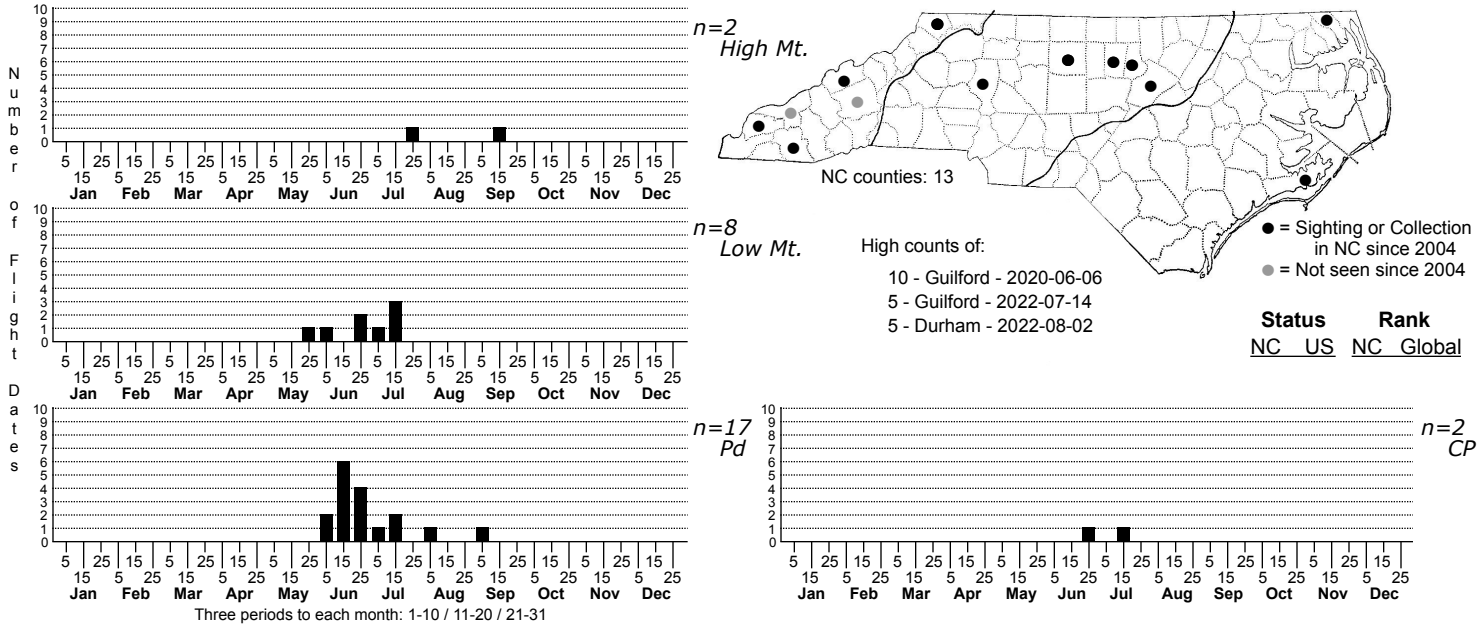
Neodactria luteolellus Mottled Grass-veneer Moth



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: Beadle and Leckie (2012)
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS: Fernald (1896).
TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: In this species the head, thorax, and ground color of the forewings are ocherous yellow, while the palps are also yellow and dusted with fuscous (Fernald, 1896). The forewing is dusted with ashy scales, particularly on the outer half. An indistinct, irregular, yellow median line runs obliquely outward from the inner margin at about one-half the wing length before terminating in the subcostal area at about two-thirds the wing length. A subterminal line runs parallel to the median line but has two outward bulges, one just below the costa, and the second just before reaching the inner margin. The terminal line has been characterized as usually being indistinct (e.g., Forbes, 1923), but in many of our specimens it is narrow, dark, and continuous, or more rarely present only as a series of points. The fringe is pale brown, and the hindwing is uniformly grayish brown to medium brown with a similar colored fringe.

Both Neodactria caliginosellus and N. zeelus are similar in form and forewing pattern to N. luteolellus, but the ground color of the forewings is dark brown in N. caliginosellus and ashy gray in N. zeelus (Fernald, 1896). Neodactria luteolellus also lacks the two pale ocherous lines that run from the wing base.

DISTRIBUTION: Neodactria luteolellus is widely distributed in the eastern U.S. and southern Canada, and in several of the western states including California, Colorado, and Montana. This species occurs in southern Canada from British Columbia eastward to Nova Scotia and Price Edward Island, and in the eastern U.S. from Maine southward to northern Florida, and westward to Louisiana, eastern Oklahoma, Kansas, eastern Nebraska, Minnesota and northeastern North Dakota. As of 2023, we have scattered records from throughout the state, but relatively few from the Coastal Plain and higher elevations in the Blue Ridge.

FLIGHT COMMENT: The adults have been observed from March through September, with June and July the peak months in most states. As of 2023, our records are from early-June through mid-September, with a seasonal peak in June and July.

HABITAT: We have records from mountain bogs, freshwater marshes in the Piedmont, and brackish marshes in the Tidewater region, as well as mesic forests with nearby fields or road corridors, and residential neighborhoods.

FOOD: The host plants are poorly documented. Fernald (1896) reported that they feed on grass, but provided no evidence for this, while Robinson et al. (2010) noted that the larvae feed on corn.

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: This species appears to be somewhat secure within the state given that it is widespread and frequently occupies disturbed sites.