa</i>), and blueberry (<i>Vaccinium</i>).

OBSERVATION_METHODS: The adults are mostly diurnally active (Sylvia and Averill, 2005), but occasionally appear at lights. The nests of webbed leaves and stems can be found on deciduous hollies, cranberries, and other host plants.

NATURAL HERITAGE PROGRAM RANKS: GNR[S3-S4]

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

COMMENTS: This species is diurnally active and has likely been undersampled because its daily activity typically stops at dusk. We need additional information on its distribution and abundance to assess its conservation status within the state.