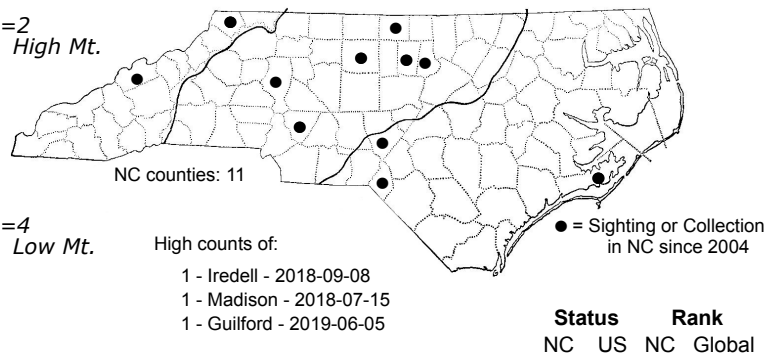
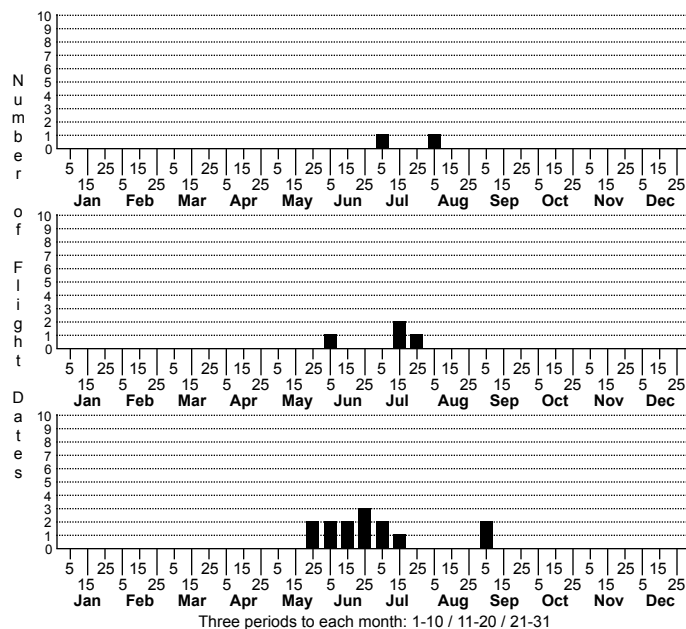


# *Neodactria zeellus* No common name



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:

ID COMMENTS: The following description is based in part on that of Fernald (1896). The palps, head, and thorax are a pale leaden gray (Fernald, 1896). The ground color of the forewing is similar, but mixed with ashy gray and white, particularly outwardly. The median and postmedian lines are often obscure. When present they are ochreous-yellow and sometimes overlaid in places by dark brown, particularly on the costal two-thirds. The median line runs from the inner margin and crosses the end of the cell, where it is angulated, while the subterminal is irregular and crosses the wing about half way between the median line and the outer margin. A light-gray patch is sometimes present between the two lines near the center of the wing. Most specimens also have two narrow, pale ochreous lines that run longitudinally out from the wing base. One extends from the middle of the wing base to the subterminal line near the anal angle, while the second, which is often less plainly marked, runs parallel between this line and the inner margin. The subterminal space is gray, and the fringe has a pale, metallic-lead color. The terminal line that adjoins the fringe is black and very narrow, while the hindwing is pale fuscous with a lighter fringe.

Both *Neodactria caliginosella* and *N. luteolellus* are similar in form and forewing pattern to *Neodactria zeellus*, but the ground color of the forewings is dark brown in *N. caliginosella* and ochreous-yellow in *N. luteolellus* (Fernald, 1896). The latter also lacks the two pale ochreous lines that run from the wing base. We occasional find specimens of *N. zeellus* that are exceptionally dark, but still possess the two pale ochreous lines that run from the wing base.

DISTRIBUTION: *Neodactria zeellus* occurs across the eastern U.S. from Maine to southern Florida, and westward to Mississippi, western Tennessee, eastern Oklahoma, Iowa and Minnesota. This species has also been observed in Colorado, Alberta, Saskatchewan, Manitoba, Ontario, Quebec and Nova Scotia. AS of 2023, we have records from all three physiographic provinces, with most from the Piedmont.

FLIGHT COMMENT: The adults have been observed from February through November in different areas of the range, but primarily from June-through September. As of 2023, our records are from late-May through mid-October, with most from June and July. Populations in the Coastal Plain appear to produce at least two broods per year, while those in the Blue Ridge appear to be univoltine.

HABITAT:

FOOD: The host plants appear to be undocumented. Forbes (1923) listed corn as a host, which traces back to Fernald (1896), but no evidence was provided to support this claim.

OBSERVATION\_METHODS:

NATURAL HERITAGE PROGRAM RANKS: GNR SU

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

COMMENTS: