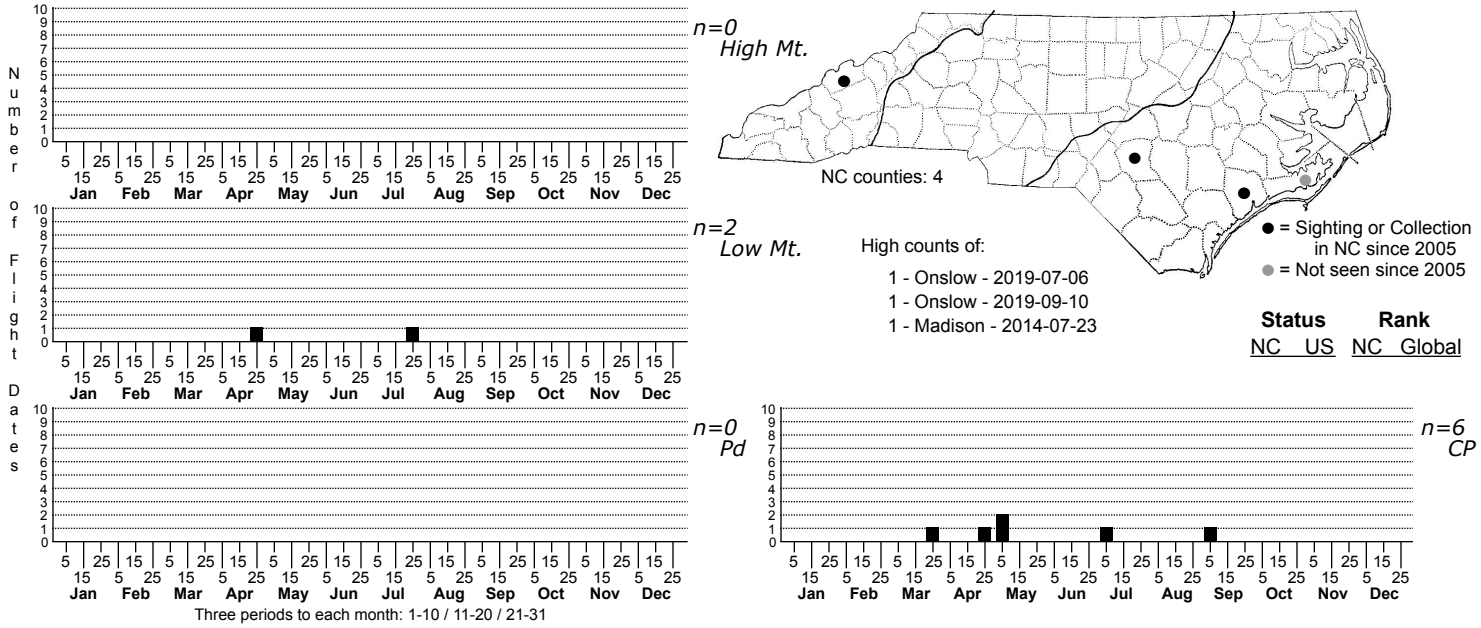
Aroga trialbamaculella Red-striped Fireworm Moth



FAMILY: Gelechiidae SUBFAMILY: Gelechiinae TRIBE: Gelechiini
TAXONOMIC_COMMENTS:

FIELD GUIDE DESCRIPTIONS:
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS: Hodges (1974a)
TECHNICAL DESCRIPTION, IMMATURE STAGES: Drummond and Groden (2000); Kelly et al. (2017)

ID COMMENTS: This species is indistinguishable from Aroga argutiola based on external appearance. The following description is based on that of Hodges (1974a) description of Aroga argutiola. The maxillary palp is gray. The outer surface of the first segment and base of the second segment of the labial palp are gray, while the inner surface of the first and second segments are mainly white. The scale brush on the second segment is pale orange to red-orange, while the third segment is mainly dark gray with yellowish-white scales at the base, anterior margin, apex, and sometimes elsewhere. The frons is white with a row of gray-brown scales in front of the eye, and the vertex and occiput are gray. The antenna is dark gray. The dorsal surfaces of the thorax, tegula, and forewing are dark gray. There is a patch of white scales on the costa at three-fourths the wing length, and often one on the posterior margin at three-fourths the wing length. A few white scales are often present on the fold, just before and just beyond one-half the length of the fold. A few white scales are also present at two-thirds to three-fourths the length of the cell, and at the end of the cell. The fringe is mainly pale gray. The hindwing is mainly pale yellowish gray above, with yellow more intense on the outer third of the wing. The legs are mainly dark gray, with off-white to whitish markings. Hodges (1974a) noted that A. trialbamaculella, Aroga argutiola and A. epigaeella cannot be distinguished based on external appearance, but can be identified using genitalia. BOLD specimens indicate that there may be two cryptic species masquerading under the current name of A. trialbamaculella. Additional studies are needed to determine the taxonomic status of these groups.

DISTRIBUTION: The range of Aroga trialbamaculella is rather poorly defined because of the need to identify this species through the examination of genitalia or genetic markers. This species appears to range throughout much of eastern North America, including portions of southern Canada southward to Florida and westward to eastern Texas, eastern Oklahoma, and Illinois. Pohl et al. (2018) has records from Albert eastward to Prince Edward Island and Nova Scotia.

FLIGHT COMMENT: The adults are active year-round in Florida, and primarily from April through August in the northern regions of the range.

HABITAT: The habitats are rather poorly defined. Populations appear to rely on ericaceous plants as hosts, particularly blueberries.

FOOD: Because there are three cryptic species of Aroga in the eastern US, and one was not described until 1974, many reported host plants for A. trialbamaculella may in fact be those of other cryptic species. This species can be a pest on Lowbush Blueberry (Vaccinium angustifolium) and commercial cranberries, and likely feeds on other ericaceous genera. However, more work is needed to verify the host based on rearing and identification from genitalia. In North Carolina, Tracy Feldman has reared a larva from Waxmyrtle (Morella cerifera).

OBSERVATION_METHODS: The adults are attracted to lights, and the larvae can be found on blueberries.

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: