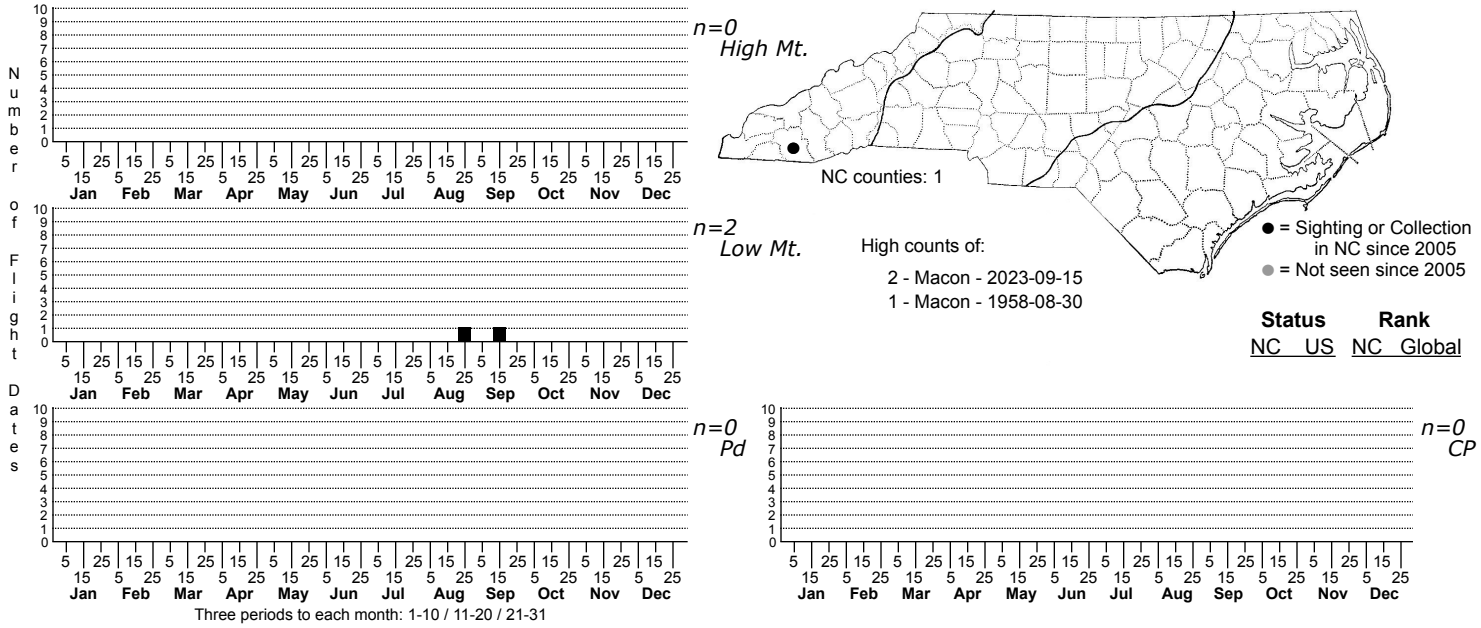
Agonopterix hyperella None



FAMILY: Depressariidae SUBFAMILY: Depressariinae TRIBE:
TAXONOMIC_COMMENTS: Agonopterix is a large holarctic genus with more than 125 species, with most occurring in the Palearctic Region. Currently, there are 47 recognized species in North America. Our species are largely confined to the western mountains.

FIELD GUIDE DESCRIPTIONS:
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS: Ely (1910)
TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following is based on the descriptions by Ely (1910) and Clarke (1941). The labial palps are pale yellowish to creamy white and heavily overlaid with fuscous exteriorly. The third segment has a broad black subapical annulation. The head is pale yellowish in front and grayish above. The thorax varies from dark yellow-gray to dark lavender-gray. The forewing is dark grayish lavender and shaded with yellowish brown, especially towards the inner margin. Near the wing base there is a narrow, yellowish white, transverse band that is preceded by two black spots -- one near the costa, and the other at the inner angle. Along the costal margin there are small, alternating, black and yellowish patches that produce a somewhat striated appearance. A black crescent-shaped streak is present in the center of the cell that is margined with yellowish brown and followed by a grayish shade. A white discal spot is present just beyond it. At the base of the cilia there is a thin fuscous to black line. The cilia are light purplish fuscous mixed with gray. The hindwing is smoky gray, with the cilia more yellowish. The legs are yellow to creamy white and shaded with fuscous outwardly except at the joints. The abdomen is gray, more yellowish below, with a row of black dots situated laterally.

Hodges (1974) noted that this species is very similar to A. lythrella. As with A. lythrella, A. hyperella has a dark, curved streak beginning at about one-third the wing length, and a small white spot just beyond its terminus. It differs in having a gray to grayish brown forewing, versus a distinctly reddish brown forewing in A. lythrella. The curved streak on A. hyperella is also broader and better developed. On A. lythrella this mark is much shorter and more narrow, and sometimes divided into two distinct dots. Hodges (1974) also noted that the first tarsal segment of the foreleg is usually unicolorous in A. hyperella versus pale yellowish white in A. lythrella. Although Hodges (1974) surmised that A. hyperella may just be a form of A. lythrella, it appears to be a good species based on DNA barcoding, and clusters with a group that is not sister to A. lythrella. This species also resembles A. curvilineella, but most obviously differs by lacking the broad zone of light banding on the thorax and base of the wings that extends along the costa.

DISTRIBUTION: Agonopterix hyperella is found in eastern North America. The range is poorly delineated, with only a few scattered records from Massachusetts, Maryland, Indiana, Kentucky, Tennessee, Virginia, North Carolina and northern Alabama. Hodges (1974) collected a specimen from Highlands in 1958, and we have one recent record as of 2025 from the same county.

FLIGHT COMMENT: The adults presumably overwinter and become active with the spring warm-up. Adult or larval records extend from May through September. Our two North Carolina specimens as of 2025 were collected in late-August and mid-September..

HABITAT: Very little is known about the habitat requirement. The known hosts occur in both dry forested slopes and in more open, disturbed habitats such as roadsides, fields, and woodland borders.

FOOD: Ely (1910) found larvae on Shrubby St. John's-wort (Hypericum prolificum) and Common St. John's-wort (Hypericum perforatum). Other Hypericum species are probably also used.

OBSERVATION_METHODS: The adults have only occasionally been seen at lights. We recommend searching for the larvae on Hypericum during May and June.

NATURAL HERITAGE PROGRAM RANKS: GNR [S1-S3]

STATE PROTECTION:

COMMENTS: We have only two records as of 2025, with one being a historical record from Highlands from 1958. This species appears to be rare in North Carolina, but more information is needed on its distribution, abundance and preferred habitats before we can accurately assess its conservation status within the state.