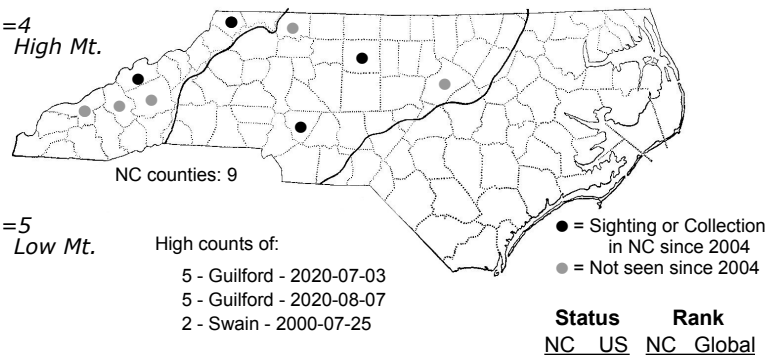
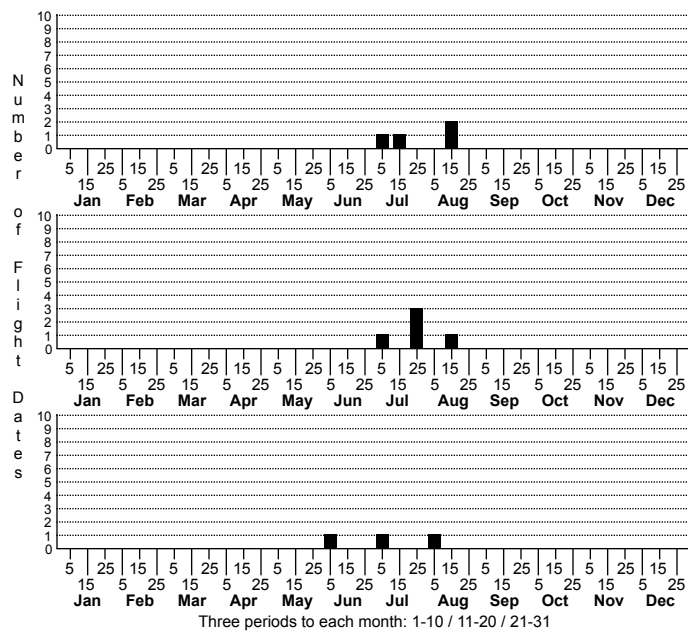


Neodactria caliginosellus Corn Root Webworm Moth



FAMILY: Crambidae SUBFAMILY: Crambinae TRIBE: Crambini

TAXONOMIC COMMENTS: The genus *Neodactria* contains several closely related forms that comprise a species complex that is poorly resolved. Members of this group, including *N. luteolellus*, *N. caliginosella* and *N. zeella*, can often be identified by coloration and patterning, but there appears to be much overlap in variation of external characters between the members of the complex, at least across the entire ranges of these species. There is currently a general lack of consensus among taxonomists as to the number of species that should be recognized. As Brian Scholtens (2017) noted concerning the species in the southeastern U.S., "These may or may not be distinct species. There is a great deal of variation in coloration and pattern, so that no clear groups can be easily defined." A comprehensive study of this species complex across the U.S. and Canada is needed. Our assignment of specimens to species is based on the original descriptions of the species and other evidence.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS:

TECHNICAL DESCRIPTION, IMMATURE STAGES: Runner (1914).

ID COMMENTS: In this species the head, thorax, and palps are dark fuscous and dusted to varying degrees with gray scales (Fernald, 1896). The ground color of the forewings is dark fuscous or orangish-fuscous with a sprinkling of brown and yellow scales, and usually with a scattering of gray scales. The median and subterminal lines are often only weakly developed. They are often either blackish and margined with white, or orangish-fuscous and overlain with varying levels of dark brown to blackish scales. The median line originates at the costa and forms a sharp angle at the end of the cell, then runs obliquely to the inner margin, with an outward tooth or angle at the fold. The subterminal line is similar in color and runs roughly parallel to the median line, but is irregularly jagged and often has four or five small blackish teeth. In some of our specimen, there is a pale gray patch between the two lines that extends to the inner margin. The terminal line is usually very narrow and indistinct, while the fringe is a dark, leaden gray. The hindwings are dark fuscous with lighter fringes.

Both *Neodactria luteolellus* and *N. zeelus* are similar in form and forewing pattern but the ground color of the forewings is mostly ochreous yellow in *N. caliginosellus* and ashy gray in *N. zeelus* (Fernald, 1896). Both *N. luteolellus* and *N. caliginosella* lack the two narrow, pale ochreous lines seen in *N. zeelus* that run longitudinally out from the wing base.

DISTRIBUTION: *Neodactria caliginosellus* is primarily found in the eastern U.S. and adjoining areas of southern Canada, but scattered records are known from a few western states, including California, Montana and Colorado. This species occurs in Canada from the Northwest Territories and British Columbia eastward to Nova Scotia and Prince Edward Island. In the U.S. the range extends from Maine southward to southern Florida, and westward to Alabama, Tennessee, Kentucky, Illinois and Indiana. As of 2023, our records are restricted to the Piedmont and the Blue Ridge.

FLIGHT COMMENT: This species is active nearly year-round in Florida and from May through October in other states, with a seasonal peak in June through August in most areas. As of 2023, our records range from early June through mid-August.

HABITAT: Our records include fields, meadows, and residential neighborhoods, as well as more natural habitats such as a mountain fen, a road corridor through a northern hardwood forest, and streamside habitats in mesic woods in the mountains.

FOOD: The larvae are polyphagous and can be a significant pest on agricultural plants, including corn, wheat, carrots and tobacco, as well as turf grasses (Felt, 1894; Runner, 1914; Ainslie, 1916; Dominick, 1960; Robinson et al., 2010; Vittum, 2020). Runner (1914) found the larvae on Sheep Sorrel (*Acetosa acetosella*), Queen-Annes-lace (*Daucus carota*), fleabanes (*Erigeron* spp.), including Annual Fleabane (*Erigeron annuus*), Common Ragwort (*Jacobaea vulgaris*), Oxeye Daisy (*Leucanthemum vulgare*), English Plantain (*Plantago lanceolata*) and asters (*Symphyotrichum* spp.), including White Heath Aster (*Symphyotrichum ericoides*).

OBSERVATION_METHODS: The adults are attracted to lights, and the larvae and their bore holes and webbed shelters can be found at the bases of host plants.

NATURAL HERITAGE PROGRAM RANKS: GNR S3S5

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

COMMENTS: This species is somewhat uncommon in North Carolina, but does well in disturbed habitats such as roadways and fields.