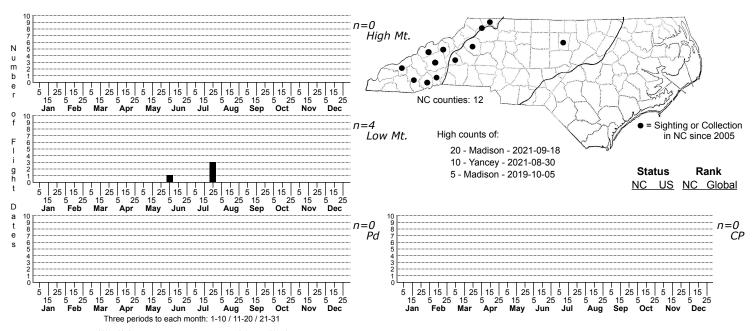
Cameraria aceriella Maple Leaf Blotch Miner Moth



FAMILY: Gracillariidae SUBFAMILY: Lithocolletinae TRIBE:

TAXONOMIC_COMMENTS: <i>Cameraria</i> is a genus of leaf-mining micromoths. Many species are stenophagous and specialize on a small number of closely related host species. There are currently more than 50 described species in North America.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Clemens (1859), Braun (1908).

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following description of the adults is based on Clemens (1859) and Braun (1908). The face is silvery white and the tuft has a mixture of orange and silvery scales (general appearance is whitish). The forewings are reddish orange with several silvery or whitish marks. A short white streak with a black posterior margin extends from the inner basal angle to the fold. The most conspicuous marks are two straight or nearly straight fasciae that are whitish or silvery white with black borders on the posterior margin. The two fasciae are oblique, with one at about the middle of the wing, and the second midway between it and the base of the wing. Near the wing tip there is a prominent dorsal streak that curves towards the apex and a smaller, opposing costal spot that is often faint. A similar spot or short streak is present at the apex. All three marks have black borders on their posterior margin. The marginal line in the cilia is indistinct, and the apical third of the forewing is not dusted with dark coloration as occurs in some <i>Cameraria</i>
The hindwings are plumbeous, with cilia that have a fulvous hue. <i>Cameraria hamameliella</i>
The hind tarsi of <i>C. hamameliella</i>
The hind tarsi of care also usually tipped with black, whereas in <i>C. aceriella</i>
The year either faintly blackish tipped or entirely pure white. Based on our rearing on North Carolina specimens, there are exceptions to these general trends and adults are best identified by either rearing or barcoding.

DISTRIBUTION: <i>Cameraria aceriella</i> occurs in the northeastern US and nearby regions of southern Canada (Ontario, Quebec, and New Brunswick), then south and southwestward to Illinois, Oklahoma, Tennessee, and North Carolina. As of 2022, populations in North Carolina are only known from the mountains.

FLIGHT COMMENT: Local populations are bivoltine, with a summer brood that is followed by a fall brood that overwinters (Eiseman, 2019). As of 2022, our earliest records for occupied mines are from mid-June. Mines with overwintering larvae have been found in October.

HABITAT: Our larval records are mostly from Red Maple and Sugar Maple in rich hardwood forests at mid- to higher elevations in the mountains.

FOOD: Larvae feed on Sugar Maple (<i>Acer saccharum</i>), and Red Maple (<i>A. rubrum</i>), and to a lesser extent on Mountain Maple (<i>A. spicatum</i>) and Silver Maple (<i>A. saccharinum</i>); Eiseman, 2019). Braun (1908) reported that the mines are common throughout the Atlantic States on Red Maple, but are rarely found on Sugar Maple. In North Carolina, this species frequently uses both Sugar Maple and Red Maple, but also uses Mountain Maple at the highest elevations in the Blue Ridge.

OBSERVATION_METHODS: The adults appear to only rarely visit lights, so we recommend searching for the conspicuous leaf mines on maples, and rearing adults whenever feasible. <i>Cameraria saccharella</i> also feeds on maples, so care should be taken to document the frass patterns and pupal chambers in mines.

NATURAL HERITAGE PROGRAM RANKS: GNR [S3-S5]

STATE PROTECTION:

COMMENTS: This species appears to be restricted to the western mountains where it is somewhat common in rich hardwood forests.