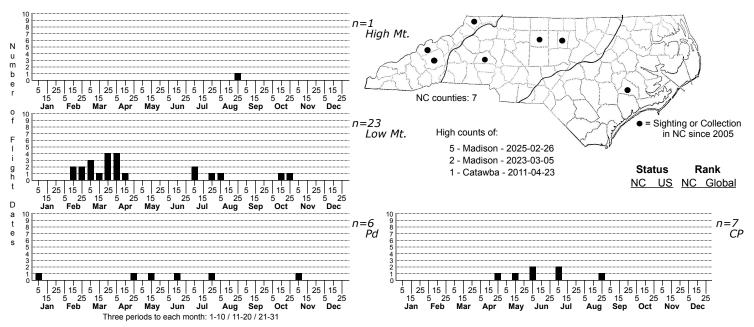
## Acleris robinsoniana Robinson's Acleris



FAMILY: Tortricidae SUBFAMILY: Tortricinae TRIBE: Tortricini TAXONOMIC\_COMMENTS:

FIELD GUIDE DESCRIPTIONS: ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: We have two common color morphs in North Carolina, with local populations often being predominantly one or the other. In the first, resting individuals have a dull, silvery-gray, oval-shaped shield on the anterior half that encloses an inverted Y-shaped mark that varies from blackish-brown to black. The palps and head have a mix of silvery-gray and brownish speckling and the antennae are light brown. The thorax is mostly silvery-gray except for a thin, faint, blackish or brownish-black, weakly curved line on the anterior end, and a blackish to brownish-black longitudinal dash on the posterior margin. The forewing has a conspicuous, broad, silvery-gray semicircular patch with reddish-brown to dark-brown mottling and reticulations. The patch extends from the wing base and gradually narrows before terminating at or near the inner margin at around one-half the wing length. The region near the inner margin has a smaller dark-brown or blackish mark that is triangular-shaped or arc-shaped, with the proximal end often being continuous with the longitudinal dash on the posterior half of the thorax. The area distal to the silvery-gray patch has a chestnut-brown ground colored that is often weakly mottled with small, dull, silvery-gray patches. A line of small, raised scale patches is present at the boundary of the semi-circular patch and darker ground posteriorly. The fringe is dull silvery-gray with brownish mottling, and the hindwing varies from tan to light-brown.

The second color morph is predominantly reddish-brown to brown with the inverted Y-shaped pattern on the base of the inner margin and thorax less conspicuous. The basal half of the wing -- and the dorsal half of the remainder of the wing -- have a light reddish-tan ground color with darker brown longitudinal lines along the veins. A prominent, broad, dark-brown longitudinal band extends along the costa from around two-fifths the wing length to the apex. The basal edge of the band slants obliquely outward to near the center of the wing and the band gradually narrows towards the apex.

In North Carolina, <i>A. robinsoniana</i>, is most easily confused with <i>A. maculidorsana</i>, with <i>A. robinsoniana</i> having an overall duller appearance. In <i>A. maculidorsana</i>, the curved line on the anterior edge of the thorax is chestnut-brown, the outer edge of the silvery-gray patch is relatively smooth, the posterior half of the wing is overlain with silvery-gray frosting, and the forewing is speckled with fine dark-brown marks. In <i>A. robinsoniana</i>, the line on the anterior edge of the thorax is dark-brown to black, the outer edge of the silvery-gray patch is relatively wavy, the posterior half of the wing has little or no silvery-gray frosting, and the forewing has far less speckling. <i>Acleris robinsoniana</i> lost resembles certain color morphs of <i>A. hana</i> ln the latter, a prominent patch of raised orangish to light reddish-brown scales is present at the boundary between the light semi-circular patch and the darker color that occurs posteriorly (missing in <i>A. robinsoniana</i> had the boundary between the two is generally less wavy. The outer third of the forewing of <i>A. hana</i> often has patches of small, dull, silvery-gray scales and associated raised scale patches that are usually not evident on <i>A. robinsoniana</i> In some cases, specimens may need to be dissected for proper identification.

DISTRIBUTION: <i>Acleris robinsoniana</i> has both eastern and western groups in North America, with the western populations occurring from central California northward through the Pacific Northwest to British Columbia, and eastward to Alberta, Saskatchewan and Montana. In the East it occurs in the U.S. from Maine across the northern tier of states to Wisconsin and Minnesota, and southward to Missouri, eastern Oklahoma, Tennessee, North Carolina and northern Georgia. As of 2024, we have scattered records from all three physiographic provinces, including coastal forests in Jones County.

FLIGHT COMMENT: The adult have been observed during every month of the year in different areas of the range. Most populations in eastern North America appear to have one or perhaps two generations per year. Populations in North Carolina appear to have one or two generations per year, but a correct interpretation is hampered by the fact that we are uncertain whether this species overwinters as adults, pupae or larvae in North Carolina. The appearance of adults as early as mid-February in the Blue Ridge strongly suggests that the adults from the last seasonal brood overwinter.

HABITAT: Specimens in North Carolina commonly occur in semi-wooded residential areas in the Blue Ridge and Piedmont, and often with mesic woods present or nearby, while Coastal Plain populations frequent bottomland hardwoods.

FOOD: The host species are poorly documented, with Quaking Aspen (<i>Populus tremuloides</i>) and California Wild Rose (<i>Rosa californica</i>) being the only reported hosts that we are aware of in the literature (Prentice, 1966; Robinson et al., 2010; Lam et al., 2011; Gilligan and Epstein, 2014). Mass Moths also lists Sheep Laurel (<i>Kalmia angustifolia</i>), Virginia Rose (<i>Rosa virginiana</i>) and a blueberry (<i>Vaccinium</i>) sp.) as hosts. As of 2024, we have one rearing record for North Carolina for Multiflora Rose (<i>R. multiflora</i>) based on a specimen that has been tentatively identified as this species.

OBSERVATION\_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR S2S3

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

COMMENTS: This species is uncommon in the state, but can be somewhat locally common at some sites.