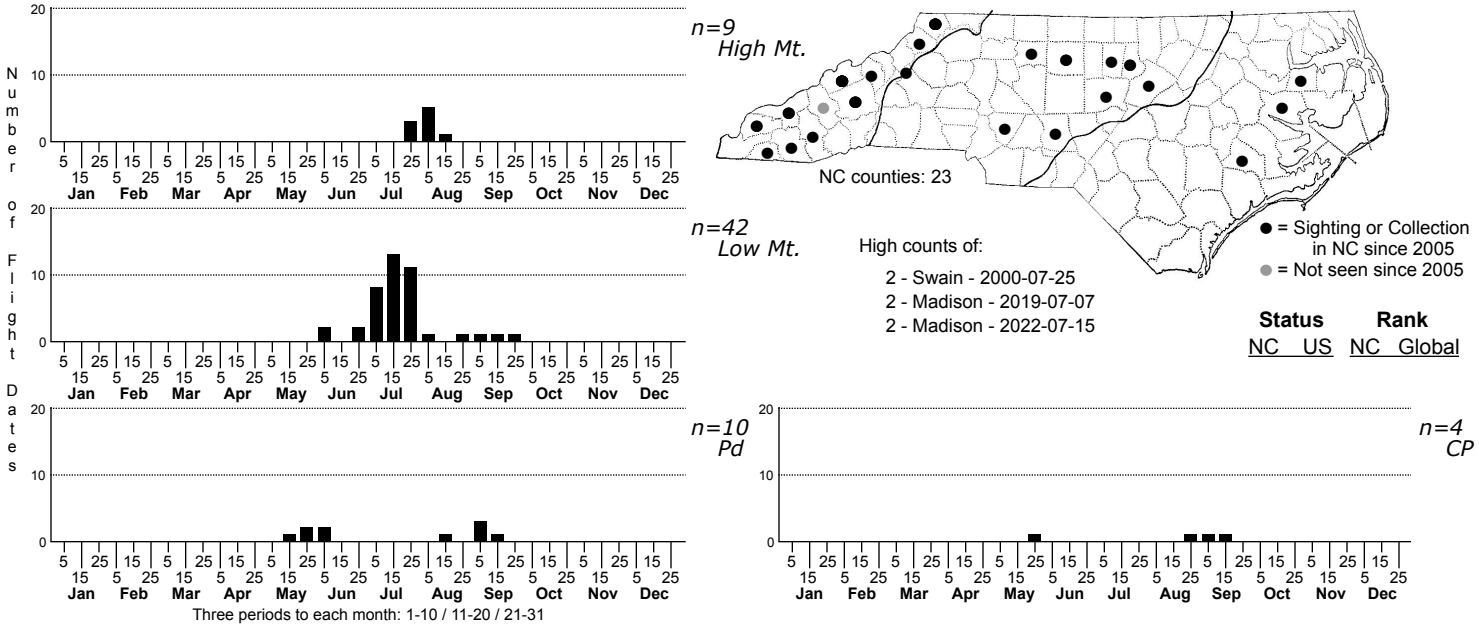
Herpetogramma aeglealis Serpentine Webworm Moth



FAMILY: Crambidae SUBFAMILY: Pyraustinae TRIBE: Spilomelini
TAXONOMIC_COMMENTS: Over 20 species of Herpetogramma have been described from North America that are based mostly on external morphology. The most recent treatment consolidates these into only nine species (Solis, 2010) and all nine occur in North Carolina.

FIELD GUIDE DESCRIPTIONS:
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS: Solis (2010); Handfield and Handfield (2021)
TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The adults have several color forms that range from pale gray with a yellowish hue on the forewing to predominantly dark brown, with the darker forms well-represented in North Carolina. Regardless of the general color, the head, palps, thorax, abdomen and dark colorings of the wings are concolorous. The marks on the forewing vary from medium to dark brown depending on the color form. The orbicular spot is dark and rounded or squarish, while the dark reniform spot is larger and either rectangular or curved inward. A white patch is present between the two spots, but not between the reniform spot and the postmedial line as seen in some of our Herpetogramma species.

The antemedial line is weakly sinuate and strikes the costa just anterior to the orbicular spot. The postmedial line projects inward from the costa at around three-fourths the wing length where it meets an outwardly bulged section with three blunt teeth. From there it projects basally towards the orbicular spot for a short distance, then sharply angles away after approaching the reniform spot and runs nearly perpendicular to the inner margin. A narrow, diffuse, pale line is present on the posterior margin of the postmedial line that contrast with a darker zone of dusting in the subterminal area. The forewing fringe can vary from light brown to dark brown, with a white region near the anal angle. There is a narrow, broken line at the base that parallels a brown marginal line that can be complete or weakly broken.

The hindwing is usually paler or whiter than the forewing, and the veins on the light forms often are dark and contrast with the paler ground color. There is an elongated discal spot and a postmedial line that is generally similar in shape to the one on the forewing. A whitish zone is present on the posterior margin of the postmedial line that is much more pronounced than the comparable pale zone on the forewing. It contrasts sharply with a darker zone of dusting in the subterminal area. The fringe on the outer margin is brown on the costal half and whitish on the tornal half, with a line of dark spots along the base of the brown region. The brown terminal line is well developed.

The dark forms of H. aeglealis are most easily confused with H. sphingealis. Both species have a white patch between the orbicular and reniform, but not between the reniform and the postmedial line. In the latter, the postmedial lines on both the forewing and hindwing are rather obscure and lack a pale or whitish zone on the posterior margin of the line.

DISTRIBUTION: Herpetogramma aeglealis is found in eastern North America, including extreme southern Canada (Ontario; Quebec) and the U.S. from Maine southward to southern Florida, and westward to Louisiana, eastern Oklahoma, Missouri, eastern Nebraska, southern Minnesota and eastern North Dakota. This species occurs statewide in North Carolina, but is uncommon in the Coastal Plain where it is largely restricted to bottomlands and other mesic habitats.

FLIGHT COMMENT: The adults have been observed from April through November in Florida, and mostly from May through September in the central and northern portions of the range. As of 2023, our records extend from mid-May through late September. Local populations in North Carolina appear to be bivoltine, except for those at higher elevations in the Blue Ridge where a single brood is produced annually.

HABITAT: This species is commonly found in rich, mesic hardwoods, bottomland forests, and along forest edges and openings.

FOOD: The larvae are polyphagous and have been reared on a taxonomically diverse group of plants (Forbes, 1923; Heppner, 2007; Robinson et al., 2010; Solis, 2010; Handfield and Handfield, 2011, 2021; Beadle and Leckie, 2018; BugGuide). They commonly use ferns, including Interrupted Fern (Osmunda claytoniana), Christmas Fern (Polystichum acrostichoides), and Woodwardia. Other reported hosts include Canada Wild-ginger (Asarum canadense), ragworts (Packera), Virginia Creeper (Parthenocissus quinquefolia), American Pokeweed (Phytolacca americana), Mayapple (Podophyllum peltatum) and goldenrods, including Zigzag Goldenrod (Solidago flexicaulis), and White Goldenrod (S. bicolor). In North Carolina, Jeff Niznik and David George reared an adult from a larva using Wingstem (Verbesina alternifolia), and Jim Petranka reared a larva from Intermediate Wood-fern (Dryopteris intermedia).

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

NATURAL HERITAGE PROGRAM RANKS: GNR S4S5

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

COMMENTS: This species is found statewide in rich woods and bottomlands are appears to be secure within the state.