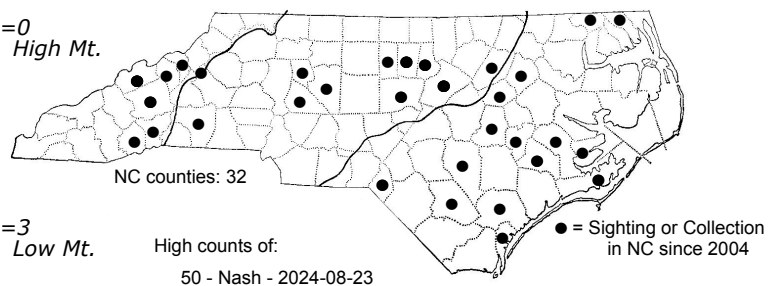
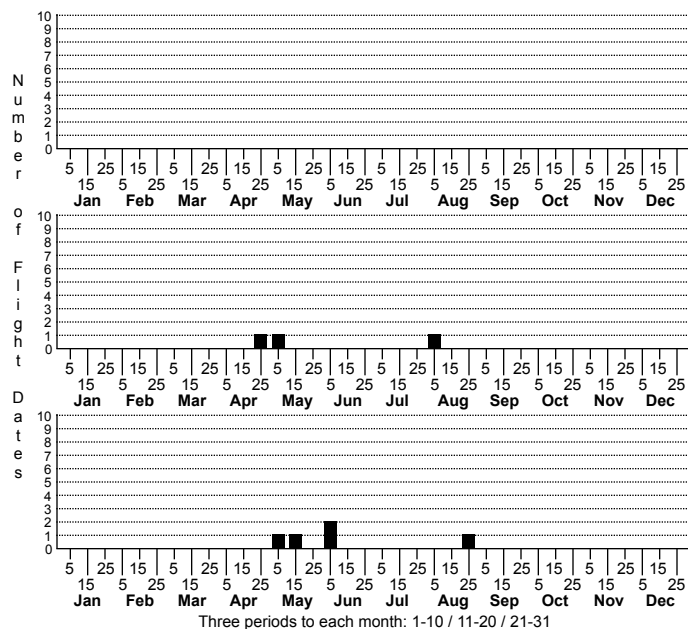


Phyllocnistis vitifoliella no common name



High counts of:
 50 - Nash - 2024-08-23
 10 - Scotland - 2019-10-02
 10 - Camden - 2022-11-08

Status	Rank
NC	US
NC	Global



FAMILY: Gracillariidae SUBFAMILY: Phyllocnistinae TRIBE:
 TAXONOMIC_COMMENTS: *Phyllocnistis* is a large genus with more than 125 described species worldwide, with 16 species currently recognized in North America. Davis and Wagner (2011) surmised that there may be hundreds of undescribed species in the neotropics. The adults of some species are very similar, and knowledge of the host plant and mine characteristics is helpful in identifying morphologically similar species (Eiseman, 2019).

FIELD GUIDE DESCRIPTIONS:
 ONLINE PHOTOS:
 TECHNICAL DESCRIPTION, ADULTS: Chambers, 1871.
 TECHNICAL DESCRIPTION, IMMATURE STAGES: Eiseman, 2019.

ID COMMENTS: The following is based primarily on Chambers's (1871) original description. The head, thorax, and antenna are glistening snowy white. The ground color of the forewing is also glistening snowy white, but tinged with light golden towards the apex. Overlaying this are a series of narrow, blackish streaks or lines that are less than half the width of the forewing. Near the middle of the wing is a narrow oblique blackish costal streak. Just behind it is a small straight blackish streak that is slightly oblique and that opposes a similar small dorsal streak. There is a conspicuous circular black spot at the wing tip. Just anterior to this there are two straight black costal streaks. At the tip of the wing are three blackish diverging lines in the cilia that tend to converge towards the apical spot. A blackish marginal line arches forward from the apical spot towards the dorsal margin. There is often a broad area of golden wash that adjoins the marginal line on the anterior side. The hindwing and cilia are silvery white. Chambers (1871) noted that *P. vitigenella* closely resembles *P. vitifoliella*, but differs in having antennae that are dark above (whitish in *P. vitifoliella*), a semi-oval dorsal spot (absent in *P. vitifoliella*), and the second costal streak that unites with the opposite dorsal streak to form a narrow fascia (these remain separated in *P. vitifoliella*).

DISTRIBUTION: *Phyllocnistis vitifoliella* is primarily found in the eastern US and Quebec, with a disjunct population in California. Population records are somewhat unreliable because of the similarity of this species with other white *Phyllocnistis* species. As of 2024, we have scattered records that include the Blue Ridge, Piedmont, and Coastal Plain.

FLIGHT COMMENT: Chambers (1871) noted that the larvae mine grape leaves from May to October in Kentucky. As of 2024, we have records of adults beginning in late-April and early May, and records of occupied mines as late as early November. In North Carolina local populations presumably produce several broods per year.

HABITAT: Local populations are strongly associated with wild grapes, which appear to be the primary hosts. Grapes inhabit a variety of forest and edge habitats. Representative habitats include forest edges along roadways and trails, mature hardwood or mixed hardwood-pine forests, and floodplains where they often arch over trees and shrubs near the water's edge.

FOOD: The larvae feed on wild grapes (*Muscadinia* and *Vitis* spp.; Robinson et al., 2010; Eiseman, 2019). Some of the known hosts include Muscadine (*Muscadinia rotundifolia*), Summer Grape (*V. aestivalis*), Possum Grape (*V. baileyana*), Riverbank Grape (*V. riparia*) and Frost Grape (*V. vulpina*). Mines resembling those of *P. vitifoliella* have occasionally been found on the upper leaves of Virginia Creeper (*Parthenocissus quinquefolia*) but it is uncertain if these are indeed those of *P. vitifoliella* (Eiseman, 2019). In North Carolina, Muscadine is an important host in the Coastal Plain and Piedmont, while *Vitis* spp. are the primary hosts in the Blue Ridge, including Frost Grape and others.

OBSERVATION_METHODS: We recommend looking for mines on the upper surfaces of grape leaves; photographs of individuals that are reared from mines are needed to better document phenotypes that occur in North Carolina.

NATURAL HERITAGE PROGRAM RANKS: GNR S3S5

STATE PROTECTION:

COMMENTS: This species can be locally common where wild grapes abound within the state.