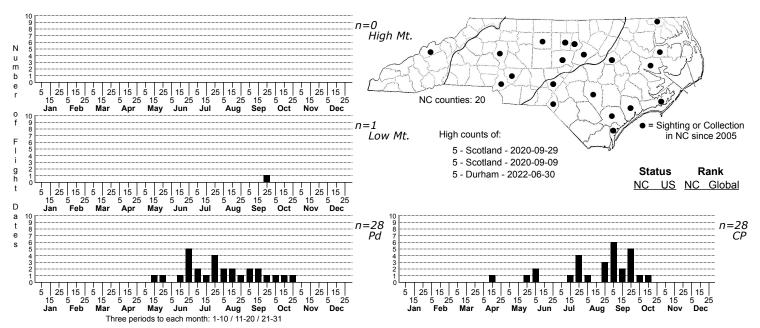
## Herpetogramma fluctuosalis Greater Sweetpotato Webworm Moth



FAMILY: Crambidae SUBFAMILY: Pyraustinae TRIBE: Spilomelini

TAXONOMIC\_COMMENTS: One of 28 species in this genus that occur in North America (Solis, 2010; Handfield and Handfield, 2011), nine of which have been recorded in North Carolina

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Solis (2010)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: In this species the head, thorax, abdomen and ground color of the wings are all concolorous and are typically pale yellowish, tan or dull yellowish-brown. The markings on the forewing are dark brown, and include a slightly irregular antemedial line at around one-fourth the wing length that is followed by an orbicular spot and a wider, curved reniform spot. The area between the orbicular and reniform spots is not noticeably white as seen in some <i>Herpetogramma</i> species. The postmedial has a curved portion that projects from the costa and meets the remainder of the line that has a stepped pattern, with a toothed portion that runs parallel to the termen, a connecting line that runs parallel to the inner margin, and a final portion that runs parallel to the termen to the inner margin near the middle of the wing. Heavy dark brown shade occurs along the costa to the apex, then continues as a broad subterminal band that is often toothed or zig-zagged basally. A gap of lighter ground color is present between the band and the postmedial line.

The hindwing is similar, but lacks the antemedial line and reniform spot. A discocellular dot is present and the postmedial line is similar to that of the forewing. The subterminal region is very weakly shaded relative to that on the forewing, and a zig-zagging subterminal line is present that is usually masked by dark shading on the forewing. Both the forewing and hindwing have a dark marginal line and a two-toned fringe, with the base darker than the outer half.

This species is best separated from our other <i>Herpetogramma</i> species by the absence of a noticeably white area between the orbicular and reniform spots, and in having a light-colored gap between the postmedial line and the darker subterminal shading. <i>Herpetogramma bipunctalis</i> is similar but has two prominent dark brown spots on sternite 2 of the abdomen.

DISTRIBUTION: <i>Herpetogramma fluctuosalis</i> is found in Central America, the West Indies, and the eastern U.S. from southern New York southward to southern Florida, and westward to eastern Texas, eastern Oklahoma, Missouri, Illinois and Indiana. As of 2023, all of our records are from the Coastal Plain and Piedmont, except for one low-elevation site in the Blue Ridge.

FLIGHT COMMENT: The adults fly from April through December in Florida, and mostly from June through October farther north. As of 2023 our records range from mid-May through late-October. Populations in North Carolina appear to have two or three generations per year.

HABITAT: The majority of our records come from forb-rich wetlands, including marshes and lakeshores.

FOOD: The larvae appear to be polyphagous, but the hosts are rather poorly documented. Tracy Feldman found larvae on two wetland species in North Carolina, Lizard's-tail (<i>Saururus cernuus</i>) and Broadleaf Arrowhead (<i>Sagittaria latifolia</i>). Heppner (2003) noted that the larvae feed on False Nettle (<i>Boehmeria cylindrica</i>) and Sweet Potato (<i>Ipomoea batatas</i>). Heppner's report of this species using Sweet Potato is apparently from Capps (1964), who noted that the type and paratypes from Louisiana had labels indicating that they were reared on Sweet Potato by C. E. Smith in 1915. However, we are unaware of any records since then indicating that this species uses Sweet Potato, which suggests that it may not be a valid host. This species is also not listed as a pest of Sweet Potato in North Carolina by the NC Department of Agriculture, or by any other agricultural department of other states that we are aware of. Based on the habitats where we have found this species, False Nettle and other wetland forbs seem to be the most likely hosts.

OBSERVATION\_METHODS: The adults are attracted to lights.

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: Populations in North Carolina appear to be relatively secure, although the historical loss of wetlands in North Carolina has undoubtedly adversely affected this species.