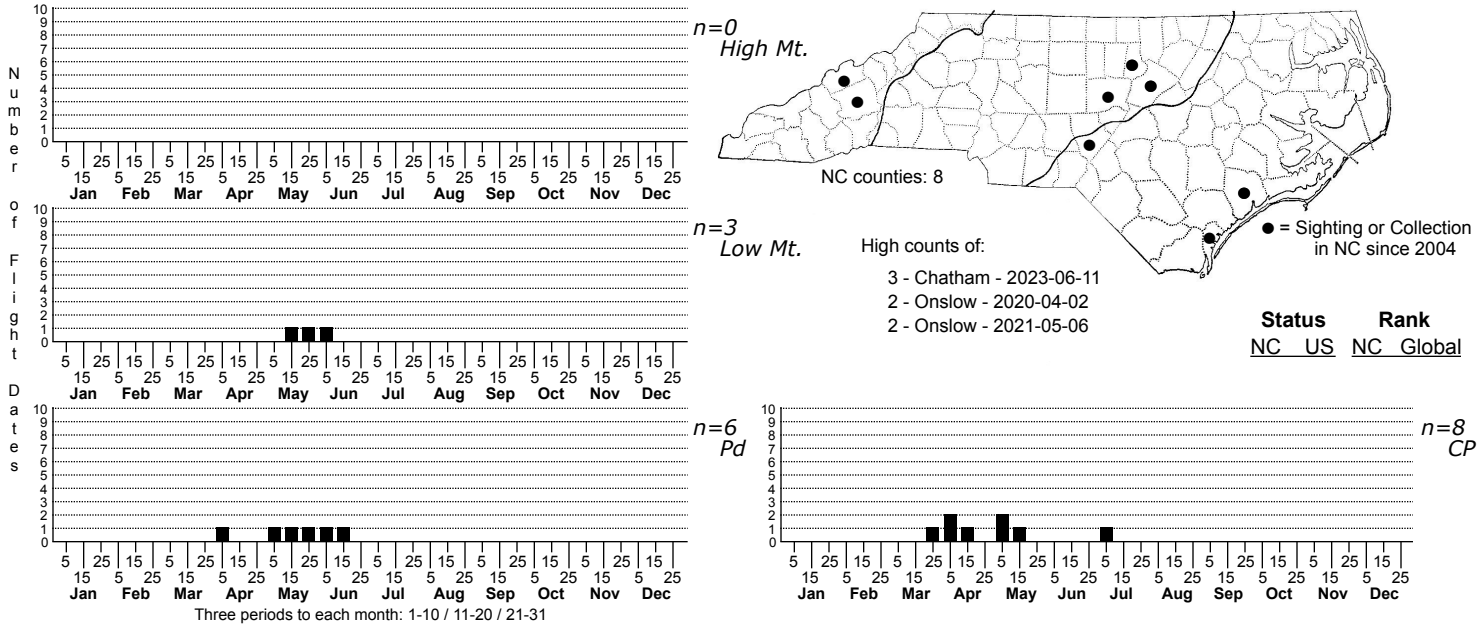
Zimmermannia bosquella No common name



FAMILY: Nepticulidae SUBFAMILY: TRIBE:
TAXONOMIC_COMMENTS: Zimmermannia is a genus that contains 17 currently recognized species, many of which were previously placed in the closely related genus Ectoedemia. Five species are currently recognized in the Nearctic region. In their revised classification and catalogue of global Nepticulidae, Nieukerken et al. (2016) recognized Z. bosquella as a new combination that involved treating three previously recognized species as synonyms. These are Ectoedemia castaneae Busck, 1913, E. heinrichi Busck, 1914, and E. helenella Wilkinson, 1981.

FIELD GUIDE DESCRIPTIONS:
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS: Busck, 1914; Braun, 1917
TECHNICAL DESCRIPTION, IMMATURE STAGES: Busck, 1914; Eiseman, 2019

ID COMMENTS: The palps are pale ocherous, and the face, head and tufts black. The antenna is dark fuscous with narrow pale annulations. The eye-caps are creamy-white. The thorax is pale ocherous to light tan with a few blackish scales. The ground color of the forewing is also pale ocherous to light tan and densely dusted with blackish fuscous scales which tend to form patches. The blackish scales are typically reduced near the extreme base of the wing, near the basal third, and near the apical third. This produces two poorly defined transverse fascia, one at the basal third, the other at the apical third, on which the dark dusting is absent or scattered. The second fascia is less distinct and is sometimes almost obliterated by scattered dusting (Braun, 1917). The cilia are pale ocherous, with a row of dark-tipped scales around the base. The hindwing and cilia are fuscous. The legs are ocherous. Z. bosquella is distinctive in having a black head and tuft. It also usually has the dark dusting organized as two or three patches on the forewing. The other two Zimmermannia that might occur in NC (phleophaga; obrutella) have ocherous tufts and more scattered dusting.

DISTRIBUTION: virginia, ohio, kentucky

FLIGHT COMMENT: Local populations are univoltine. The larvae overwinter as pupae, and the adults emerge during or after the spring leaf-out. Adults emerge in May and June in Virginia (Eiseman, 2019). As of 2020, we have records of adults from late March and early April near the coast, to mid-May in the Piedmont.

HABITAT: Local populations are associated with hardwood forests, but little is known about the specific habitats. As of 2020, our records are from semi-wooded residential neighborhoods and a young, second growth forest.

FOOD: This species mines the stems of Pin Oak (Quercus palustris), and very likely other oak species since many of our records are from areas of the state where Pin Oak does not occur. Busck (1913) reported that one of the species that has been synonymized with Z. bosquella (Ectoedemia castaneae) was breed by colleagues from stem galls on chestnuts. The galls have not been found since Busck’s original description of the species (Eiseman, 2019).

OBSERVATION_METHODS: The adults are attracted to lights, and the distinctive spiral mines on oak twigs are easily recognizable.

NATURAL HERITAGE PROGRAM RANKS: GNR SU

STATE PROTECTION:

COMMENTS: We currently do not have sufficient data on the distribution and abundance of this species within the state to assess its conservation status.