



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: Clemens (1859); Braun (1908). TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following description is based on Clemens (1859) and Braun (1908). The antenna is silvery white, and sometimes has faint darker annulations. The face is silvery white, and the tuft is silvery white with golden coloration at the apex and sides. The thorax and forewing ground color is pale reddish saffron. A conspicuous white transverse band is present that extends from the anterior margin of the thorax through the patagia, and then becomes continuous with the basal streak on the forewing. Overall, there are five costal and four dorsal white streaks, most of which are curved posteriorly and have dark scales on the anterior margin. The first costal and dorsal streaks lack a black margin. The first dorsal streak has a broad base and tapering to a point in the middle of the wing, while the first costal streak is rather slender, and only one-half as long as the first dorsal. The second costal and second dorsal streaks are just before the middle of the wing, and often have a few scattered dark scales on the anterior margin. The third costal and dorsal streaks form a pair that are opposite each other and both have dark scales on the anterior margin. The fourth dorsal streak is about midway between the fourth and fifth costal streaks. These streaks may have a few dark marginal scales, but sometimes lack them. At the apex is a small patch of scattered black scales. The cilia is saffron and paler on the inner margin. The hindwings are shining silver-gray, with rather dark cilia. The abdomen is yellowish fuscous above, and the legs are whitish with faint brown spots. Features that help distinguish this species include the conspicuous white transverse band that extends from the thorax into the basal portion of the forewing, the occurrence of paired streaks that do not meet to form fascia, and the presence of four dorsal streaks on the forewing. <i>Phyllonorycter occitanica </i> is superficially similar, but has a well-developed fascia about mid-way, rather than separate dorsal and costal streaks.

DISTRIBUTION: <i>Phyllonorycter argentinotella</i> occurs from Ontario, Quebec, Maine, and Vermont, southward to Kentucky and North Carolina, and westward to Iowa and Oklahoma. As of 2020, our records are from lower elevations in the mountains and from the eastern Piedmont.

FLIGHT COMMENT: Local populations probably have two or more broods per year. Our records for active mines in North Carolina are from June through early August (Eiseman and Davis, 2020), and in the fall from September through November.

HABITAT: This species is found in forests or forest edges where elms grow. Habitats can range from bottomland forests and moist slopes, to drier ridges and open woods. In addition to using forested sites, elms sometimes grow in disturbed habitats such as abandoned fields and roadways. Most species prefer sites with rich, circumneutral soils.

FOOD: Larvae specialize on elms, including Winged Elm (<i>Ulmus alata</i>), American Elm (<i>U. americana</i>), and Slippery Elm (<i>U. rubra</i>) (Braun, 1908; Eiseman, 2019). In North Carolina, we have records for Winged Elm and Slippery Elm.

OBSERVATION_METHODS: The adults occasionally visit UV lights, but many records are from adults that were reared from active mines on elm leaves.

NATURAL HERITAGE PROGRAM RANKS: GNR S2S3

STATE PROTECTION:

COMMENTS: We currently do not have sufficient data on the distribution and abundance of populations to assess the conservation status of this species. March 2025 The Moths of North Carolina - Early Draft 1