



FAMILY: Gracillariidae SUBFAMILY: Lithocolletinae TRIBE: 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:

ID COMMENTS: The following description is based on Braun (1908). The antenna is white with a dark brown tip. The face and palpi are shining snow-white, and the tuft is white with intermixed pale yellowish brown scales. The thorax is shining white. The forewing is predominately white in the basal half, and pale golden brown in the apical half. In this description the ground color is considered to be pale golden brown, while the white is the forewing streaks. There is a broad white streak near the median area that extends from the wing base to about one-half of the wing length and tapers near the tip. This streak has a black margin on the costal side that extends to the base. The golden brown ground color parallels the black margin and extends towards the costa. At the basal third of the wing there is an oblique costal streak with an internal black margin that extends along the costa towards the base. Opposite the apex of this costal streak is the apex of the first dorsal streak, which has a black margin internally. This streak continues as an oblique broad white band along the dorsal margin towards the base. Near the base, it is confluent with the median basal streak, leaving only a narrow streak of the ground color between the two. In the apical half of the wing, there are three costal and one or two dorsal streaks. The second costal and dorsal streaks are opposite each other. These sometimes meet, and their oblique dark internal (anterior) margins often unite in the middle of the wing. The third and fourth costal streaks are nearly perpendicular, and the fourth is sometimes unmargined. The third costal streak is opposite the third dorsal streak, which is often small or indicated only by its dark margin. There is a black apical spot with a few silvery scales before it. A dark marginal line is present in the cilia, which are pale golden around the apex, with a gray streak below the fourth costal streak. The cilia shade to grayish white toward the tornus. The hindwings and cilia are pale grayish ocherous in the male, and even more ocherous in the female. The legs and tarsi whitish gray, except the first pair, which are fuscous on their anterior edges. <i>Phyllonorycter albanotella</i> resembles <i>P. obscuricostella</i> and is most easily distinguished from <i>P. obscuricostella</i> by the shining snow-white coloration of the thorax and forewings (much duller with a light brownish infusion in the latter).

DISTRIBUTION: <i>Phyllonorycter albanotella</i> occurs in scattered populations from Ontario, Quebec, and the northeastern US, southward and westward to Illinois, Ohio, Kentucky, North Carolina, and Texas (Eiseman, 2019). As of 2020, we have only one record for North Carolina.

FLIGHT COMMENT: The flight season is poorly documented due to the scarcity of reliable records for this species.

HABITAT: The larvae mine the leaves of oaks and are generally associated with wet to mesic hardwood forests with the host plants.

FOOD: The known hosts include White Oak (<i>Q. alba</i>), Swamp White Oak (<i>Q. bicolor</i>), Bur Oak (<i>Q. macrocarpa</i>), Swamp Chestnut Oak (<i>Q. michauxii</i>), and Water Oak (<i>Q. nigra</i>) (Eiseman, 2022). In North Carolina, Tracy Feldman has reared the species from Swamp Chestnut Oak.

OBSERVATION_METHODS: The adults appear to rarely visit UV lights and are best obtained by rearing them from the mines on oaks.

NATURAL HERITAGE PROGRAM RANKS: GNR S1S3

STATE PROTECTION:

COMMENTS: We currently do not have sufficient data on the distribution and abundance of this species within the state to accurately assess its conservation status.

The Moths of North Carolina - Early Draft