## Caloptilia cornusella No common name



FAMILY: Gracillariidae SUBFAMILY: Gracillariinae TRIBE: [Gracillariini] TAXONOMIC_COMMENTS:

FIELD GUIDE DESCRIPTIONS:
ONLINE PHOTOS: MPG, Bugguide, BAMONA
TECHNICAL DESCRIPTION, ADULTS: Ely, 2015.
TECHNICAL DESCRIPTION, IMMATURE STAGES: Ely, 2015; Eiseman, 2019.
ID COMMENTS: The following is based on the original description by Ely (1915). based on numerous reared adults. This species has a dark purple ground color on the forewings, thorax, and upper head. The forewings have two golden patches on the costal margin. The larger one extends from the basal fourth to nearly the middle of the costa, while the second is widely separated from the first and very small. The face is pale lemon yellow and the labial palps are yellowish white and annulate with black just before the apex. The antenna is brown with fine yellowish annulations at the joints. The cilia are dark gray, with two distinct black lines extending around the apex and well into the dorsal cilia. The tibia and femur of the front and middle leg are dark purple, while the tarsi are white with fine dark markings near the tarsal joints. The hind leg is yellowish with brown shading. This species resembles $<\mathrm{i}>\mathrm{C}$. bimaculatella</i>, but has a dark purple ground color, widely separated costal patches, a posterior costal patch that is reduced in size, and a yellow face (white in $\langle\mathrm{i}\rangle \mathrm{C}$. bimaculatell $\mathrm{a}<\mathrm{i}\rangle$ ).

DISTRIBUTION: $<\mathrm{i}>\mathrm{C}$. cornusella</i> is most common in southern Canada and in an area that extends from the Great Lakes region to the Northeast. Isolated populations occur southward to Kentucky and North Carolina. As of 2023 we have only two records that may reflect southern disjuncts.

FLIGHT COMMENT: In the Northeast, leaf rolls appear on Red-osier Dogwood in mid-July and adults emerge by early August (Eiseman, 2019). As of 2023, our only larval record is from July 15 in the Blue Ridge, with two reared adults emerging on August 3. Our only other record for an adult is from May 12 in the eastern Piedmont.

HABITAT: Local populations are typically associated with hardwood forests and the edges of wetlands.
FOOD: This species specializes on dogwoods ( $<\mathrm{i}>$ Cornus $<\mathrm{i}>$ spp.). Documented hosts in eastern North America include Alternate-leaf Dogwood (<i>C. alternifolia</i>), Bunchberry (<i>C. canadensis</i>), Northern Swamp Dogwood (<i>C. racemosa< $<\mathrm{i}>$ ), and Redosier Dogwood ( $<\mathrm{i}>\mathrm{C}$. sericea $<\mathrm{i}>$ ssp. $<\mathrm{i}>$ sericea $<\mathrm{i}>$ ).

OBSERVATION_METHODS: The adults are attracted to UV lights and larvae can be collected by searching for the mines rolled leaves on native $\bar{d}$ ogwoods.

## NATURAL HERITAGE PROGRAM RANKS: GNR S1S3

STATE PROTECTION: Has no legal protection, although permits are required to collect it on state parks and other public lands.
COMMENTS: Our two records for North Carolina as of 2023 may reflect disjunct populations of what is generally a more northernly distributed species.

