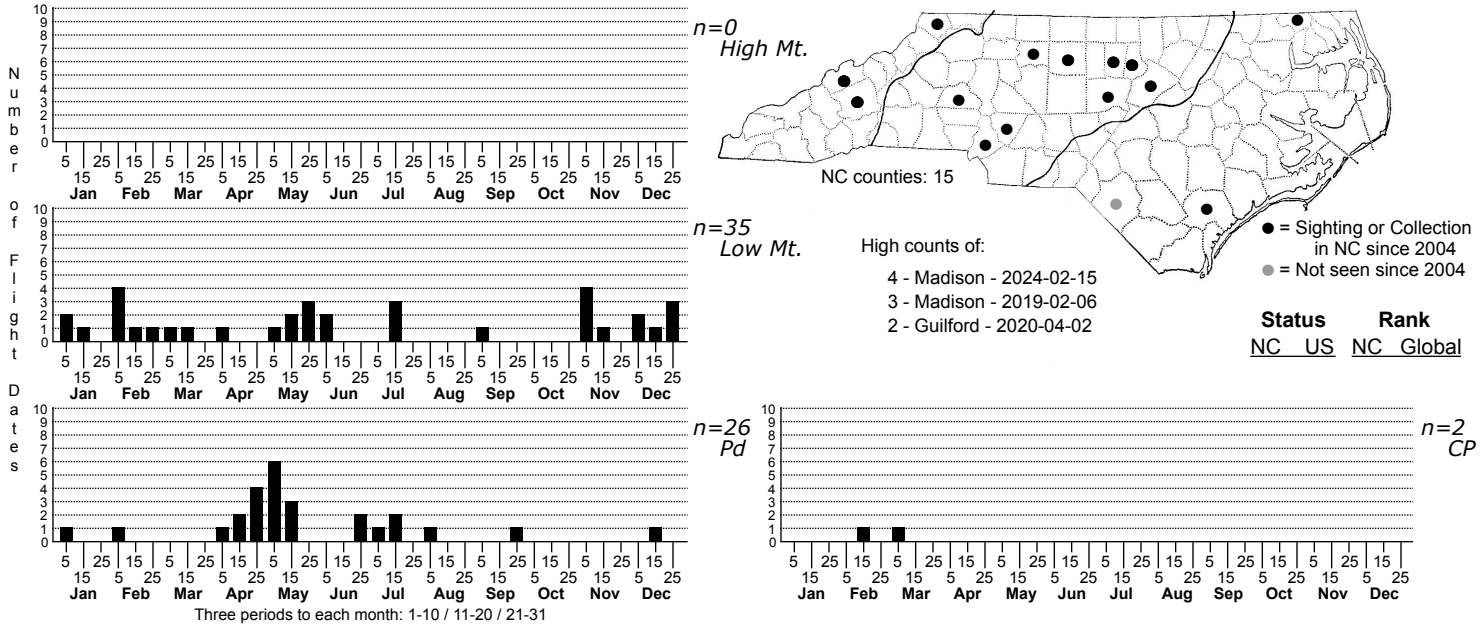
Acleris viburnana Viburnum Acleris



FAMILY: Tortricidae SUBFAMILY: Tortricinae TRIBE: Tortricini
TAXONOMIC_COMMENTS: Acleris viburnana was formerly treated as a subspecies of A. schalleriana, but was treated as a separate species by Gilligan et al. (2020), with A. schalleriana (sensu stricto) now restricted to the Palearctic region.

FIELD GUIDE DESCRIPTIONS:
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS:
TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: Acleris viburnana has a variable dorsal pattern, but usually can be recognizable based on external morphology. Most specimens have an overall reddish-brown color with a diffuse costal triangle and prominent dark speckling on the forewing. The palps and head vary from gray to reddish-brown, and the thorax is often two-toned, with a dark-brown anterior third or half that grades into light reddish-brown posteriorly. The dorsal third to two-thirds of the forewing ground tends to be silvery-white to light reddish-tan, then shades into a darker reddish-brown color towards the costa. The costal triangle is poorly defined relative to those of most Acleris species, and is represented as a diffuse, dark reddish-brown region near the mid-wing that projects inward just beyond the center of the wing where is fades out. The dark coloration often extends posteriorly as a broadly wavy and narrowing blotch before fading out near the apex. The hindwing is light gray to yellowish-brown with a concolorous fringe. In addition to the typical form described above, a dark morph is occasionally seen in North Carolina populations that is uniformly reddish-brown (lacking the lighter center as seen in the typical form). This form has varying levels of blackish speckling on the forewing (sometimes completely absent), and often has a few scattered whitish scales on the wing.

DISTRIBUTION: Acleris viburnana is primarily found in eastern North America, but there are also records from southern Alaska, British Columbia and Alberta in the West. In the East it occurs in southern Canada (Manitoba, Ontario; Quebec; New Brunswick; Nova Scotia) and in the U.S. from Maine southwestward to northern Georgia, and westward to western Tennessee, eastern Oklahoma, Missouri, eastern Nebraska, Minnesota and northeastern North Dakota. As of 2024, we have records from all three physiographic provinces, although this species is much less common in the Coastal Plain relative to the Piedmont and Blue Ridge.

FLIGHT COMMENT: Populations have been found during every month of the year in different areas of the range, with most local populations probably having two generations per year. Local populations in North Carolina appear to have two, or possibly three, generations per year. In the Blue Ridge, adults from the last seasonal brood are commonly seen at lights or at sugar bait in November and December and well after leaf-fall in the autumn. They presumably overwinter, with the adults appearing at lights or sugar bait the following year in January through early April. Mating and egg-laying likely occurs at this time, with adults from the first larval brood emerging around May. A second and much smaller emergence occurs in late-summer, with the last adults of the season appearing during November and December. It is uncertain if the adults that are seen in November and December are the product of the late-summer brood, or a mixture of adults from the first and second brood. Seasonal trends in the Piedmont appear to be generally similar to that in the Blue Ridge, but the percentage on individuals that appear to be overwintering adults is much smaller.

HABITAT: Local populations are commonly found in association with our native Viburnum species, which are commonly found in mesic to somewhat drier forests and forest edges.

FOOD: This species appears to rely rather heavily on species of Viburnum as a food source (Clemens, 1860; Ferguson, 1975; Brown et al., 2008). The reported hosts include Choke Cherry (Prunus virginiana), Nannyberry (V. lentago), Smooth Blackhaw (V. prunifolium), and a Vaccinium. In North Carolina, John Petranka reared an adult from a pupa that was in a leaf roll on Mapleleaf Viburnum (V. acerifolium). A larva was also found in a leaf roll on the same plant.

OBSERVATION_METHODS: The adults are attracted to lights and to sugar and wine bait.

NATURAL HERITAGE PROGRAM RANKS: GNR S3S4

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

COMMENTS: This species can be locally common at sites that support the host plants.