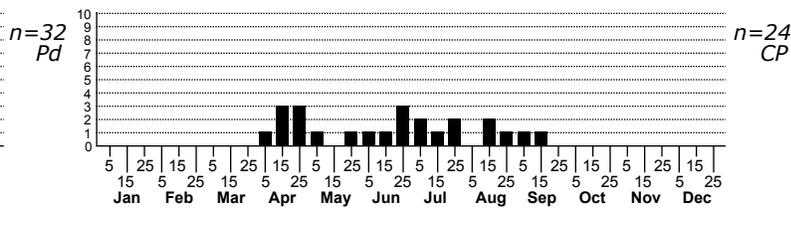
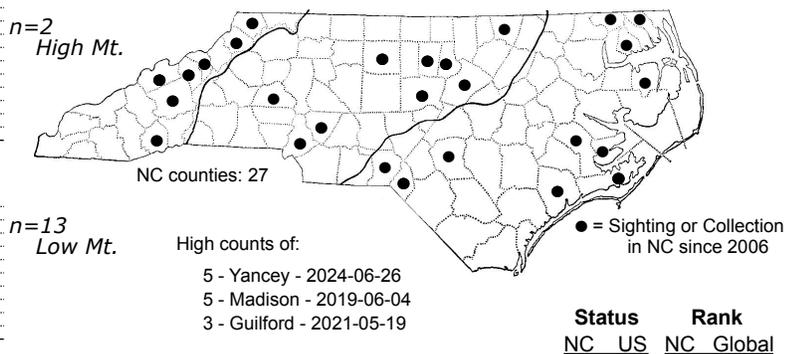
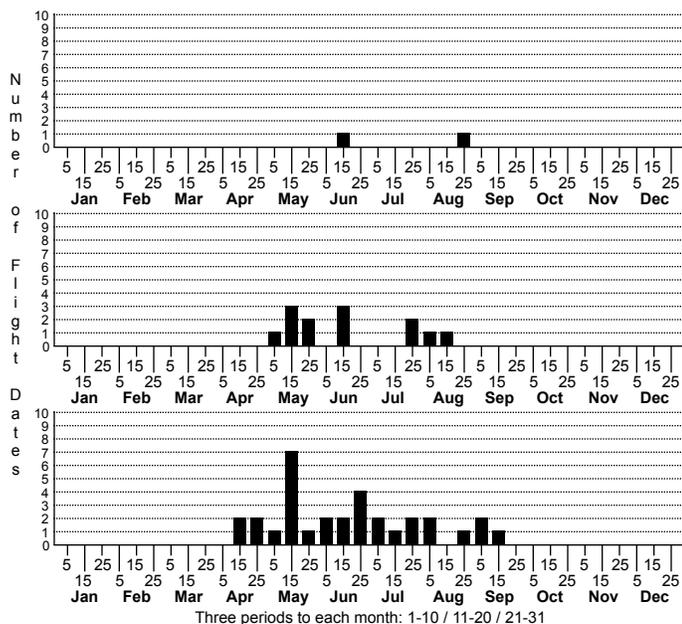


Episimus argutana Sumac Leaf-tier Moth



FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Olethreutini

TAXONOMIC_COMMENTS: As currently recognized, *Episimus argutana* exhibits substantial geographic variation in molecular markers and likely reflects a species complex.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1923)

TECHNICAL DESCRIPTION, IMMATURE STAGES: MacKay (1959)

ID COMMENTS: *Episimus argutana* is a variably colored moth that has a forewing that is finely mottled with mixtures of pale-white, pale-yellow, cinnamon-red, wood-brown, grayish-brown, and blackish patches that are often overlain with purplish coloration. A given individual is usually mottled with only some of the colors described above. Individuals in North Carolina tend to grade from specimens that are relatively light-colored, with pale white, pale-yellow, reddish, and grayish-brown patches predominating, to relatively dark individuals with dark-brown, purplish and black patches predominating. The color of the antennae, head tuft and thorax vary and generally conform to the coloration of the forewings. The ocellus in the subterminal area is relatively dark on the basal half, with two black, longitudinal dashes or spots that are followed by a silvery-gray bar, then a white bar at the posterior end. Short, white streaks or marks are also present along the costal at the apex and near the torus that collectively produce an irregular, broken, white line of sorts below the outer margin. The line is followed by a more continuous reddish to blackish line at the outer margin. The hindwing varies from grayish-brown to medium brown, with a slightly lighter fringe.

DISTRIBUTION: *Episimus argutana* is broadly distributed across the eastern US and adjoining areas of southern Canada, from Manitoba eastward to New Brunswick and Nova Scotia. It also occurs farther west as scattered populations in Colorado, Arizona, California, Washington and British Columbia. In the eastern US the range extends from Maine southward to southern Florida, and westward to central Texas, Oklahoma, eastern Kansas, Missouri, Illinois, southeastern Iowa and Wisconsin. This species occurs statewide in North Carolina.

FLIGHT COMMENT: The adults fly year-round in Florida, with progressively shorter fly periods as one moves north. Populations in the east-central US mostly fly from April through September, and those in Canada from May through August. As of 2025, our records range from early-April through mid-September. Local populations in the Coastal Plain and Piedmont appear to produce three broods per year, versus only two broods per year in the Blue Ridge.

HABITAT:

FOOD: The larvae are polyphagous, with sumacs and American Witch-hazel (*Hamamelis virginiana*) being the two most commonly used host groups (Forbes, 1923; Heinrich, 1926; Craighead et al., 1950; Schaffner, 1959; Prentice, 1966; Baker, 1972; Godfrey et al., 1987; Heppner, 1994; Robinson et al., 2010; Beadle and Leckie, 2018; Austin et al., 2025). Sumacs that are used include Winged Sumac (*Rhus copallinum*) and Smooth Sumac (*R. glabra*) and Staghorn Sumac (*R. typhina*). Atlantic Poison-oak (*Toxicodendron pubescens*) and Poison-ivy (*T. radicans*) are also occasionally used. Several other hosts have also been reported that need additional verification. These include alders (*Alnus*), Giant Ragweed (*Ambrosia trifida*), American Smoketree (*Cotinus obovatus*), hawthorns (*Crataegus*), Wild Poinsettia (*Euphorbia cyathophora*), Mexican Fireplant (*E. heterophylla*), Blackgum (*Nyssa sylvatica*), elderberries (*Sambucus*), goldenrods (*Solidago*), elms (*Ulmus*), and grapes (*Vitis*). As of 2025, larvae only have been found in North Carolina in leaf-folds of American Witch-hazel, but other hosts are undoubtedly used.

OBSERVATION_METHODS: The adults are attracted to lights and the larvae can be found in leaf rolls and leaf folds on the host plants.

NATURAL HERITAGE PROGRAM RANKS: GNR SNR [S3S4]

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

COMMENTS: