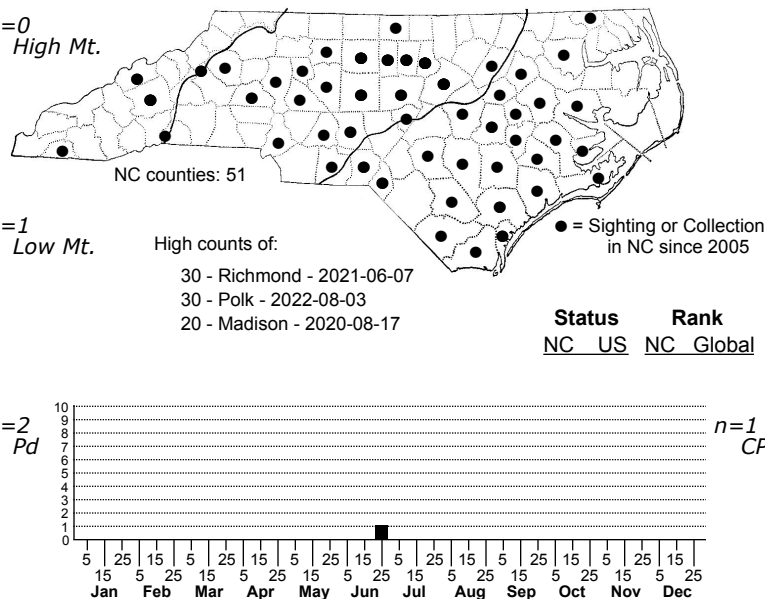
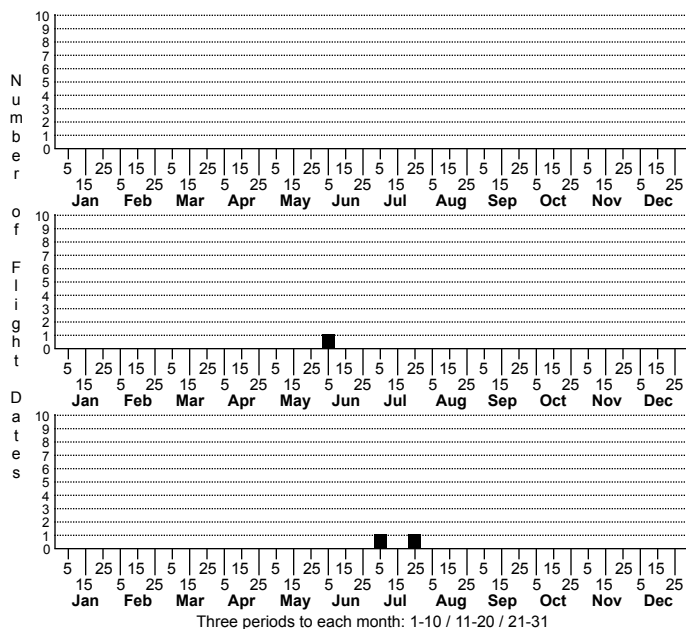


# Phyllocnistis liquidambarisella None



FAMILY: Gracillariidae SUBFAMILY: Phyllocnistinae TRIBE: [Phyllocnistini]

TAXONOMIC\_COMMENTS: <i>Phyllocnistis</i> 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:

TECHNICAL DESCRIPTION, IMMATURE STAGES: Chambers (1875; Eiseman, 2019).

ID COMMENTS: The ground color of the forewing is silvery white with faint golden-yellowish coloration often present in the apical fourth. Just beyond mid-length, a curved dark line (narrow streak) extends from the costa to near the middle of the wing. This is followed by three relatively straight and shorter dark lines that are spaced out towards the apical spot, and that extend well into the fringe along the costa. Just posterior to the curved dark line on the costa, there is a similar curved line that originates on the dorsal margin and extends to the middle of the wing. The terminus of this line projects towards the first straight line on the costa. There is a well developed black apical spot, and a dark line in the apical fringe that originates at the spot and arches anteriorly towards the dorsal margin. Two or three additional faint dark lines are often evident in the apical fringe of unworn specimens. These radiate away from the apical spot. Chambers (1875) noted that the adults appear to be indistinguishable from <i>Phyllocnistis vitifoliella</i> and are best identified through rearing from the host plant.

DISTRIBUTION: Local populations of <i>P. liquidambarisella</i> are restricted to sites where Sweetgum is present. The species is found through much of the southeastern US to at least as far north as southern Ohio and New Jersey. In North Carolina, populations occur throughout the Coastal Plain and eastern Piedmont. Populations were recently located in the mountains, and appear to be locally common along the French Broad River drainage where Sweetgum is present.

FLIGHT COMMENT: The flight season is poorly documented because of the scarcity of adult records. Fully formed leaf mines have been observed in North Carolina as early as late June, so the adults are likely on the wing sometime in May.

HABITAT: The larvae are dependent on Sweetgum (<i>Liquidambar styraciflua</i>) for reproduction. Sweetgum tends to be an early successional species that establishes well in disturbed habitats. Sweetgum tolerates a wide range of soil moisture and soil pH regimes, and can be found in a variety of habitats, including mature forests. Examples include floodplain and bottomland forests, swamplands, clearcuts, abandoned fields, roadways, and mesic to drier hardwood and mixed pine-hardwood forests.

FOOD: Larvae feed on Sweetgum (<i>Liquidambar styraciflua</i>) (Eiseman, 2022), which has been confirmed as the host in North Carolina.

OBSERVATION\_METHODS: There are remarkably few adult records for this species, presumably because the adults are not attracted to lights. Almost all records are based on the leaf mines. We recommend searching for occupied mines during the late spring or early summer, then rearing and photographing the adults.

NATURAL HERITAGE PROGRAM RANKS: [GNR] S4S5

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

COMMENTS: