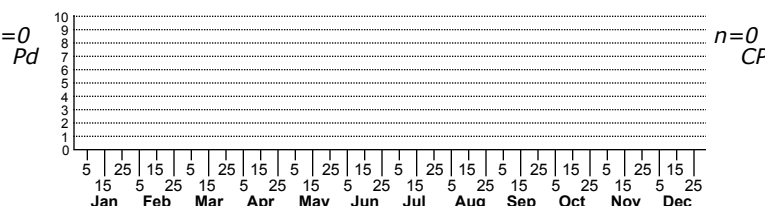
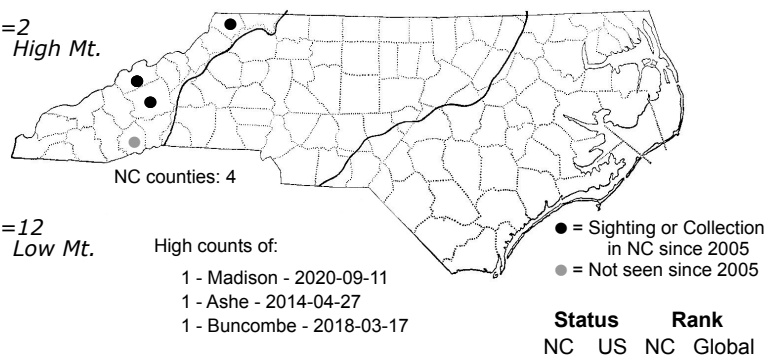
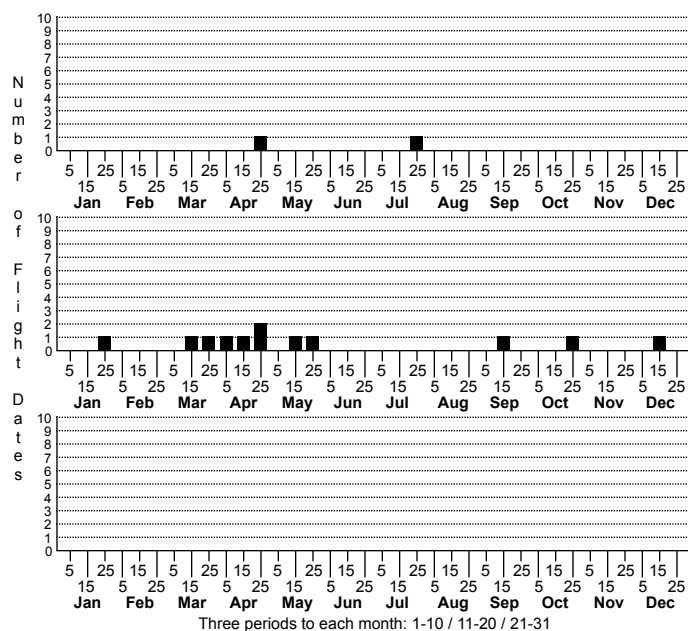


# *Agonopterix atrodorsella* Beggartick Leafroller Moth



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: Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Clarke (1941); Hodges (1974)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following is based on descriptions by Clemens (1863), Clarke (1941) and Hodges (1974). *Agonopterix atrodorsella* is a distinctive species that has a pale-yellow to yellow-ocherous forewing with a dark brown base. The cell is overlaid with red-brown scales, and there is an elongated, brown, costal blotch just before the apex. A small dark brown spot is present at about one-third the wing length at the beginning of the cell, along with a small white spot posterior to this and just beyond one-half. The costa has a series of 4-8 small dark blotches along its margin. The thorax is black, while the head is dark fuscous. The antenna has a black, ochreous-tipped basal segment, while the remainder is fuscous and annulated with ochreous-fuscous. The face is blackish brown above and yellowish beneath. The labial palp is pale yellow with the second joint dusted with black exteriorly. The terminal segment has two dark fuscous rings, one near the base, and the other near the tip. The legs are yellowish white and strongly overlaid with blackish fuscous except at the joints. The hindwing is light reddish fuscous.

DISTRIBUTION: *Agonopterix atrodorsella* is found in eastern North America and has a northern distribution. Populations occur in southern Canada from Prince Edward Island to Ontario, and in the U.S. from the northeastern states westward to Illinois and Wisconsin. The southern limit is reached near Maryland and northern Kentucky, except for an apparent disjunct in the western North Carolina mountains. As of 2023, our records are restricted to the Blue Ridge, where individuals occur at both lower and higher elevations in the mountains.

FLIGHT COMMENT: Adults have been observed during almost every month of the year, but reach a peak in seasonal activity from April to June in most areas of the range. The adults overwinter and become active following the spring warm-up. As of 2023, our records fall into two clusters: one from mid-March through late-May, with a second from mid-September through mid-December and late-January, with the December and January records presumably being overwintering adults.

HABITAT: This species uses Sweet-fern and several species of composites that are generally found in open, sunny habitats. Representative habitats include moist ditches and other low-lying areas, and fields, meadows, and woodland borders. Sweet Fern grows on dry ridgetops and open woods in the mountains.

FOOD: Hodges (1974) reported that the adults have been reared from thoroughworts (*Eupatorium* spp.), tickseeds (*Coreopsis* spp.), including *C. tripteris*, Devil's Beggarticks (*Bidens frondosa*), and Sweet-fern (*Comptonia peregrina*).

OBSERVATION\_METHODS: The adults are attracted to UV lights.

NATURAL HERITAGE PROGRAM RANKS: GNR [S2-S3]

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

COMMENTS: We have only five site records as of 2023, which suggests that this species is rare within the state. More data are needed on its distribution, abundance and host plant use in North Carolina before we can accurately assess its conservation status.