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## High Mt. N u m b е 5 Apr 5 Dec NC counties: 6 Jan o f Sighting or Collection n = 34High counts of: in NC since 2005 Low Mt. F 2 - Madison - 2023-03-23 Т 2 - Buncombe - 2024-05-17 Rank Status g h 1 - Madison - 2018-07-15 NC US NC Global t D а n=0 \_\_\_\_\_n=0 e Pd CP s

## Agonopterix curvilineella Curved-line Agonopterix

FAMILY: Depressariidae SUBFAMILY: Depressariinae TRIBE: [Depressariini] TAXONOMIC\_COMMENTS: <i>Agonopterix</i> 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: Beadle and Leckie (2012) ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Hodges, 1974 TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following is primarily based on the description in Clarke (1941). This is a distinctive species that has a pale yellowish-gray to grayish-brown forewing, along with an elongated, curved, dark-brown to black streak at the middle of the wing that extends almost to the white discal spot. The antenna is fuscous with darker annulations. The labial palp is white with the second segment irrorated with blackish fuscous exteriorly. The third segment has basal and subapical bands and an apex that is blackish fuscous. A zone of gray to light brownish-gray scales covers the top of the head and thorax, then extends as a narrow band along the costal margin. The band sometimes terminates shortly before reaching the costa, but on some specimens extends all the way to the mid-costal region to produce a horseshoe shape. There are two small blackish-fuscous spots near the basal portion of the band. At the base of the wing that immediately adjoins the light band there is a dark patch or zone that lightens posteriorly until it grades into the ground color of the forewing. The remainder of the costal margin has a series of alternating dark and light spots or bars that are reduced in size along the termen. The legs are whitish with a series of dark blotches and bands along their length.

DISTRIBUTION: <i>Agonopterix curvilineella</i> is found primarily in eastern North America, including much of southern Canada from Nova Scotia to Ontario and Manitoba. In the US, the range extends from the northeastern states westward to Illinois, Iowa, and Wisconsin, and southward to Alabama, Tennessee, and North Carolina. As of 2020, all of our records are from the lower elevations in the mountains.

FLIGHT COMMENT: The adults overwinter and small numbers are sometimes active during warm weather in the colder months of the year. They have been observed during almost every month of the year, but are most active from April through July. As of 2020, our records extend from February to early August. Populations in North Carolina show two seasonal peaks, with an initial breeding bout in March-May and a second peak in July and August. It is uncertain whether the latter reflects a second generation, or simply adults emerging and dispersing from the first.

HABITAT: The habitats are poorly undocumented, but most of our records are associated with forested sites.

FOOD: The host plants are unknown.

OBSERVATION\_METHODS: The adults regularly visit UV-lights.

NATURAL HERITAGE PROGRAM RANKS: GNR SU

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

COMMENTS: This species appears to be restricted to the mountains where it is near the southern limits of its range. We currently do not have sufficient information on the distribution and abundance of this species to assess its conservation status. March 2025 The Moths of North Carolina - Early Draft 1