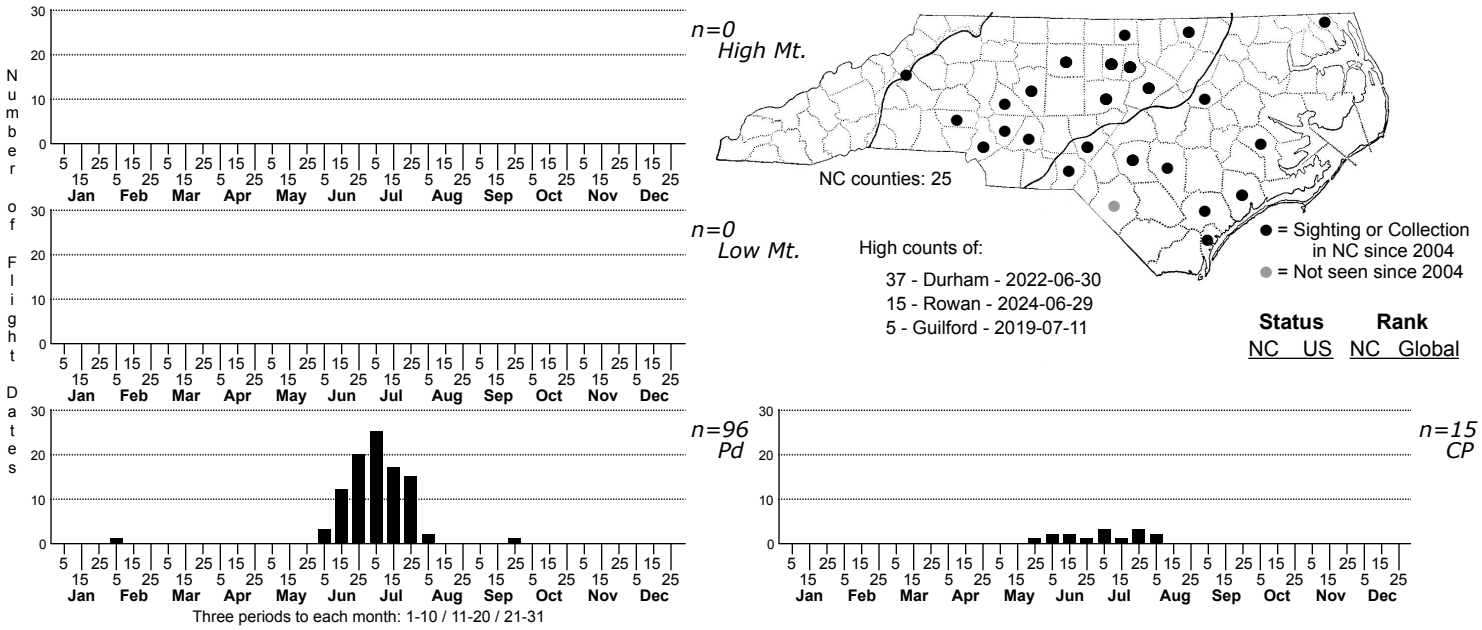
Acrolophus panamae Panama Grass Tubeworm Moth



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: Leckie and Beadle (2018)
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS: Hasbrouck (1964)
TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: This species is somewhat variable in coloration and patterning, but can be recognized by its short palps, and by a large tuft of ocherous gray hairs that often obscure the sides of the head. These tufts are missing in the females. The following detailed description of the male is based in part from Busck's original description (see Hasbrouck, 1964). The labial palp is shorter than in many Acrolophus and only reaches the vertex. The first joint is long and curved, and the second and third joints short. The upper head and thorax vary from light yellowish brown to grayish or ocherous brown. The ground of the forewing is variable, with a mixture of whitish, tan, dark brown, and black scales. Many individuals have an ochreous brown caste, but other may be darker. The ground is overlain with a a rather poorly defined darker patterning. A wide, dark brown to blackish band is usually evident that begins on the inner margin at about one-half the wing length. The band extend to about the middle, then angles anteriorly and ends near the base of the costa. A second broad, irregular band or blotch extends from the costa in the subapical region and fills much of the subterminal region. A series of blackish brown costal spots are often evident on the costal margin, along with some diffused marginal brown spots on the terminal edge. The hindwing is dark brownish fuscous, and the abdomen dark brown above. The legs are dark brown exteriorly, with the tarsi banded with brown and paler annulations. On the underside of the thorax there is a large, dense tuft of ocherous gray hairs that often obscures the sides of the head and the base of the forewings. The females are larger, somewhat lighter in color, and have labial palps that project more forward. They rarely visit lights, as is the case with the females of many Acrolophus species.

DISTRIBUTION: Acrolophus panamae is found from Columbia and Panama northward to the southeastern US. This species occurs primarily in non-mountainous regions of the Southeast and Eastern Seaboard. The range extends from extreme southern New York southward to Georgia and Florida, and westward to Louisiana and western Tennessee. As of 2020, our records are all from the Coastal Plain and eastern and central Piedmont.

FLIGHT COMMENT: Adults have been found from March through October in areas of the US outside of North Carolina, with the seasonal peak in activity in June and July. Local populations in North Carolina appear to be univoltine, with adults flying from mid-June to late-July. We have one record from late September.

HABITAT: The larvae are undocumented and the preferred habitats are unknown. Our records include residential neighborhoods as well as more natural sites, but it is uncertain whether the larvae are dependent on particular plant species or forested habitats for their food resources.

FOOD: The hosts are poorly documented. Many Acrolophus species feed on grass roots, but it is uncertain if A. panamae does the same. Heppner (2007) reports grasses are used as hosts, but it is unclear if this is based on actual observation or just inferred based on the hosts of other Acrolophus species.

OBSERVATION_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR [S4S5]

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

COMMENTS: Populations are somewhat common in the eastern half of the state and are seemingly secure.