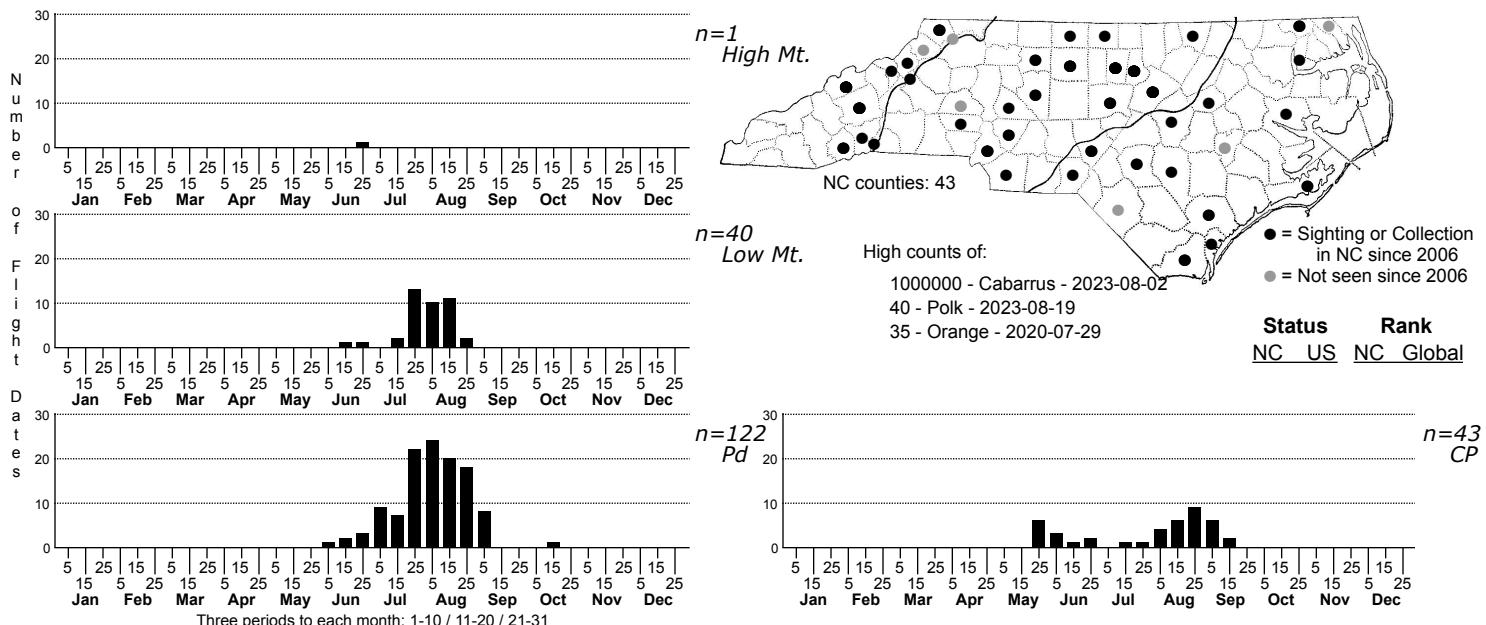


# *Acrolophus popeanella* Clemens' Grass Tubeworm Moth



FAMILY: Tineidae SUBFAMILY: [Acrolophinae] TRIBE: [Acrolophini]

TAXONOMIC COMMENTS: The genus *Acrolophus* is a mostly neotropical taxon with over 250 described species, including 54 that are currently recognized in North America. The labial palps on the males of many species are very elongated and densely hairy. The larvae of some species live in silk-lined burrows in the ground and feed on the roots and young shoots of grasses and herbs. However, the life histories of most species remain undocumented and in need of study. Members of this genus were previously placed in their own family (Acrolophidae), but they are now treated as a subgroup within the Tineidae based on molecular phylogenetic studies.

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

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Hasbrouck (1964)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Forbes, 1903

ID COMMENTS: This is one of our largest *Acrolophus* species. The recurved, elongated labial palp of the male is heavily scaled and extends over the head before terminating near the posterior end of the thorax. The labial palp of the female is much shorter and projects forward. The head, thorax, and labial palps are covered with a thick, elongated vestiture of brown hair-like scales that create a 'helmeted' appearance. The antennae are brown and project just beyond the labial palps. The forewing ground color varies from brownish gray to brownish-luteous or reddish-brown. The patterning is variable, but many specimens have two longitudinal streaks that are pale yellow and interrupted by a dark brown to blackish blotch. The first runs about one-third inward from the inner margin. It begins at the wing base and is interrupted by a dark blotch just before it terminates at about two-thirds the wing length. The streak is narrowly margined with black along much of its length. The second pale streak is near the middle of the wing and begins at about one-half. It is interrupted with a dark blotch before terminating at about four-fifths the wing length. Specimens are occasionally found that lack most of the pale yellow component of the streaks, but retain the two dark brown to blackish blotches. A row of faint to boldly marked dark spots are sometimes evident along the costa that continue onto the terminal fringe as a series of dark streaks. The ground color of the cilia are similar in color to the forewing ground, and the hindwing is brownish-yellow.

DISTRIBUTION: *Acrolophus popeanella* is a wide-ranging species that occurs from northern South America northward through Central America and Mexico to the US. It ranges throughout most of the central and eastern US, from Vermont and New Hampshire southward to Florida, and then westward to Arizona, Colorado, and Nebraska. This species occurs statewide in North Carolina, except for the higher elevations in the mountains.

FLIGHT COMMENT: The adults have been observed from February through November in areas outside of North Carolina, with a peak in activity from July through September. As of 2020, our records are from mid-June through mid-September. Local populations in North Carolina appear to be univoltine, with a peak in breeding during July and August.

HABITAT: Populations prefer open habitats that support grasses, clovers, and perhaps other host species. This species seems to do well in disturbed areas such as agricultural lands and urban environments.

FOOD: The known hosts include the roots and young shoots of corn and perhaps other grasses. Robinson et al. (2010) reported that the larvae also feed on Red Clover (*Trifolium pratense*).

OBSERVATION METHODS: The adults are attracted to lights.

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 species is widespread and common in most areas of the state.