

FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Grapholitini

TAXONOMIC_COMMENTS: Populations that are currently treated as <i>Cydia laricana<math></i> constitute a wide-ranging species and may be a species complex. The type specimen is from Montana and the larvae feed on the cambium layer of western conifers. This species ranges throughout the eastern US where the larvae presumably use other conifer hosts such has pines. This is one of several <i>Cydia<math></i> species in North America that need additional phylogenetic and taxonomic study.

FIELD GUIDE DESCRIPTIONS: ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Busck (1916) TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following description is based in part on the description by Busck (1916). The head, palps, and antennae are grayish to grayish-brown. The thorax is similar but sometimes with scattered orangish-brown scales. The ground color of the forewing varies from grayish to grayish-brown or grayish-black and has white-tipped scales that produce a heavily dusted appearance throughout. The costal margin has five pairs of white dashes, with the first just before the middle, the second just beyond the middle and the three outer ones on the apical third of the costa. The first pair continues inward as silvery-gray or leaden-gray striae across the wing to produce an outwardly angulated fascia that terminates near the middle of the inner margin. In many specimens the two striae are partially fused along their lengths. The second pair of white dashes also continues obliquely inward to produce a similar angulated or curved fascia that usually has the two striae fused. The fascia continues to near the middle where it angles and forms the anterior edge of the ocellus. In some specimens it may continue nearly to the dorsal margin. The ocellus has a matching parallel vertical streak on the posterior edge, along with three parallel, longitudinal black lines. The penultimate pair of costal dashes fuse and continue as an irregular, silvery-gray or leaden-gray stria that usually terminates before reaching the silvery vertical bar on the posterior margin of the ocellus. The fringe is dark bronzy with a black basal line, and the hindwing is brown to blackish fuscus.

DISTRIBUTION: Specimens that are currently assigned to this species have been found in western North America in Idaho, Montana, and British Columbia as well as in Quebec and throughout much of the eastern US. The range in the eastern US extends from New Hampshire and Massachusetts southward to southern Florida and westward to Alabama, Tennessee, Indiana, and Michigan. As of 2022, we have records from the Piedmont and lower elevations in the Blue Ridge.

FLIGHT COMMENT: The adults fly form February through October in Florida and from April through September elsewhere. As of 2022, we have records from late-April through early July.

HABITAT: Populations are generally associated with conifer or mixed conifer-hardwood forests, including in both natural areas and residential settings.

FOOD: The larvae feed on the cambium of at least two species of western conifers, Douglas Fir ($\langle i \rangle$ Pseudotsuga menziesii $\langle i \rangle$) and Western Larch ($\langle i \rangle$ Larix occidentalis $\langle i \rangle$). The hosts for populations in the eastern US are undocumented, but presumably are pines or other conifers such as hemlocks.

OBSERVATION_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR [S2-S3]

STATE PROTECTION:

COMMENTS: This species appears to be uncommon in North Carolina, but more information on host use, distribution, and abundance is needed before we can assess its conservation status.