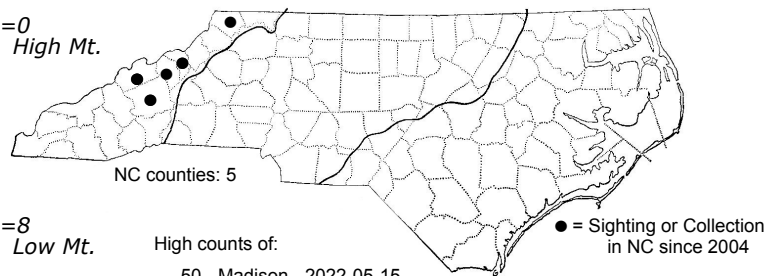
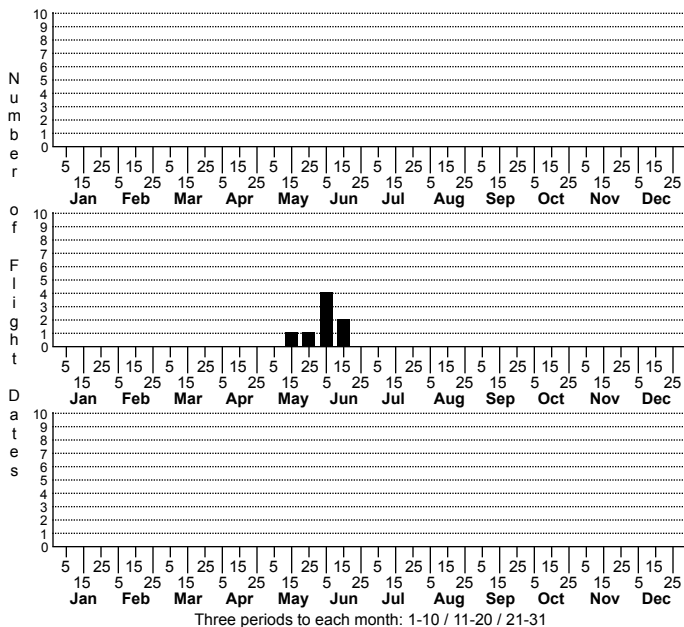
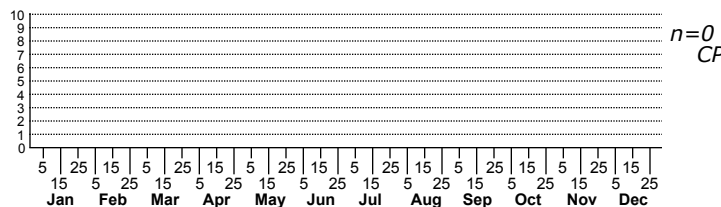


*Agonopterix senicionella* No common name



High counts of:  
 50 - Madison - 2022-05-15  
 30 - Buncombe - 2022-05-14  
 20 - Buncombe - 2022-05-14

Status	Rank
NC	US
NC	Global



FAMILY: Depressariidae SUBFAMILY: 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: Busck (1902), Hodges (1974)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following is based primarily on the original description by Busck (1902). The antenna is ocherous with narrow black annulations, and the labial palp is light ocherous overall. The second joint of the labial palp is sprinkled with white and black scales and the terminal joint has an annulation at the base, around the middle, and at the extreme apex. The face varies from very light yellowish to nearly white, and the head and thorax are light ocherous.

The forewing is dark ocherous gray, mottled with lighter ocherous, and sparsely sprinkled with black and white scales. The base of the wing is concolorous with the thorax and lighter than the rest of the wing. It is rather sharply edged outwardly by an area of somewhat darker shade relative to the rest of the wing. In the middle of the cell there is a more or less conspicuous black dot that is usually preceded by a similar dot that is nearer the costa. At the end of the cell is a third somewhat inconspicuous black dot. Between these dots there is usually a somewhat diffuse dark fuscous blotch that is displaced towards the costa. Along the costa and the round apical edge is a series of more or less pronounced blackish dots. The hindwing is shining dark gray with a faint blackish line at the apex before the cilia. The cilia are a shade lighter than the wing, and the abdomen is grayish ocherous with two longitudinal rows of black dots on the underside. The legs are light ocherous and the spurs and tarsal joints are sparsely sprinkled with black scales.

Busck (1902) and Hodges (1974) noted that individuals are variable and sometimes deviate from the general description above. The degree of yellow-brown overlay on the forewing is variable. Some specimens are pale yellow with a slight overlay, while others are nearly uniformly yellowish brown with a small yellow area at the base of the forewing. The two dark spots at the end of the cell of the forewing usually are well developed, but they may be faint to absent in some specimens. Specimens with dark forewings also tend to have darker hindwings than do those with pale forewings.

Hodges (1974) noted that *A. senicionella* is closely related to *A. flavicomella*, *A. robiniella*, *A. thelmae* and *A. lecontella*. It may be separated from *A. flavicomella* by the more even coloring on the forewing and by the heavy overlay of yellow brown. The hindwing of *A. senicionella* is dark yellowish gray, while that of *A. flavicomella* is pale yellowish white to yellowish gray. The remaining species can be separated from *A. senicionella* by their yellow-orange to orange (not yellow to yellow-brown) forewings. This species also resembles *A. canadensis* but tends to be lighter colored, to have larger discal spots, and have a heavier dusting of dark brown to blackish coloration on the posterior half of the forewings. The genitalia are also distinctive, and the host plant is invariably present where local populations occur.

DISTRIBUTION: The distribution of *A. senicionella* is rather poorly documented. Hodges (1974) noted that it is known from the lower Potomac Valley and southeastern Michigan. There appear to be other valid records from northern Virginia, West Virginia, southern Ohio, and northern Kentucky. This species was only recently found in western North Carolina where it can be locally common.

FLIGHT COMMENT: The flight season is poorly documented. Our limited observations suggest that the adults probably overwinter and lay eggs during the spring warm-up.

HABITAT: This species is found locally in moist to mesic deciduous forests, in woodland openings, along forest edge habitats, and in road corridors and other open sites where the host plant grows.

FOOD: *Agonopterix senicionella* is one of only two moths that are known to use Golden Ragwort (*Packera aurea*) as a host plant, the other being *Phyllocnistis insignis*. *P. aurea* produces pyrrolizidine alkaloids that are toxic to most herbivorous mammals, which may explain the paucity of lepidopterans that use this species as a host. Jim Petranka has successfully reared *A. senicionella* from leaf rolls on *P. aurea*.

OBSERVATION METHODS: Local populations are most easily documented by looking for the rolled leaves of Golden Ragwort during April and May. This species was only recently documented in North Carolina, but appears to be locally common where Golden Ragwort is present. The adults appear to be only weakly attracted to lights.

NATURAL HERITAGE PROGRAM RANKS:

STATE PROTECTION:

COMMENTS: Although this species was only recently documented in North Carolina, it can be locally abundant based on observations of leaf rolls.