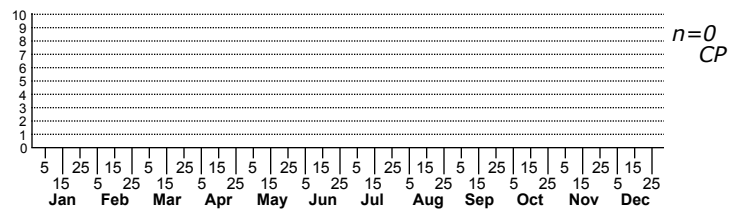
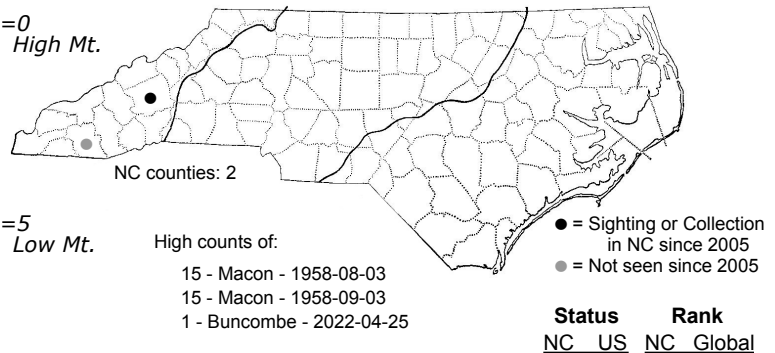
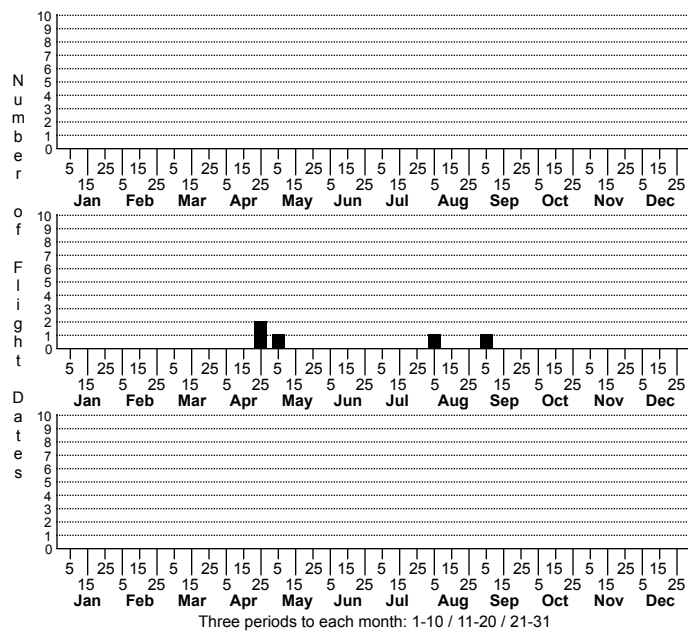


Bucculatrix recognita None



FAMILY: Bucculatricidae SUBFAMILY: TRIBE:

TAXONOMIC_COMMENTS: *Bucculatrix* is a large genus of small leaf-mining moths, with around 300 species worldwide. A total of 103 Nearctic species have been described, and many others will likely be described in the future. Braun (1963) covered 99 species in her monograph, and four additional Nearctic species have been described since then.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Braun (1963, p. 155)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: This is a minute yellowish-brown moth. The head is cream white, with a dorsal tuft that is variably shaded with brown or ocher. There are three light fascias, along with an apical dark spot and faint dark ciliary line that are sometimes poorly developed. The following detailed description is from Braun (1963). The eye-cap is creamy white and conspicuously dotted with brown-tipped scales. The antennal segments are annulated, with each segment shading from buff to dark brown, or with an occasional pale segment near the tip of the antenna. The thorax and tegulae are pale yellow and conspicuously dotted with brown-tipped scales (or sometimes minute dark dots). The ground color of the forewing is pale yellow to orange (occasionally cream), but darker specimens appear to be dusted with dark brown. There are three very oblique parallel costal streaks that are composed of the pale ground color, with areas that are more heavily dusted in between. These begin along the costa at about one-fifth, one-half, and three-fourths, and all three streaks extend to the middle of the wing. The third is most sharply defined, with a line of darker scales located along its inner margin. A patch of raised black scales is located along the midpoint of the inner margin, followed by scattered dark-tipped scales. Some specimens have a short, oblique, pale streak from near the tornus that meets the third costal streak at an acute angle (about 60°). Just before the apex, there is a whitish triangular spot that is partly in the cilia. The wing tip has a small irregular black apical spot from which a faint line of dark-tipped scales extends along the termen. Both the spot and the line are sometimes lacking or obscure. A second more conspicuous line in the middle of the whitish cilia curves around the apex from the whitish triangular spot to the tornus. The hindwing is yellowish-white to silvery gray (Braun, 1963). The legs are pale yellow, with the white hind tarsal segments black-tipped.

Braun (1963) noted that this species can be recognized easily when the ground color of the forewing is a bright yellow orange-ocherous and the pale markings are distinctly yellow. Specimens in which the clear yellow of the ground color and markings is obscured by dark dusting, or where the basal area of the wing if abraded, cannot be easily differentiated from *B. packardella* except by genitalia. *Bucculatrix luteella* is similar but lacks the apical dark spot and ciliary line, while *B. packardella* has only two light streaks instead of three.

DISTRIBUTION: The range of *Bucculatrix recognita* is poorly documented. Scattered populations have been found in Ontario and in many areas of the eastern US, including Massachusetts, New Jersey, Missouri, Washington DC, and North and South Carolina (Braun, 1963). As of 2024, nearly all of our records are from Highlands in Macon County where Braun (1963) collected 31 specimens, as well as a recent record from Buncombe County.

FLIGHT COMMENT: Adults records are from July through September for areas outside of North Carolina. Braun (1963) collected a series of 31 specimens from Highlands between 3 August and 3 September.

HABITAT: Braun (1963) did not describe the habitat where she collected North Carolina specimens, but Montane Oak-Hickory Forest seems likely, with White Oak the most likely host plant.

FOOD: The hosts are poorly documented. Larvae use Bur Oak (*Quercus macrocarpa*) in Canada, and presumably use other members of the White Oak group such as White Oak (*Q. alba*) or Chestnut Oak (*Q. montana*) elsewhere (Braun, 1963). Eiseman (2022) lists White Oak as a host. We do not have any larval records in North Carolina.

OBSERVATION_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR SNR [S1S2]

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

COMMENTS: This species is currently known in North Carolina only from one historic site and one newly discovered site. Its suspected host plants, however, are common and widespread, and the same may eventually be found to be true for the moth as well. Currently, however, we have too little information to accurately assess its conservation status.