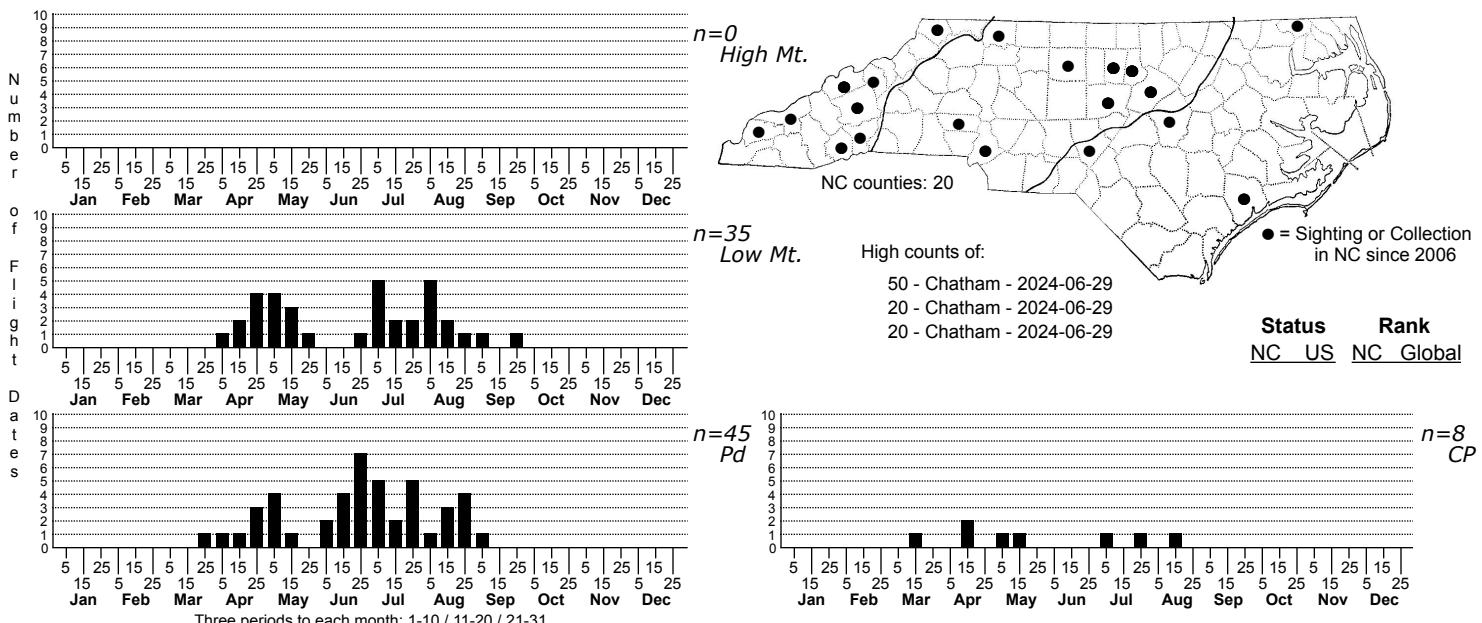


Bucculatrix coronatella Crowned Bucculatrix



FAMILY: Bucculatricidae **SUBFAMILY:** [Bucculatriginae] **TRIBE:** [Bucculatrigini]

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: Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Braun (1963, p. 145)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Braun (1963)

ID COMMENTS: This is a tiny moth with three costal streaks and one tornal streak, a black raised scale patch, a black apical spot, and a black apical ciliary line. The following detailed description is based on Braun (1963). The head is yellowish white, and the tuft orange-ocherous centrally and lighter laterally. The eye-cap is yellowish white and tinged with ocherous posteriorly, while the antennal stalk is dotted with brown above. The thorax is orange-ocherous, and the tegulae and extreme base of the forewing pale. The ground color of the forewing is a uniform orange-ocherous or sometimes brownish color. A contrasting patch of raised dark scales is located on the dorsal surface (inner margin) of the forewing at about one-half the wing length. It is bordered in front and behind by small patches of white (sometimes not readily evident). The black patch may be conspicuous, reduced to a few scales, or sometimes absent, and the ground color behind the raised scales is not conspicuously darkened. Three posteriorly oblique, white streaks extend from the costa to near the middle of the wing. The first begins near the basal fifth and extends towards the black scale patch on the inner margin. The second begins at about one-half, and the third at two-thirds. The latter is an irregular whitish band that is angulated at its middle, and crosses the wing to the tornus. It is often represented as two separate streaks, with the costal streak slightly more posterior than the one at the tornus. There is a small black apical spot with a whitish patch in front. In some specimens the white coloration may extend into the cilia of the costa and termen to encircling the black spot. The cilia is whitish or pale ocherous, and tinged with fuscous toward the dorsum. There is a line of black-tipped scales at the base of the cilia that continues to the tornus. It is sometimes poorly developed or represented as merely a faint pale line. A few of the marginal scales along the termen, especially near the tornus, are often black-tipped. The hindwing and cilia are gray or pale reddish fuscous. The legs are pale stramineous, and the hind tarsal segments faintly dark-tipped. The abdomen is fuscous and reddish brown above.

Bucculatrix canadensisella is similar but the ground color is dark brown. *Bucculatrix trifasciella* is also similar, but is a northern form that has a dark zone of scales between the black dorsal patch. This species has not been recorded as far south as North Carolina.

DISTRIBUTION: *Bucculatrix coronatella* is found in the eastern US from Maine and vicinity southward to South Carolina, Georgia, and southern Alabama. The range extends westward to central Texas, Oklahoma, Illinois and Michigan. This species occurs statewide in North Carolina, except for perhaps the highest elevations in the mountains.

FLIGHT COMMENT: Adults have been recorded from April through September in areas outside of North Carolina. As of 2021, we have records from March through September. Our data suggests the possibility of two broods in North Carolina that needs to be confirmed by additional data.

HABITAT: This species appears to rely heavily on River Birch, and at least two of our records come from river and lake shorelines in the Piedmont and Coastal Plain where River Birch is common.

FOOD: Larvae are leafminers on River Birch (*Betula nigra*), although other birches may be possible hosts (Braun, 1963). Eiseman (2022) also lists Gray Birch (*Betula populifolia*), which is not native to North Carolina. In our state, mines have only been observed on River Birch.

OBSERVATION METHODS: All of our records come from lights. We recommend searching for leaf mines on River Birch and other birches to better document host use in North Carolina.

NATURAL HERITAGE PROGRAM RANKS: GNR SNR [S4S5]

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

COMMENTS: This small moth that is easily overlooked. It appears to be both common and widespread based on the number of state records, its host plants, and habitat associations.