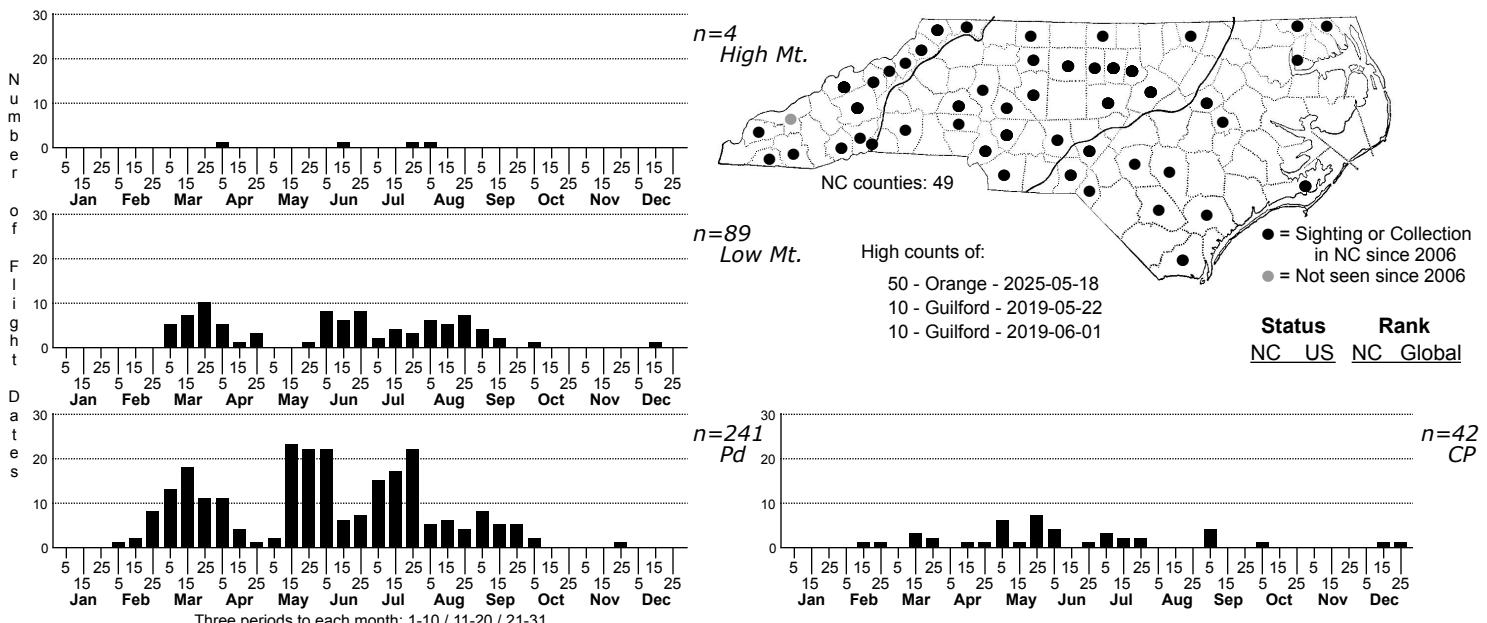


Argyrotaenia velutinana Red-banded Leafroller Moth



FAMILY: Tortricidae SUBFAMILY: Tortricinae TRIBE: Archipini

TAXONOMIC COMMENTS: The genus *Argyrotaenia* contains approximately 100 described species, with most occurring in Nearctic and Neotropical regions. Thirty-six species are currently recognized in North America.

FIELD GUIDE DESCRIPTIONS: Covell (1984); Beadle and Leckie (2012); Leckie and Beadle (2018)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1923); Gilligan and Epstein (2020)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Gilligan and Epstein (2020)

ID COMMENTS: The following description is based in part on those of Forbes (1923) and Gilligan and Epstein (2020). The head, thorax, and ground color of the forewing vary from buff or pale ocherous to pale gray or white, and the thoracic tufts are dark purplish to reddish brown. The forewing typically has three prominent dark marks. A dark patch is present on the dorsal half of the wing that begins on the inner margin at about one-fifth the wing length. It extends inward to near the middle and usually has a prominent tooth that projects posteriorly. The most conspicuous mark is a broad median band that is usually dark red or purplish red, and often with purplish gray shadings or patches of black. It begins at about one-half the wing length and extends obliquely before ending on the inner margin before the tornus. The dorsal half is often lighter colored than the costal half. The last mark is a dark subapical patch along the costa. A smaller and often lighter patch often adjoins the costal patch towards the tornus, and these are sometimes joined to form a single elongated mark that originates at the costa. The subterminal region beyond the costal patch typically consists of a zone of off-white to duff scales. The lighter regions between the three dark patches or median band often have striations or patches of light brown scales. The hindwing is grayish brown. The males are slightly smaller than the females, lack a costal fold in the forewing, and have a median band that is darker than the reddish band of the females.

DISTRIBUTION: *Argyrotaenia velutinana* is widely distributed across central and eastern North America, including southern Canada from Manitoba eastward to Nova Scotia and Prince Edward Island. In the US the range extends from the New England states southward to northern Florida and westward to eastern Texas, Oklahoma, Nebraska, and North Dakota. This species occurs statewide in North Carolina, but is generally more common in the Piedmont and lower elevations in the mountains.

FLIGHT COMMENT: The adults have been found during all months of the year depending on latitude, but are most active from March through September in areas outside of North Carolina. As of 2023, our records extend from early-February through late-December. Many local populations in North Carolina appear to have three broods per year.

HABITAT: This highly polyphagous species occurs in a wide variety of communities, included hardwood forests, mixed conifer-hardwood forests, and sunny sites such as forest edges, open fields and roadsides.

FOOD: The larvae use a wide variety of hosts, including both conifers, hardwood trees, and herbaceous plants. Brown et al. (2008) list 29 genera of vascular plants. Examples of genera of vascular plants that are used include fir (*Abies*), maple (*Acer*), alder (*Alnus*), ragweed (*Ambrosia*), dogbane (*Apocynum*), birch (*Betula*), geranium (*Geranium*), holly (*Ilex*), lobelia (*Lobelia*), honeysuckle (*Lonicera*), spruce (*Picea*), cherry (*Prunus*), oak (*Quercus*), blackberry (*Rubus*), willow (*Salix*), basswood (*Tilia*), hemlock (*Tsuga*), elm (*Ulmus*), and blueberry (*Vaccinium*). Some of the known hosts that are likely used in North Carolina include Giant Ragweed (*Ambrosia trifida*), Possumhaw Holly (*Ilex decidua*), Common Apple (*Malus domestica*), Red Spruce (*Picea rubens*), Fire Cherry (*Prunus pensylvanica*), Black Cherry (*P. serotina*), Scarlet Oak (*Quercus coccinea*), Northern Red Oak (*Q. rubra*), Allegheny Blackberry (*Rubus allegheniensis*), American Basswood (*Tilia americana*), Eastern Hemlock (*Tsuga canadensis*), and American Elm (*Ulmus americana*). As of 2024 we have records for Hairy Leafcup (*Smallanthus uvedalia*), Black Cherry, Painted Buckeye (*Aesculus sylvatica*), Small's Ragwort (*Packera anonyma*), and Late-flowering Thoroughwort (*Eupatorium serotinum*).

OBSERVATION METHODS: The adults are attracted to lights and the larvae can be found on a variety of host plants.

NATURAL HERITAGE PROGRAM RANKS: GNR S5

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

COMMENTS: This is a widespread and abundant species in the state and is secure.