

FAMILY: Gracillariidae SUBFAMILY: Lithocolletinae TRIBE: [Lithocolletini] TAXONOMIC\_COMMENTS: <i>Phyllonorycter</i> is a genus of small and often colorful moths, with 79 described species in North America. The larvae of most form underside tentiform mines on woody plants and pupate within the mines.

FIELD GUIDE DESCRIPTIONS: ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Braun, 1908. TECHNICAL DESCRIPTION, IMMATURE STAGES: Braun, 1908.

ID COMMENTS: The following is based primarily on the description by Clemens (1859). The antenna and front of the head are silvery, and the tuft is a mix of silvery and fuscous scales. The thorax is silvery, with the basal part of the tegula pale golden. The forewing is pale golden to golden-brown with a median basal streak that varies from silvery to pale whitish. The basal streak lacks a dark margin, and extends from the wing base to about mid-length, where it terminates between the first pair of dorsal and costal streaks. A similar streak occurs along the basal portion of the dorsal margin, but is shorter than the median streak and may have a faint black internal margin. The forewing has four silvery costal streaks and three dorsal streaks with a black margin on their anterior edges. The last streak on the costa may have the black margin missing, and the third dorsal streak is often greatly reduced in size and sometimes missing. The first costal and first dorsal streaks form a pair near the middle of the wing and are oblique and project apically. The second dorsal and second costal streak form a similar pair at about twothirds, but are shorter and more broadly triangular in shape. The third dorsal and costal streaks form a less conspicuous pair at about four-fifths the wing length. The wing tip has a conspicuous circular black spot, while the cilia are fulvous gray with a blackish marginal line. The hindwing is gray with fulvous gray cilia. <i>Phyllonorycter ostryaefoliella</i> resembles several other <i>Phyllonorycter</i> species (e.g., <i> Phyllonorycter propinquinella</i>). Characters that are helpful in separating this species from others include the golden brown ground color, the circular black apical spot (often streaked in other species), and the basal streak that lacks a dark margin (often dark margined on the costal side or the terminal half in other species).

DISTRIBUTION: <i>Phyllonorycter ostryaefoliella</i> is rather patchily distributed in eastern North America where the host plant occurs locally. Populations have been found in southern Canada (Ontario; Quebec; Nova Scotia) and adjacent areas in the northeastern US. The range extends southward and westward to Illinois, Ohio, Kentucky, and North Carolina.

FLIGHT COMMENT: Please refer to the flight charts.

## HABITAT:

FOOD: The larvae use American Hop-hornbeam (<i>Ostrya virginiana</i>) as the primary host. This species has been reported to use American Beech, but that record is suspect and has not been verified by others (Eiseman, 2019). In North Carolina, all of our records are from American Hop-hornbeam.

OBSERVATION METHODS: The adults appear to rarely visit lights and most records are from reared adults. Searching for mines on the undersides of <i>Ostrya</i> leaves is the easiest way to document local populations. <i>Phyllonorycter obscuricostella</i> also mines the undersides of <i>Ostrya </i> leaves, but the mine is smaller and less wrinkled than that of <i>P. ostryaefoliella</i>, and is usually formed between two veins (Eiseman, 2019).

## NATURAL HERITAGE PROGRAM RANKS: GNR S1S3

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

COMMENTS: Currently, our records come from a small area in the Piedmont. These occurrences are highly disjunct from those in majority of the range of this species, which is located well to the north and west of our area. Given the commonness of its host plant, however, more records are expected from our state.

March 2025

The Moths of North Carolina - Early Draft