

n=2

SUBFAMILY: Lithocolletinae TRIBE: [Lithocolletini] FAMILY: Gracillariidae 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.

Pd

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

ID COMMENTS: The following is primarily based on the original description by Clemens (1859). The head, front and thorax are silvery-white, and the antenna is silvery white with dark brown annulations. The forewing is silvery white over the basal half to three-fifths, then grades into pale golden towards the wing tip. A dark brown basal streak that is margined with golden on the costal side extends nearly to the first costal streak. There are four silvery costal streaks with a dark margin on the anterior (basal) side. The first is very oblique and the dark margin often extends as a fine line along the costa toward the base. The remaining three are reduced in size and have dark margins that are almost perpendicular to the costa. There are two silvery dorsal streaks with a dark margin on the anterior (basal) side. The first is opposite the second costal streak, while the second is reduced in size and opposite the third costal streak. The apical spot is black and round, and there is a dark brown marginal line at the base of the silvergray cilia. The hindwing and cilia are silver-gray. <i>Phyllonorycter argentifimbriella</i> closely resembles <i>P. quercialbella</ i>, but it has four costal streaks compared with only three in  $\leq i$ >P. quercialbella $\leq i$ >.  $\leq i$ >Phyllonorycter argentifimbriella $\leq i$  is also similar to <i>P. lucidicostella</i>, but has a forewing with less golden coloration, and a dark brown basal streak that usually has a narrow golden margin (the streak is mostly golden in <i>P. lucidicostella</i>) and sometimes has a darker margin). In addition, the streak of  $\langle i \rangle P$ . argentifimbriella $\langle i \rangle$  is noticeably narrower than that of  $\langle i \rangle P$ . lucidicostella $\langle i \rangle$ , and the second dorsal streak is more prominent (often greatly reduced in  $\langle i \rangle P$ . lucidicostella $\langle i \rangle$ ). These two species segregate by host plants, so reared adults can be easily identified based on the hosts (oaks versus maples).

DISTRIBUTION: <i>Phyllonorycter argentifimbriella</i> is found in eastern North America from Ontario, Quebec and the northeastern US, westward to Illinois and southward to Kentucky, Tennessee, and North Carolina.

FLIGHT COMMENT: Adults have been found in areas outside of North Carolina from March-October; our one record for North Carolina as of 2020 is from June.

HABITAT: The larvae feed on oaks, and the known hosts are all members of the white oak group.

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

OBSERVATION\_METHODS:

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

D а

e

s

Rank

5 ∠. Oct

n=0

CP