

Cameraria ostryarella Hophornbeam Blotchminer Moth



TECHNICAL DESCRIPTION, ADULTS: Braun (1908); Eiseman (2019) TECHNICAL DESCRIPTION, IMMATURE STAGES: Braun (1908); Eiseman (2019)

ID COMMENTS: The following description of the adults is based primarily on Braun (1908). The face and palps are white, while the antenna is whitish with brown annulations above. The ground color of the thorax and forewing is reddish brown. The head tuft is whitish with some reddish brown laterally. The ground color of the forewing is reddish-brown, and is overlain with several white streaks or fascia with varying levels of black scales on their posterior margins. Two white fascia are present; one at about one-fourth, and the second at the middle of the wing. Each are boldly margined in black posteriorly. The first fascia is slightly concave outwardly on the fold, then extends obliquely to the costa. The second fascia at about the middle of the wing is slightly oblique. At the base of the wing there is a short white streak, often with a few black marginal scales, that extends from the inner margin to no more than the middle of the wing base. At about three-fourths, there is a conspicuous white streak with a black posterior margin. The streak projects from the inner margin rearward, and the terminus approaches a short, straight sub-costal streak that is often reduced to a spot or small patch. Just anterior to the sub-costal streak or patch, there may be a second faint costal patch or spot. Some of the scales in the apical third of the forewing are tipped with brown and produce varying levels of brownish dusting (sometimes obscure on North Carolina specimens). The cilia is ocherous and the marginal line in the cilia is brownish. The hindwing is grayish ocherous. The front and middle legs are banded black and white above, while the rear legs are whitish with a faint darker mark or two

sometimes evident near the tarsal joints.

<i>Cameraria ostryarella</i> closely resembles <math><i>C. corylisella</i>, but according to Braun (1908) the later lacks the brownish dusting on the apical third of the wing. However, this does not seem to be the case for North Carolina specimens where both species lack apical dusting. A better trait is the dorsal streak at about three-fourths that tends to be strongly oblique in <i>C. ostryarella</i>. In <i>C. corylisella</i> the dorsal streak is nearly erect and runs nearly parallel to the mid-wing fascia. However, there are occasional exceptions to this general rule. <i>Cameraria aceriella</i> is also similar, but lacks the marginal line in the cilia.

DISTRIBUTION: <i>Cameraria ostryarella</i> occurs in eastern North America from the northeastern US, westward to Ontario, Quebec, Michigan, and Iowa, then southward to Kentucky and North Carolina. As of 2021, our records for North Carolina are mostly from the lower mountains, with a few records from the eastern Piedmont and one from the Outer Banks.

FLIGHT COMMENT: Local populations appear to be bivoltine, with adults active from April-August.

HABITAT: Local populations are strongly affiliated with the host plants, American Hop-hornbeam (<i>Ostrya virginiana</i>) and American Hornbeam (< >Carpinus caroliniana</i>). <i>Ostrya</i> occurs in rich woods with circumneutral soils, while <i>Carpinus</i> is common along stream banks, in floodplains, and on moist slopes.

FOOD: American Hop-hornbeam (<i>Ostrya virginiana</i>) and American Hornbeam (<i>Carpinus caroliniana</i>) appear to be the primary hosts. As of 2022, all but two of our site records for North Carolina were based on leaf mines on American Hop-hornbeam. This species appears to use <i>Carpinus</i> much less commonly even though it is a very common and widespread species in the state.

 $OBSERVATION_METHODS$: We recommend searching for the rather conspicuous leaf mines on <i>Ostrya</i> and <math><i>Carpinus</i> during the late spring and summer months. We encourage individuals to rear and photograph the adults. The adults occasionally visit lights that are set up in the vicinity of the host plants.

NATURAL HERITAGE PROGRAM RANKS: GNR S3S4

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

COMMENTS: This species was only recently discovered in North Carolina, which likely reflects the fact that little effort has been put forth to document leafminers within the state.

The Moths of North Carolina - Early Draft