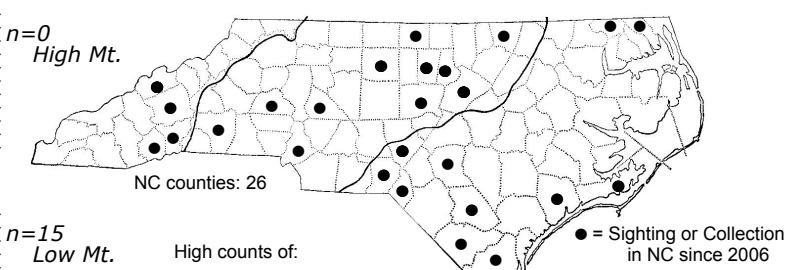
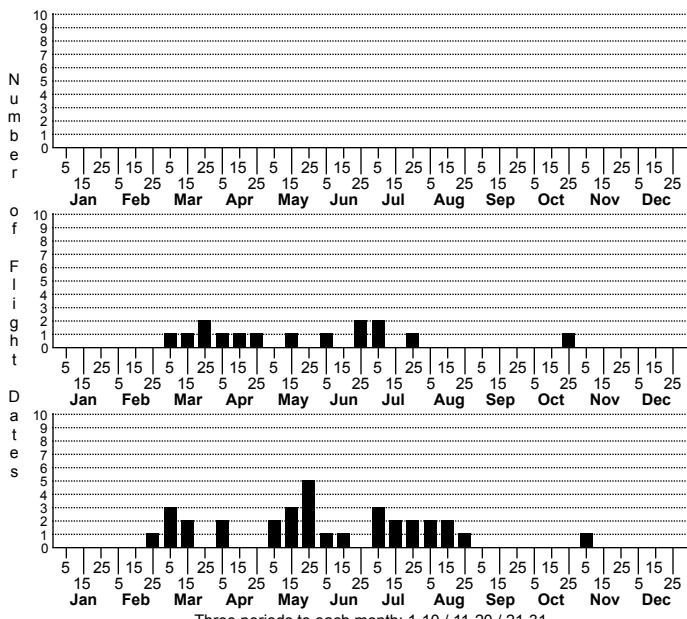


# *Caloptilia rhoifoliella* Sumac Leafblotch Miner Moth



FAMILY: Gracillariidae SUBFAMILY: Gracillariinae TRIBE: [Gracillariini]

TAXONOMIC COMMENTS: <i>Caloptilia</i> is a large genus with nearly 300 described species; 64 species have been described in North America north of Mexico. The larvae begin as leaf-mining sap-feeders, but the latter instars usually exit the mine and feed within a conical roll that begins at the leaf apex or at the tip of a leaf lobe.

FIELD GUIDE DESCRIPTIONS: Leckie and Beadle, 2018.

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: (Chambers, 1876)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Chambers, 1876; Eiseman, 2019.

ID COMMENTS: In this species, the upper head, thorax and forewings are light to dark brown, and often have a yellowish tinge. The area near the costa is often lighter than the ground color above, and in many specimens is whitish with darker dusting or fine mottling. A series of dark brown dots or small rectangular blotches usually occurs along the costa, and sometimes more dorsally along the fold. The triangular patch that is found in many <i>Caloptilia</i> is absent, and the face and palps are white. The apex of each joint of each palp is brown. The femur and tibia of the front and middle leg are brown above, while the tarsi are whitish with faint brown marks near the joints. The rear legs are light colored with varying amounts of fuscous dusting.

This species superficially resembles <i>C. sassafrasella</i>, but the face and palps are white, compared with the dark face and palps of <i>C. sassafrasella</i>. <i>Caloptilia sassafrasella</i> also has two conspicuous dark costal spots -- one midway and one just before the apex -- that are lacking in <i>C. rhoifoliella</i>.

DISTRIBUTION: <i>Caloptilia rhoifoliella</i> is widely distributed and common across the eastern US and adjoining areas of extreme southern Canada (Ontario; Quebec). Populations in the eastern US occur from Maine to southern Florida, and westward to central Texas, central Oklahoma, Missouri, eastern Nebraska and Minnesota. This species occurs essentially statewide in North Carolina, although as of 2023 it appears to be largely absent from the northern Coastal Plain and higher elevations in the mountains.

FLIGHT COMMENT: The adults have been observed during every month of the year in different areas of the range, but typically first become active following the spring leaf-out. Observations from the eastern US indicate that many populations produce more than one brood per year, with a seasonal peak in abundance in July and August. As of 2023, specimens in North Carolina have been observed from late February through early November, with local populations appearing to produce two or three broods per year.

HABITAT: The host plants include our native sumacs, which are typically found in open, dry woods or disturbed sites such as clearings, old fields, and roadsides. The larvae also feed on Poison Ivy and Poison Oak, which are found in a variety of disturbed sites, as well as a wide range of other habitats such as dry to mesic forests.

FOOD: <i>C. rhoifoliella</i> specializes on members of the Anacardiaceae (Forbes, 1923; Godfrey et al., 1987; Heppner, 2007; Robinson et al., 2010; Beadle and Leckie, 2018; Eiseman, 2022). The known hosts including Fragrant Sumac (<i>Rhus aromatica</i>), Winged Sumac (<i>R. copallina</i>), Smooth Sumac (<i>R. glabra</i>), Staghorn Sumac (<i>R. typhina</i>), Atlantic Poison-oak (<i>Toxicodendron pubescens</i>), and Poison-ivy (<i>T. radicans</i>). In North Carolina, we have records for Winged Sumac, Smooth Sumac, Fragrant Sumac, and Poison-ivy.

OBSERVATION METHODS: The adults are attracted to UV lights, and the larvae can be documented by searching for leaf mines and shelters on the host species.

NATURAL HERITAGE PROGRAM RANKS: GNR S3S5

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

COMMENTS:

March 2026

The Moths of North Carolina - Early Draft