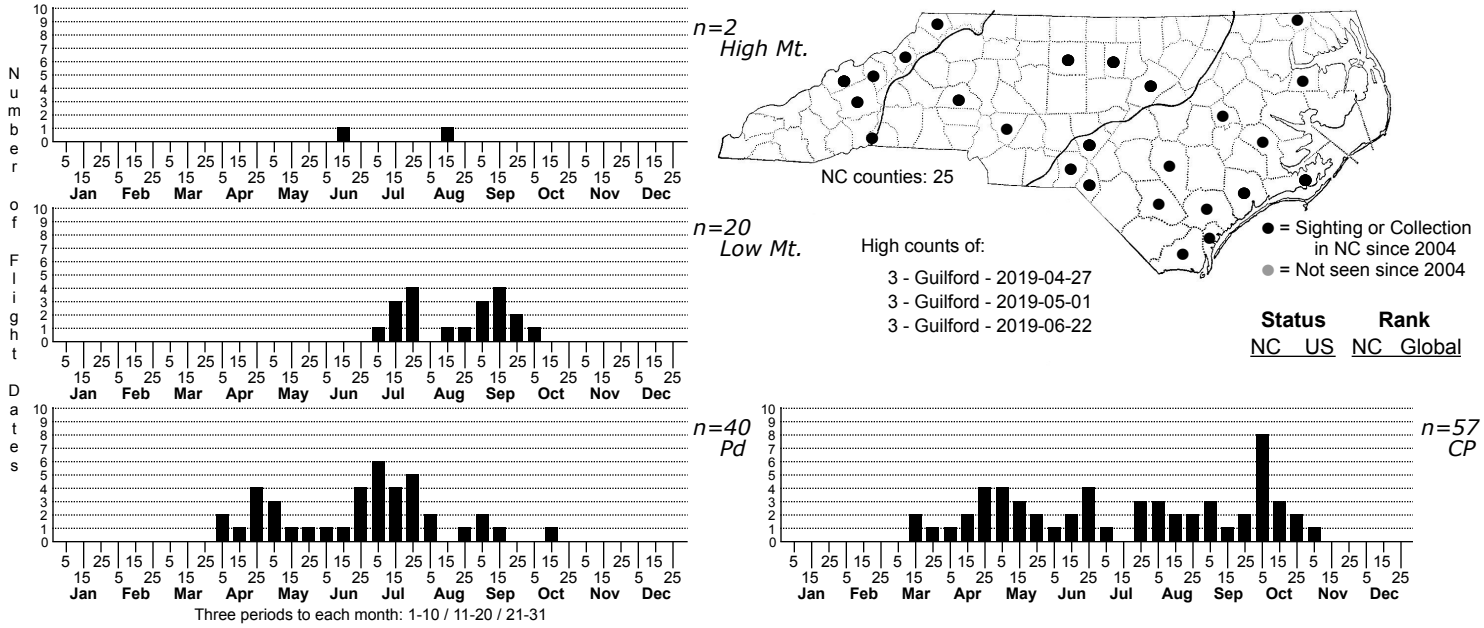
Sparganothis sulfureana Sparganothis Fruitworm Moth



FAMILY: Tortricidae SUBFAMILY: Tortricinae TRIBE: Sparganothini
TAXONOMIC_COMMENTS:

FIELD GUIDE DESCRIPTIONS: Covell (1984); Beadle and Leckie (2012)
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS: Powell and Brown (2012)
TECHNICAL DESCRIPTION, IMMATURE STAGES: MacKay (1959)

ID COMMENTS: This wide-ranging species shows remarkable variation in size and forewing patterning at different spatial scales, including within North Carolina (Powell and Brown, 2012). The following description is based primarily on that of Powell and Brown (2012). The head, palps, and thorax are yellowish with varying levels of rusty red. The forewing ground color is pale to bright yellow and has highly variable degrees of orange-brown to reddish-orange reticulations throughout. Some individuals lack reticulations altogether, while other are boldly reticulate. Two oblique fasciae are present that begin at a squarish blotch near the middle of the dorsal margin and project in opposite directions. One extends to the costa at about one-third the wing length from the base, while the second projects rearward either to the subapical region of the costa or the subapical region of the termen. Together they produce a somewhat V-shaped pattern (or X-shaped when a resting individual is viewed from above). The degree of development of the two fasciae is highly variable, with some individuals having well-developed fasciae and others having them reduced to isolated spots. In addition to the V-pattern described above, some individuals have an orange-brown to reddish-orange subapical costal patch. Most individuals also have a concolorous, narrow, irregular band along the termen. The hindwing varies from immaculate white to gray. The strongly reticulated forms of Sparganothis sulfureana resemble Cenopis reticulatana, but the later has longer palps and the median brown band and subtornal patches are infused with lighter orangish spots.

DISTRIBUTION: Sparganothis sulfureana is found across much of southern Canada, in most of the US, and spottily farther south in the Caribbean, Mexico, and Belize (Powell and Brown, 2012). It occurs in Canada from British Columbia eastward to Prince Edward Island, and in most of the conterminous US from Maine southward to southern Florida and westward to Arizona, Utah, Wyoming, Montana, and Washington. This species occurs statewide in North Carolina.

FLIGHT COMMENT: Local populations typically produce two or three broods per year depending the latitude and local climatic conditions. The adults have been observed year-round in Florida, Louisiana, and other southern locales, and mostly from April through October in the northern part of the range. Most populations in North Carolina appear to have two or three broods per year, with three most common in the Coastal Plain.

HABITAT: Local populations occur in a variety of habitats that range from conifer or hardwood dominated communities, to woodland borders and open fields. In North Carolina, populations have been found in a diversity of habitats that include barrier islands, Sandhill and coastal pinelands, bottomland and mesic hardwood forests, and residential neighborhoods.

FOOD: This species is highly polyphagous and can become a significant pest on farms that grow celery, apples, blueberries, cranberries and other crops (Beckwith, 1938; Chapman and Lienk, 1971; Powell and Brown, 2012). The larvae also feed on a wide variety of native plants, including conifers, hardwoods, and herbaceous species (Raizenne, 1952; MacKay, 1962; Godfrey et al., 1987; Heppner, 2007; Robinson et al., 2010; Powell and Brown, 2012; Gilligan and Epstein, 2014; TortAI). Some of the reported hosts include Balsam Fir (Abies balsamea), Common Ragweed (Ambrosia artemisiifolia), Greater Burdock (Arctium lappa), Groundsel-tree (Baccharis halimifolia), Bastard Toadflax (Comandra umbellata), hawthorns (Crataegus), Annual Fleabane (Erigeron annuus), Common Horseweed (E. canadensis), Honey Locust (Gleditsia triacanthos), Southeastern Sneezeweed (Helenium pinnatifidum), sunflowers (Helianthus), pennyworts (Hydrocotyle), Common St. John's-wort (Hypericum perforatum), larches (Larix), lilies (Lilium), Wild Bergamot (Monarda fistulosa), penstemons (Penstemon), several species of northern pines (Pinus sp.), Choke Cherry (Prunus virginiana), robinias (Robinia), New England Aster (Symphyotrichum novae-angliae), willows (Salix), Northern White Cedar (Thuja occidentalis), clovers (Trifolium), and grapes (Vitis).

OBSERVATION_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR S5

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

COMMENTS: This species is common throughout most of the state and appears to be secure.