## Aristotelia lespedezae No common name



FAMILY: Gelechiidae SUBFAMILY: Gelechiinae TRIBE: Gelechiini
TAXONOMIC_COMMENTS: The genus <i>Aristotelia< $\mathrm{i}>$ contains over 150 species of small moths that are found worldwide, with around 34 species in North America.

## FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS: Braun (1930)
TECHNICAL DESCRIPTION, IMMATURE STAGES: Braun (1930)
ID COMMENTS: The following description is based primarily on that of Braun (1930). The head and thorax are brown and the face whitish. The antenna is uniformly black with whitish annulations along its entire length. The labial palp is white, and the second segment has a sub-basal and sub-apical annulation. The third segment is narrow and noticeably longer than the second segment. Most specimens show evidence of three black marks along its length, including two small annulations on the basal half and a more elongated bar on the terminal half. The anterior edge of the third segment is narrowly white with a fine black line edging it on each side.

The ground color of the forewing is bright brown and sometimes has a roseate tinge. The are three large, dark brown marks. The first is a broad, slightly oblique bar that begins at the base of the costa and extends nearly to the dorsal margin. The posterior edge is usually margined with a thin line of white scales. A similar bar begins at about two-fifths and runs approximately parallel to the first. It terminates before reaching the dorsal margin, and is often hooked at the end. The last mark is a broad-based costal patch at about three-fourths that narrows just before ending near the middle of the wing. The lighter areas between the bars have darker tipped scales that produce an overall dirty white appearance.

The costal patch has a whitish patch immediately behind it that often has a few brown scales near the center. The areas between the brown marks are pale to grayish white, and dusted with varying amounts of brown scales. Some specimens have a suffusion of rosy scales in this region. Two small, dark brownish-black spots are usually evident near the middle and between the second dark bar and the dark costal patch. A blackish longitudinal streak is present beyond these that is above the white costal patch at four-fifths. The area around the tornus is often suffused with rosy coloration. Patches of small black and white scales are present along the costa just below the apex. There is often a line of dark grayish scales at the wing tip that extends around the apex and along the termen, and a parallel gray band posterior to this in the cilia.

The hindwings and cilia are dark gray, and the legs are boldly banded with black and white. This species is similar to $<\mathrm{i}>\mathrm{A}$. roseosuffusella</i>, but the latter has dark bands that strongly contrast with the white regions that are in between, along with a narrow white bar at the wing base. The wing base of $<\mathrm{i}>\mathrm{A}$. lespedezae $</ \mathrm{i}>$ is typically solid brown at the base. This species resembles $<\mathrm{i}>\mathrm{A}$. roseosuffusella</i>in terms of its forewing maculation, the elongated third segment of the labial palp, and antenna banding. It can usually be distinguished by the presence of one or two dark marks at the base of the third segment of the labial palp, the dirty whitish wash between the dark bands on the forewing, and a generally duller and less contrasting ground color in the cilia.

DISTRIBUTION: $<\mathrm{i}>$ Aristotelia lespedezae $</ \mathrm{i}>$ is found in the eastern US, primarily in Kentucky and southern Ohio, but with scattered populations elsewhere, including West Virginia, Oklahoma, Tennessee, and North Carolina. Many records need to be carefully checked for correct identification. As of 2024, our records are all from the Piedmont and Coastal Plain.

FLIGHT COMMENT: Adults have been observed from May through October in areas outside of North Carolina. As of 2021, our records are from late-May through late-July. Larvae that Braun (1930) collected in Kentucky and Ohio yielded adults in less than a month.

HABITAT: This species exploits lespedezas, which are typically found in sunny or partially sunny sites with mesic to drier soils. Typical habitats include roadways and logging roads, woodland borders, weedy fields, the edges of agricultural fields and open woodlands.

FOOD: The only known host is Hairy Lespedeza ( $<\mathrm{i}>$ Lespedeza hirta</i>), but other lespedezas are probably used (Braun, 1930).
OBSERVATION_METHODS: The adults are attracted to lights. More information is needed on the host plants and the larval ecology, so we encourage individuals to rear adults and document host use.

## NATURAL HERITAGE PROGRAM RANKS:

STATE PROTECTION: Has no legal protection, although permits are required to collect it on state parks and other public lands.
COMMENTS: We currently do not have sufficient information on the distribution and abundance of this species within the state to assess its conservation status.

