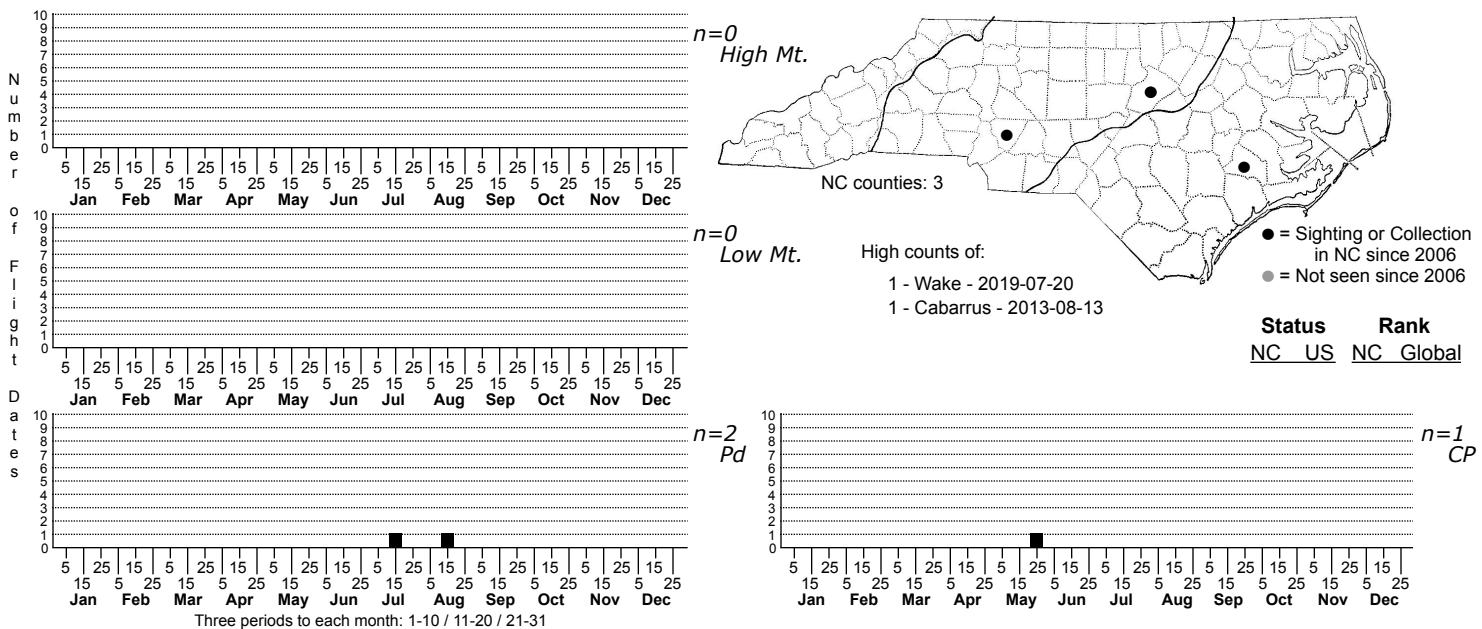


Acrolophus mortipennella Long-horned Grass Tubeworm Moth



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: Forbes (1903)

ID COMMENTS: The recurved labial palps extend back over the head to the end of the thorax. They are well-raised above the head and are thickly scaled, but not plumose as seen in many *Acrolophus*. The palps tend to be relatively dark outwardly along the sides, and more whitish on the inside. The eyes are setose, and the adults lack the conspicuous, densely hairy, head vestiture that is present on many *Acrolophus* species. The head, thorax, and ground color of the forewing are dirty white. The forewing is heavily dusted with black scales on the costal region along the basal fourth. The dusting fades outwardly from there, and is usually replaced by a series of fine dark spots along the costa. Four subterminal spots are often evident along the costa that are larger than those anteriorly. Several larger dark blotches also occur on the forewing that vary in size and development between individuals. These include one at the outer end of the cell, and another at the submedian fold at about the middle of the wing. The hindwings are dark fuscous and noticeably darker than the pallid forewings. The females are similar, but have short palps that project forward. This species is smaller than *A. plumifrontella*. It is easily recognized by its pallid, dirty-white forewings, and the non-plumose palps of males that are raised high above the head.

DISTRIBUTION: *Acrolophus mortipennella* is found in the eastern US and eastern Mexico. The range in the US extends from Maryland and Pennsylvania southward to southern Florida, and westward to central Texas, Oklahoma, Missouri, and Illinois. As of 2020, we have only two records that are both from Wake County in the Piedmont.

FLIGHT COMMENT: The adults fly from March through August in areas outside of North Carolina, with the peak in activity from April through June. As of 2020, our one dated record is from 20 July.

HABITAT: The habitats are poorly documented, but include agricultural fields, meadows, fencerows and other open, sunny habitats where grasses abound.

FOOD: The larvae are root specialists that feed on grasses, including corn. 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. We currently have very little information on the native grasses that are used.

OBSERVATION METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR SU

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

COMMENTS: This species appears to be rare in the state even though it does well in agricultural areas.