



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:

ID COMMENTS: The following is based primarily on the description in Braun (1908). The antenna is brownish gray, and the face and palps are yellowish white. The scales of the tuft are pale brownish ocherous, and darker toward the tips. The thorax and forewings are deep reddish saffron. There is a rather broad median white basal streak that ends at one-third the wing length. The streak is faintly dark margined on the costal side and at its apex. Just before the middle of the wing there is a curved white fascia that is margined on its anterior side with dark brown scales. Beyond this are three costal and two dorsal white streaks that are also margined on their anterior side with dark brown scales. The dark margin on the last costal and dorsal streaks is often faint. The first dorsal streak is oblique and begins opposite the first costal streak, which is wedge-shaped and nearly perpendicular to the costa. The apex of the dorsal streak is separated from the apex of the second costal streak by a conspicuous gap. The second dorsal streak is above the tornus and points toward the second costal streak. A conspicuous black apical dot is present just below the third costal streak. The cilia are pale grayish brown with a dark brown marginal line that becomes darker toward the tornus. The hindwings and cilia are brownish gray, and the abdomen is dark brownish gray. The legs are pale brownish gray, and the tarsi are unspotted.

DISTRIBUTION: <i>Phyllonorycter martiella</i> has been found at scattered localities across southern Canada, from British Columbia and Alberta, to as far east as Nova Scotia. In the US it occurs from Maine, Vermont, and Massachusetts, westward to Michigan, and southward to Kentucky and western North Carolina. As of 2020, we have only one historical record for North Carolina.

FLIGHT COMMENT: Adults are active during the summer months following the spring leaf-out. Our one record from North Carolina does not have a date.

HABITAT: Our one record probably comes from a Cove Forest.

FOOD: Larvae feed on birches, including Sweet Birch ($\langle i \rangle$ Betula lenta $\langle i \rangle$) and River Birch ($\langle i \rangle$ B. nigra $\langle i \rangle$) (Eiseman, 2022). In North Carolina, we have a record for Yellow Birch ($\langle i \rangle$ B. alleghaniensis $\langle i \rangle$).

OBSERVATION_METHODS: The adults are attracted to lights, and have been successfully reared from mines that were collected from birch leaves.

NATURAL HERITAGE PROGRAM RANKS: GNR S1S2

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

COMMENTS:

March 2025

The Moths of North Carolina - Early Draft