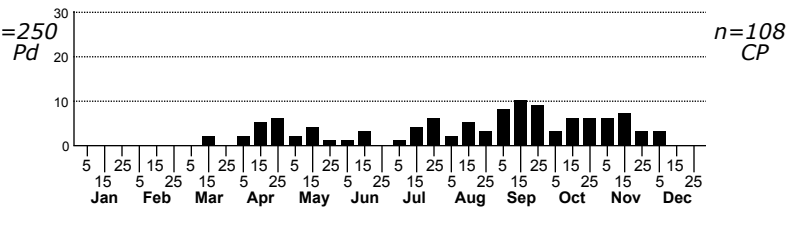
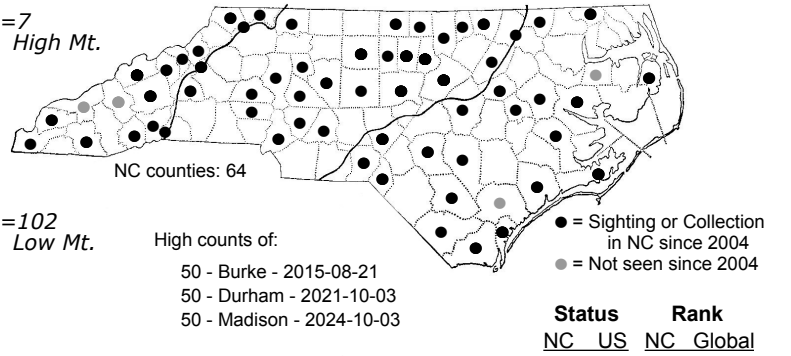
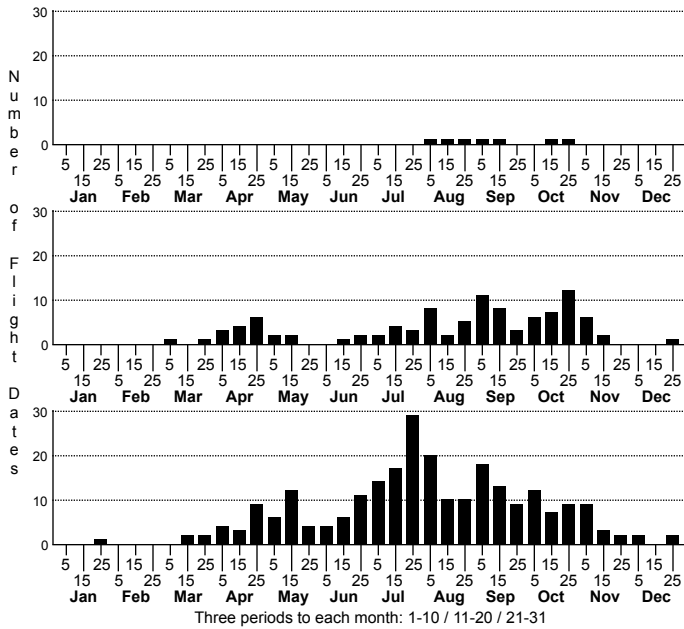


Atteva aurea Ailanthus Webworm Moth



FAMILY: Yponomeutidae SUBFAMILY: Attevinae TRIBE: [Attevini]

TAXONOMIC_COMMENTS: Wilson et al. (2010) found that what was previously thought to be a single species of *Atteva* actually was a pair of cryptic species. One is restricted to the neotropics, while the second (*A. aurea*) is found from Central America northward to southern Canada.

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

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Wilson et al. (2010)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The adults are unmistakable with their orange ground color on the forewing that is overlain with clusters of white spots that are surrounded by black coloration. The hindwing is translucent black. The bright coloration of this species likely serves as aposematic (warning) coloration.

DISTRIBUTION: *Atteva aurea* occurs in Central America and the Caribbean Islands northward across a broad swath of the eastern and central US to southern Canada. Scattered populations have also been found in California, Arizona and New Mexico. This species is found statewide in North Carolina, although it is rare at higher elevations in the mountains. Crandall and Knight (2017) noted that the larvae cannot tolerate freezing temperatures, and presumably recolonize areas in the eastern U.S. annually. This occurs initially from southern locales, then from adults that emerge from new seasonal generations and disperse northward.

FLIGHT COMMENT: The adults can be found year-round or essentially so in southern locales such as Florida. In North Carolina, the adults typically fly from mid-March through early to late-November.

HABITAT: This species relies rather heavily on the Tree-of-heaven, which occurs in disturbed habitats such as woodland edges, pastures, vacant lots, roadsides and suburban environments. It can also be found in natural forests, particularly those that have been disturbed from timbering and road building.

FOOD: The only documented host in North Carolina as of 2024 is the Tree-of-heaven (*Ailanthus altissima*, Simaroubaceae), which is an ornamental that was introduced to North America from Asia around 1784. It subsequently spread throughout much of the eastern US and southern Canada (Wilson et al., 2010) where it is currently classified as an invasive species. The Ailanthus Webworm Moth is native to the New World and its native hosts are trees in the genus *Simarouba* (Simaroubaceae), a group that has tropical and subtropical affinities. One species, the Paradise-tree (*Simarouba glauca*), is native to central and southern Florida, while another (*S. amara*) is found as far north as Mexico.

Atteva aurea presumably was restricted in the US to southern Florida, then spread northward as *Ailanthus altissima* expanded its range southward and westward and contacted one or both of the *Simarouba* species. It then spread northward using *Ailanthus altissima* as its host plant. All of our host records for North Carolina are for the Tree-of-heaven. This species is common in North Carolina, but absent from much of the Coastal Plain. The essentially statewide distribution of *Atteva aurea* suggests that it either is using other hosts plants (unlikely), or that vagrants occur on the Coastal Plain away from known host plant sites (Wilson et al., 2010). This species often occurs at lights at sites where there are no known Tree-of-heaven, which suggests that it is capable of making long-distance flights.

OBSERVATION_METHODS: The adult are attracted to lights and can be found nectaring during the day on ornamental and native plants. The larvae can be found in webbed nests on Tree-of-heaven.

NATURAL HERITAGE PROGRAM RANKS: G5 SE

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

COMMENTS: This species was formerly resident in South America but has recently expanded into North America due to a host plant switch to *Ailanthus*.