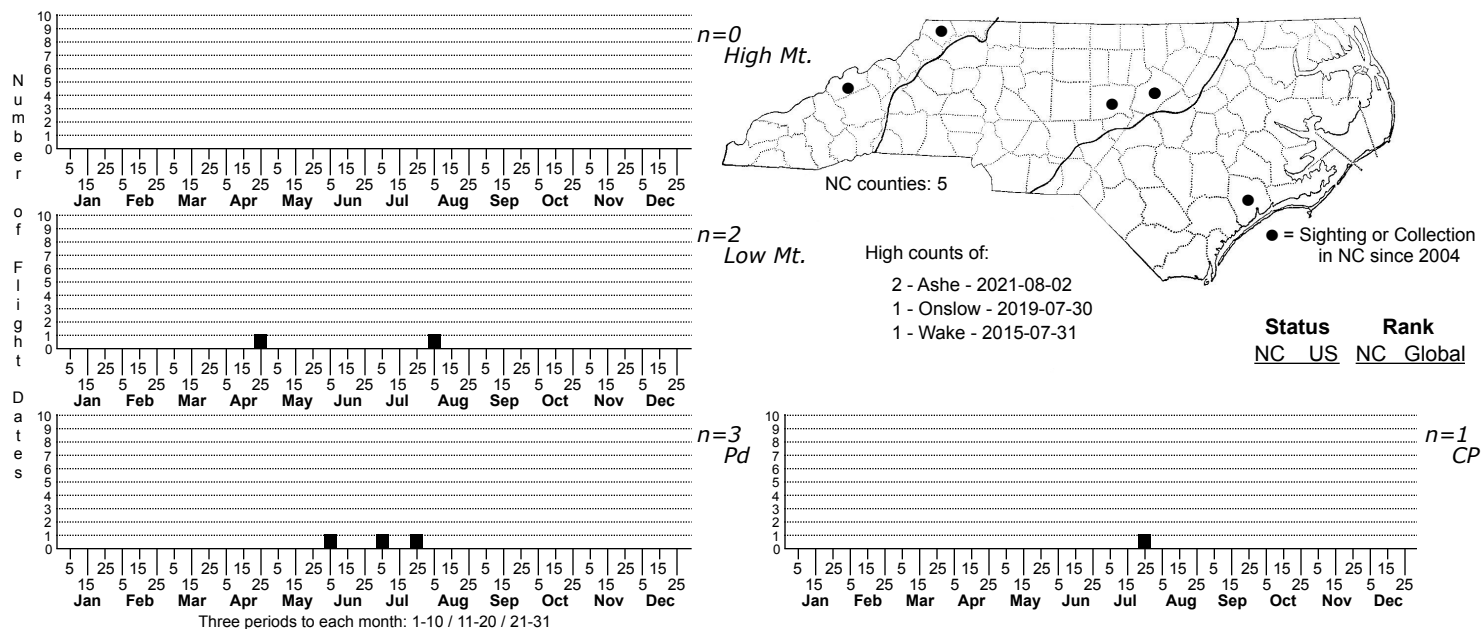


Phyllonorycter quercialbella No common name



FAMILY: Gracillariidae SUBFAMILY: Lithocolletinae TRIBE: [Lithocolletini]

TAXONOMIC COMMENTS: *Phyllonorycter* 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 face, palpi, tuft, and antennae are white, except for the extreme tips of the antennae which are dark brown. The thorax and basal two-thirds of the forewing are shining white, while the apical third is suffused with golden. A rather broad golden basal streak begins at the base on the costa and extends parallel to the fold to the middle of the wing or beyond. In the apical golden portion of the wing, there are three costal white streaks that are nearly perpendicular to the margin. All three have dark margins on the anterior side, but the margin is best developed in the anteriormost streak. A dorsal white streak with a dark anterior margin occurs opposite the first costal streak. A second indistinct dorsal streak that often lacks the black margin occurs opposite the second costal streak. There is a conspicuous black apical spot, and the cilia are whitish, but tipped with fuscous around the apex. The marginal line in the cilia is dark brown. The hindwing and cilia are pale grayish ochereous, and the legs are whitish ochereous. *Phyllonorycter quercialbella* closely resembles *P. argentifimbriella* but it has only three costal streaks, compared with four in *P. argentifimbriella*.

DISTRIBUTION: Scattered populations of *Phyllonorycter quercialbella* have been found in eastern North America from Minnesota and Quebec eastward to Massachusetts and southward to eastern Tennessee and North Carolina. As of 2020, our records for North Carolina are from the Coastal Plain and eastern Piedmont.

FLIGHT COMMENT: Local populations appear to have at least two broods. Adults are first on the wing in April and early May, with a second bout of activity in July and August.

HABITAT: The larvae mine the leaves of several oak species and are restricted locally to habitats with the host species. Examples include forested urban neighborhoods, bottomland forests, and a variety of mesic to dry hardwood forests.

FOOD: The known hosts include White Oak (*Q. alba*), Blackjack Oak (*Q. marilandica*), Willow Oak (*Q. phellos*), and Black Oak (*Q. velutina*).

OBSERVATION_METHODS: The adults are attracted to lights, and also have been successfully reared from mines with mature larvae or pupae.

NATURAL HERITAGE PROGRAM RANKS: GNR S2S4

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

COMMENTS: *Phyllonorycter quercialbella* is widespread in the eastern US, but seemingly uncommon based on the small number of records for this species. We currently do not have sufficient information about North Carolina populations to assess this species' conservation status within the state.