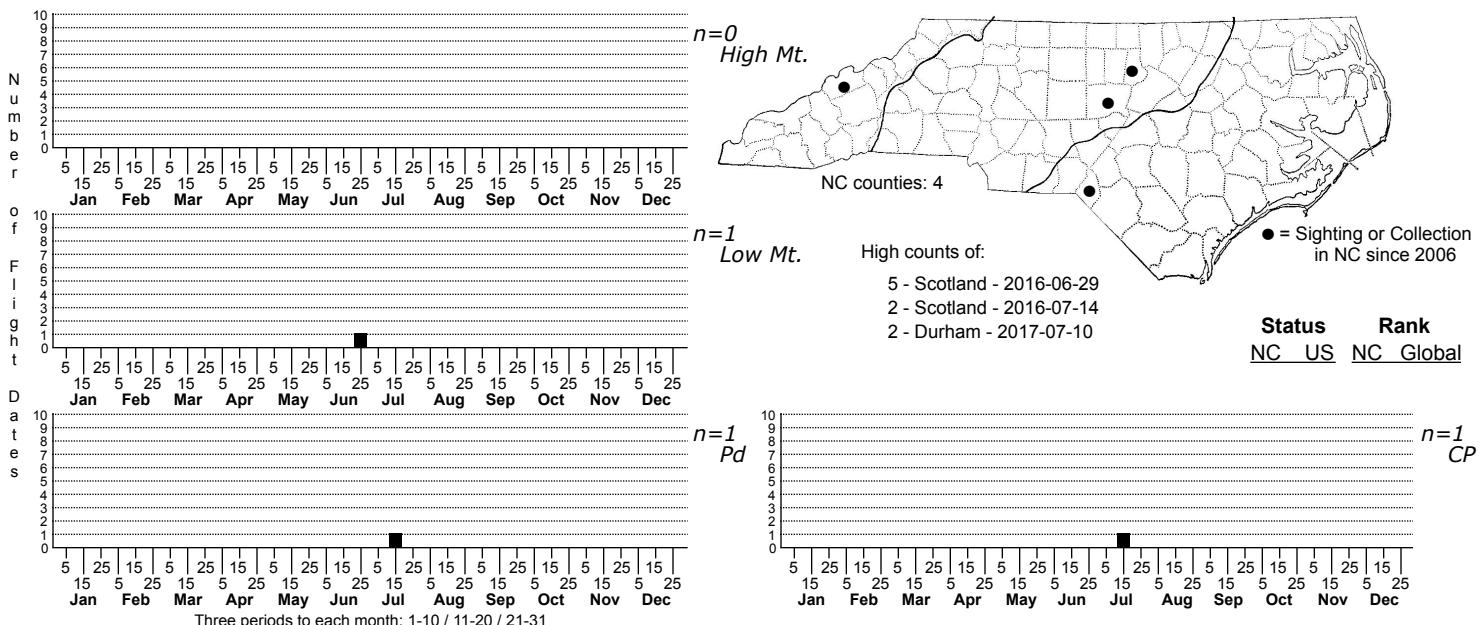


Phyllonorycter mariaeella None



FAMILY: Gracillariidae SUBFAMILY: Lithocolletinae TRIBE:

TAXONOMIC COMMENTS: Eiseman and Davis (2020) treated a closely related form, *Phyllonorycter affinis*, as a junior synonym of *P. mariaeella*.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Braun (1908); Eiseman and Davis (2020).

TECHNICAL DESCRIPTION, IMMATURE STAGES: Eiseman and Davis (2020)

ID COMMENTS: The following is primarily based on Braun's (1908) description of this species. The ground color of the head, head tuft, thorax, and forewings varies from reddish saffron to golden brown. The antenna is whitish with dark annulations above. There are two conspicuous white fasciae on the forewing, one at the basal fourth, and the other at the middle of the wing length. Both are bowed slightly outward and margined with dark brown on the anterior side. At the beginning of the costal cilia there is a white streak that nearly meets an opposing dorsal streak. These are also dark margined on the anterior side. At the apex there is a curved white streak that sometimes extends through the cilia on the dorsal margin. This streak often has a weak dark margin on the anterior side. The apex of the wing is sometimes darkened by a few brown scales, and the cilia are slightly paler than the wing ground color. The hindwing is gray with reddish cilia, and the legs are whitish with black bands.

DISTRIBUTION: Except for one record from Utah, *P. mariaeella* is restricted to eastern North America. This species occurs in southern Canada (Nova Scotia, Ontario, Quebec) and adjoining areas of the northeastern US. From there the range extends westward and southward to Illinois, Missouri, Kentucky, North Carolina, and Texas (Eiseman and Davis, 2020). As of 2020, we have only a few records from the eastern Piedmont and western Coastal Plain.

FLIGHT COMMENT: Local populations appear to be bivoltine, with the first brood beginning in June-July and a second in Oct-Nov. We have records of occupied mines in North Carolina from 29 June to 10 July, with adults emerging from 13 July until sometime between 26 and 31 July (Eiseman and Davis, 2020).

HABITAT: Local populations are restricted to sites with the host plants, which include both native and introduced members of the Caprifoliaceae. These occupy a wide variety of disturbed and forested habitats within the state. Examples include mesic to dry hardwood, pine, and mixed pine-hardwood forests, edge habitats such as roadways and fencerows, and urban landscapes.

FOOD: Larvae mine the leaves of members of the Caprifoliaceae, including honeysuckles (*Lonicera*), horse-gentians (*Triosteum*), and coralberries (*Symporicarpos*). *Symporicarpos* was probably the most important native host species, but mines are increasing being found on several invasive honeysuckles that occur in the eastern US and Canada (Eiseman and Davis, 2020). These include Japanese Honeysuckle (*L. japonica*), Amur Honeysuckle (*L. maackii*), Tatarian Honeysuckle (*L. tatarica*), and Bell's Honeysuckle (*L. × bella*). The native species that are used are Coral Honeysuckle (*L. sempervirens*), Grape Honeysuckle (*L. reticulata*), Coralberry (*S. orbiculatus*), and Yellowfruit Horse-gentian (*T. angustifolium*). In North Carolina, we have records from Coral Honeysuckle, Japanese Honeysuckle, and Coralberry.

OBSERVATION METHODS: The adults rarely visit lights, so we recommend searching for the leaf mines and rearing and photographing the adults.

NATURAL HERITAGE PROGRAM RANKS: GNR SU

STATE PROTECTION:

COMMENTS: This species is seemingly rare in the state, but this may reflect the fact that little statewide effort has been put forth to document leafminers in North Carolina.