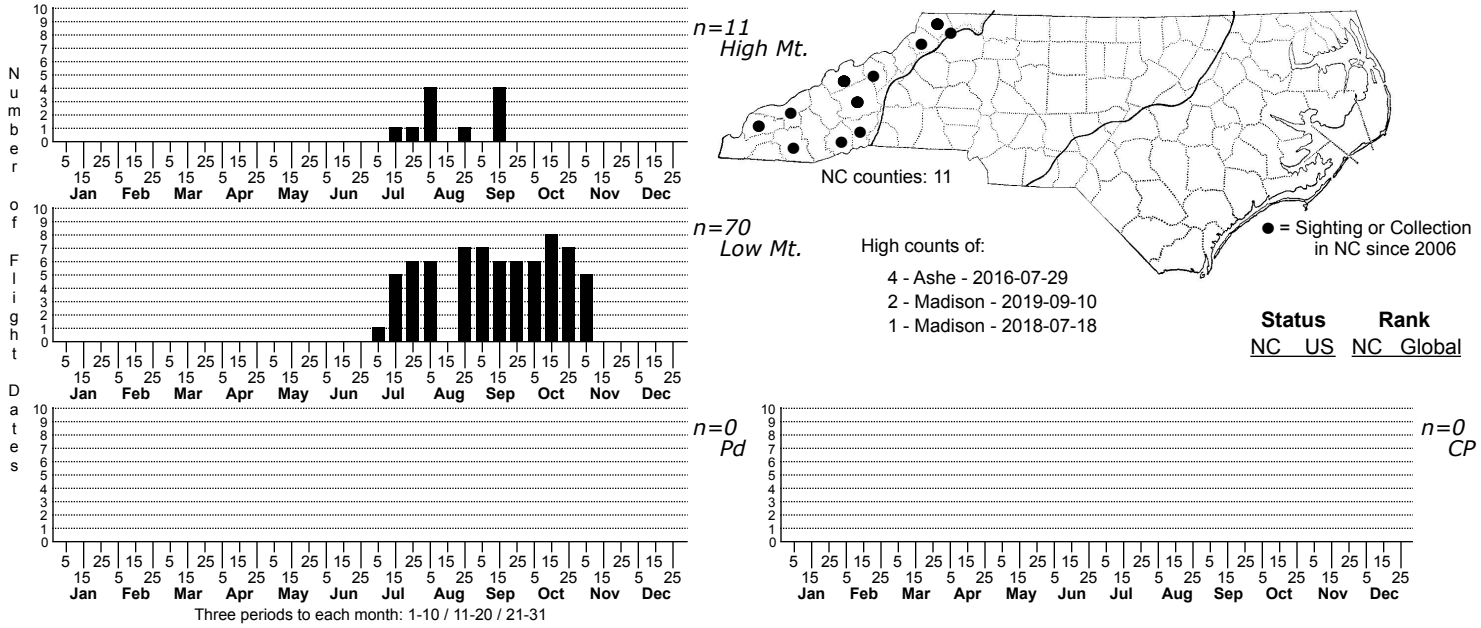
Agonopterix thelmae Thelma's Agonopterix



FAMILY: Depressariidae SUBFAMILY: Depressariinae TRIBE: [Depressariini]
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: Clarke (1941); Hodges (1974)
TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following is based primarily on descriptions in Clarke (1941) and Hodges (1974). The labial palp is whitish ochreous, with the second segment irrorated exteriorly with reddish fuscous. The third segment has a blackish-fuscous sub-basal and supra-medial band. The antenna has a whitish ochreous basal segment that is indistinctly annulated with fuscous basally. The whitish ochreous section grades towards fuscous in the apical third. The head, thorax, and ground color of the forewing are whitish ochreous, and the thorax and forewing are speckled with fuscous and suffused with dull reddish. There is a fuscous spot on each side of the thorax beneath the inner edge of the tegula. A narrow fuscous line is usually evident just beyond the light basal area that extends to the costa. At the basal third there are two diagonal blackish-fuscous discal spots. The latter is just above an orange-red streak on the cell, which has a third dark spot at its terminus (sometimes inconspicuous). A somewhat rounded, diffuse dark blotch is present between the orange-red streak and the costa. A diffuse, brownish, longitudinal band usually adjoins the streak on the inner side. The band often extends both anteriorly and posteriorly beyond the streak. The portion that extends posteriorly eventually curves towards the inner margin, then sharply angles back towards the apex. A series of indistinct fuscous spots occurs along the costa and around the termen. The cilia are whitish ochreous with a reddish tint. The hindwing is fuscous with cilia that are whitish ochreous and banded with fuscous. The legs are whitish ochreous and suffused and irrorated with reddish fuscous except at the joints. Two features that help to distinguish this species are the red to reddish-orange streak along the cell, and the dark blotch between the streak and the costa.

Agonopterix robiniella is superficially similar, but lacks the reddish-orange streak along the cell and has a curved, diffuse band that extends from the mid-costal region towards the inner margin of the wing base. Agonopterix thelmae also lacks a brick-red sub-basal annulus on the third segment of the labial palpus that is present in A. robiniella.

DISTRIBUTION: Agonopterix thelmae is found in eastern North America in southern Canada (Ontario; Quebec; Nova Scotia; New Brunswick), and from the northeastern states westward and southwestward to Iowa, Illinois, Kentucky, Tennessee, and western North Carolina. This species is absent from most of the southeastern Piedmont and Coastal Plain. As of 2023, our records are all from the Blue Ridge,

FLIGHT COMMENT: This species is univoltine. Adult have been found from June through November in different areas of the range, with a peak in numbers from August to October. As of 2023, our records extend from early-July through early-November.

HABITAT: The hosts and specific habitat requirements are unknown. Many of our records are from wooded, residential neighborhoods.

FOOD: The hosts are poorly documented. Hodges (1974) surmised that this species may use legumes since it is closely related to A. robiniella. There is a BugGuide record of a larva feeding on Black Locust (Robinia pseudoacacia), but we do not have any feeding records in North Carolina.

OBSERVATION_METHODS: The adults are attracted to 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: As of 2020 we have 15 site records for the western mountains which suggests that this species is somewhat secure. Additional information is needed on its distribution and abundance before we can accurately assess its conservation status.