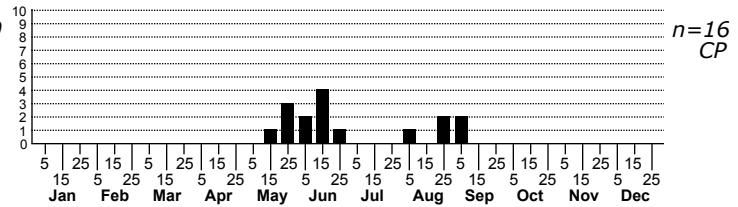
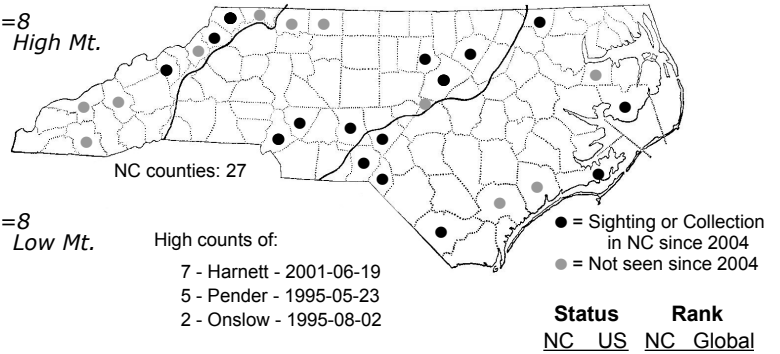
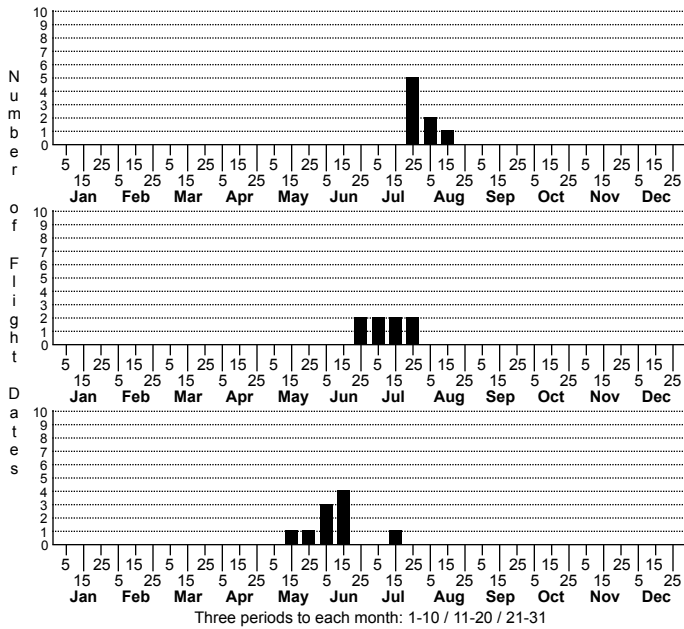


## *Achatodes zeae* Elder Shoot Borer Moth



FAMILY: Noctuidae SUBFAMILY: Noctuinae TRIBE: Apameini

TAXONOMIC\_COMMENTS: This genus contains two species, one Mexican and one from the eastern US, including North Carolina.

FIELD GUIDE DESCRIPTIONS: Covell (1984); Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1954)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Silver, J. C. 1933. Biology and morphology of the spindle worm, or elder borer. USDA Technical Bulletin 345, USDA, Washington, DC.; Forbes (1954); Wagner et al. (2011)

ID COMMENTS: A medium sized Noctuid. The ground color is crimson but overlaid with pinkish-brown; a distinctive patch of orange is present at the apex of the forewing, with the head and thorax the same color (Forbes, 1954).

DISTRIBUTION: Found throughout the state

FLIGHT COMMENT: In the Mountains and Piedmont, there appears to be a single brood in mid-summer, while in the Coastal Plain there are two distinct broods.

HABITAT: For most of the state, our records come from shallow impoundments, lake and stream shorelines, and other open wetlands, all where Common Elderberry (*Sambucus canadensis*) is common. Records from high elevations in the Mountains may reflect use of Red Elderberry (*S. racemosa*), which is strongly associated with Spruce-fir Forests and Northern Hardwoods, particularly in rocky areas (Weakley, 2015).

FOOD: Larvae bore into Elderberry and much of the life history has been described by Silver (1933). Reports of the larva boring other plants need to be confirmed.

OBSERVATION\_METHODS: Adults are attracted to lights but there is no evidence they come to bait or to flowers.

NATURAL HERITAGE PROGRAM RANKS: G5 [S4S5]

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 occupies fairly common types of habitats, including disturbed areas. Nonetheless, we have relatively few records for it. If high elevation populations are actually associated with Red Elderberry, they may be at risk due to climate change. Otherwise, it is probably secure within the state.