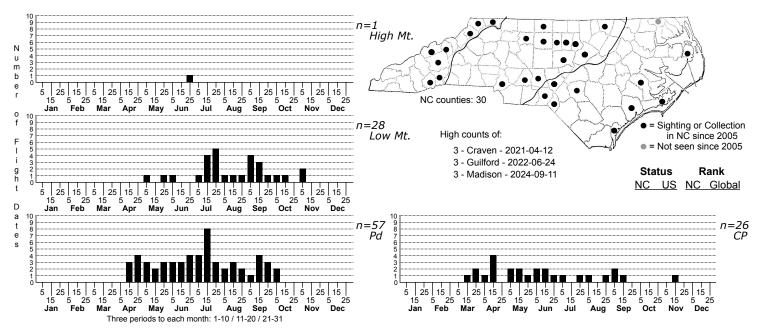
## Aristotelia rubidella Ruby Aristotelia



FAMILY: Gelechiidae SUBFAMILY: Anomologinae TRIBE:

TAXONOMIC\_COMMENTS: The genus <i>Aristotelia</i> contains over 150 species of small moths that are found worldwide, with around 34 species in North America.

FIELD GUIDE DESCRIPTIONS: Covell (1984); Leckie and Beadle (2018) ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Chambers (1860); Forbes (1923; 1932).

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: This is a distinctive species that typically has a suffusion of roseate and grayish scales between the dark bars on the forewing. The antenna is distinctive in having a series of five well-spaced white spots or annuli on the apical third. The following description is based on that of Chambers (1860) and Forbes (1923; 1932). The head, face, and thorax vary from yellowish brown to fuscous. The third segment of the labial palp is only slightly longer than the second segment, and is black with three white bands: one near the base, one before the middle, and the last before the black tip. The basal two-thirds of the antenna has alternating black and white annulations, while the apical third is black with five equally spaced white spots or annulations along its length. These stand out from the more closely spaced white annulations on the basal two-thirds

The forewing has rather complex patterning. The most conspicuous mark is a dark, broad band that extends from the costal at about one-third the wing length, and gently curves rearward before terminating near the dorsal margin. A shorter and more rectangular dark costal blotch is present at around two-thirds the wing length, and a subterminal blotch or zone of blackish scales fills much of the area just before the wing tip. A small black streak is also usually present between the wing base and the broad band at one-third. The areas between these bands are suffused with a mixture of grayish, fuscous and roseate patches. The dorsal margin often has a border of yellowish brown scales that tend to intermix with the other patches to varying degrees. The cilia are light grayish to brownish and usually have a darker band through the middle. The hindwing is blackish gray with somewhat paler cilia. The legs have a series of deep fuscous and whitish bands. Individuals vary in the amount of reddishpink wash, and in the amount of yellowish-brown scales along the dorsal margin. If in doubt, check for the three white bands on the terminal segment of the labial palp, along with the five white annuli on the apical third of the antenna.

DISTRIBUTION: <i>Aristotelia rubidella</i> is widely distributed across eastern North America, and in Alberta, British Columbia, Washington State, southern California, and Colorado. The range in the east extends from the New England states and adjoining areas of southern Canada southward to Florida, and westward to central Texas, Oklahoma, Kansas, and Wisconsin. This species occurs statewide in North Carolina.

FLIGHT COMMENT: Adults have been documented in all but the coldest months of the year at the southernmost locales, and mostly from May through September farther north. We have records from mid-March through early October, with the first brood beginning with the spring leaf-out. Local populations appear to produce two or more broods per year.

HABITAT: Oaks are the only known hosts, but this is based on very limited information. Many of our records are from forested sites, but the specific habitat requrements are unknown.

FOOD: Heppner (1979) has one rearing record of larvae from an unspecified species of oak (<i>Quercus</i> sp.) in Florida.

OBSERVATION METHODS: The adults regularly visit lights. More information is needed on host use and the life history of the larval stage.

NATURAL HERITAGE PROGRAM RANKS: GNR [S4S5]

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

COMMENTS: This species is widespread and seemingly secure based on the number of records that we have for the state.