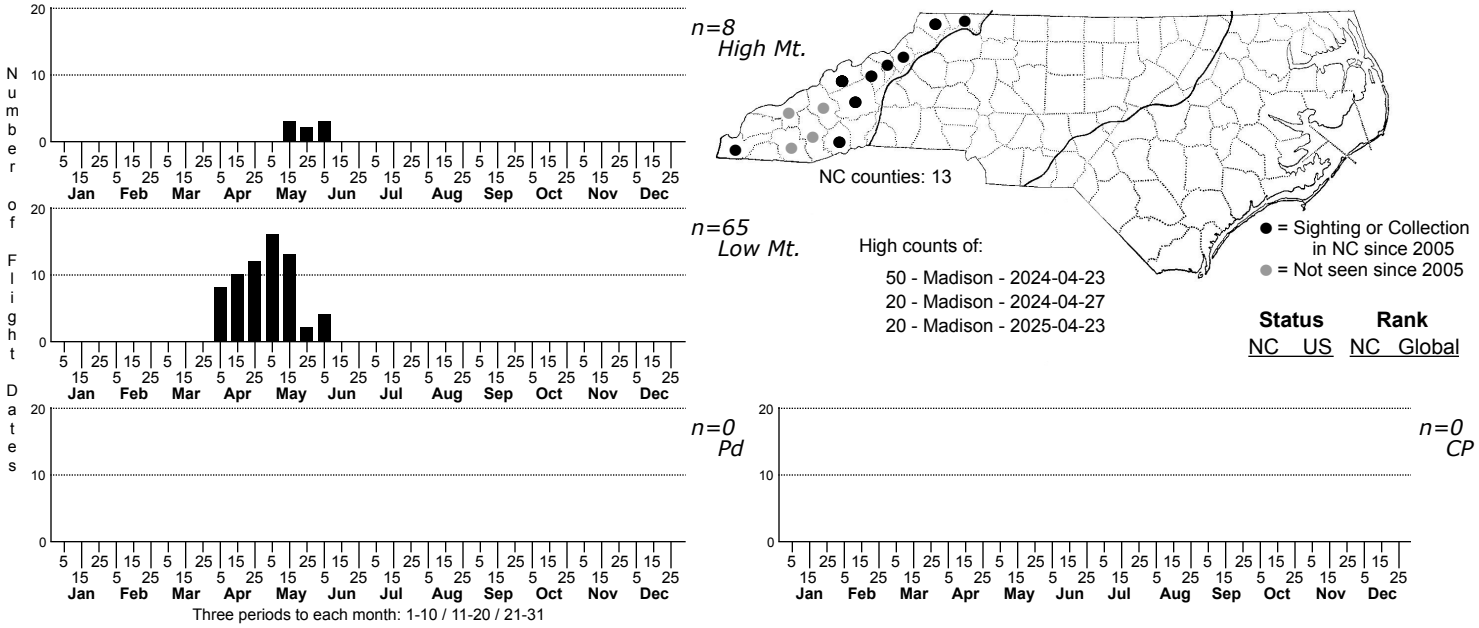
Argyrotaenia mariana Gray-banded Leafroller Moth



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)
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS:
TECHNICAL DESCRIPTION, IMMATURE STAGES: Gilligan and Epstein (2014)

ID COMMENTS: The dorsum of the head and thorax are whitish except for dark scale tufts at the posterior end of the thorax. The color of the scale tufts tend to match a dark region near the dorsal margin of the wing base to produce a 'reverse parentheses' pattern when a resting individual is viewed from above. The ground color of the forewing is whitish, but often with a heavy dirty brown wash that tends to be concentrated on the basal half. The most prominent mark is a wide, dark-brown to black band that begins on the costa near the middle and curves obliquely rearward. It terminates near the mid-point of the wing where it adjoins a lighter, narrower, and more poorly defined dirty brown band that continues to the dorsal margin (sometimes missing or reduced on specimens). A triangular dark-brown to black costal patch occurs immediately posterior to the median band, and a small costal dot often follows the costal patch. The dorsal margin has a series of fine dark dots that often extend beyond the termen to the apex, while a similar series is often evident along the costa between the wing base and the median band. The hindwing is gray and the males lack a forewing costal fold (Gilligan and Epstein, 2014).

DISTRIBUTION: Argyrotaenia mariana is primarily found in eastern North America, with a few occurrences from western Canada to as far west as the Yukon Territory. The range in the East extends from Nova Scotia, Prince Edward Island, and the New England states westward through southern Canada to the Great Lakes region and Minnesota. The range extends from the northern states southward primarily through the southern Appalachian region before ending in eastern Tennessee and western North Carolina. As 2022, our records for North Carolina are all from the Blue Ridge.

FLIGHT COMMENT: Local populations are univoltine. The adults have been documented from March-August in different regions of the country, with a peak in activity in May and June. As of 2022, almost all of our records are from April and May.

HABITAT: In North Carolina the adults are commonly found in hardwood forest settings or areas with hardwood forest and edge habitat, including semi-wooded residential neighborhoods.

FOOD: The larvae are euryphagous and use a taxonomically diverse group of plants (Frost, 1927; Gilliatt, 1937; Prentice, 1966; Chapman and Lienk, 1971; Baker, 1972; Bradley, 1987; Pohl et al., 2005; Robinson et al., 2010; Gilligan and Epstein, 2014). The reported hosts include a maple (Acer sp.), an alder (Alnus sp.), serviceberry (Amelanchier), Yellow Birch (Betula alleghaniensis), Paper Birch (B. papyrifera), Gray Birch (B. populifolia), Sheep Laurel (Kalmia angustifolia), apples and crabapples (Malus spp.), Three-leaved Rattlesnake-root (Nabalus trifoliolatus), an oak (Quercus sp.), Quaking Aspen (Populus tremuloides), Choke Cherry (Prunus virginiana), commercial pears (Pyrus sp.), raspberries (Rubus), a willow (Salix sp.), American Elm (Ulmus americana), blueberries, including Vaccinium uliginosum, and a viburnum (Viburnum sp.). Gilliatt (1937) noted that this species can become a minor pest in apple orchards. Chapman and Lienk (1971) believed that the primary hosts for this species are members of the Rosaceae. They surmised that many of the host records on other taxa may simply reflect larvae that were collected from the plants, with no direct observed of the larvae feeding. We clearly have much to learn about host specificity for this species.

OBSERVATION_METHODS: The adults are attracted to lights.

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: