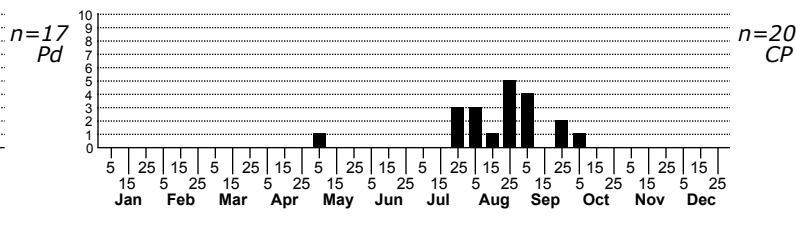
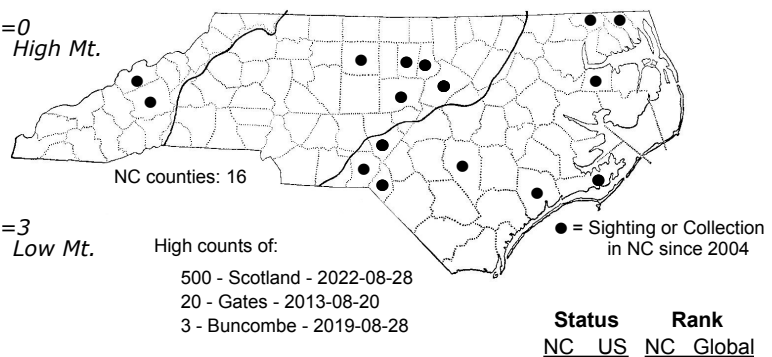
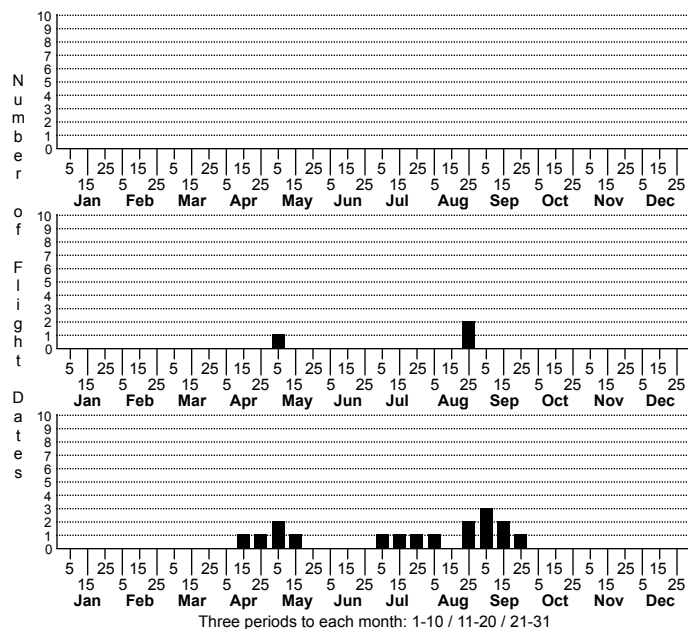


Polyhymno luteostrigella Polyhymno Moth



FAMILY: Gelechiidae SUBFAMILY: Gelechiinae TRIBE: Gelechiini

TAXONOMIC COMMENTS: The genus *Polyhymno* contains about 45 species that are mostly found in the Old World, where they are particularly well represented in southern Africa. There are only two species in North America.

FIELD GUIDE DESCRIPTIONS: Leckie and Beadle (2018)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Chambers (1874a)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: This is a tiny, but distinctive moth with brown striping on the thorax and wings, and black dots on the cilia. The following description is based in part on that of Chambers (1874a). The head is silvery white and the labial palps tawny white and recurved above the head. The antenna is pale with darker annulations. The upper surface of the thorax has four narrow, equidistant, longitudinal, yellowish brown to brown lines. The forewing is silvery white with three longitudinal yellowish brown to brown streaks. The first is faint and extends along the inner margin, and the other two are bold and extend for most of the wing length. The largest of the two bold streaks begins at the base of the costa and extends just below the costa to about four-fifths where it narrows and joins a series of five oblique, short bars that radiate anteriorly. The second streak begins at the base near the middle of the wing, and is continuous with one of the thoracic lines. It forks at about two-thirds, with one branch going towards the dorsal margin and the second towards the extreme apex where it converges toward the first streak and joins the radiating bars. Behind this are two or more less distinct short bars at the apex, which is tailed. The cilia have two or three distinct, small black spots near the base, and the hindwing is brownish white. The legs are whitish, with dark dusting on the dorsal surface, and dark annulations on the tarsi. *Eucosma striatana* is superficially similar, but lacks the four black lines on the thorax and the black dots of the cilia.

DISTRIBUTION: *Polyhymno luteostrigella* is found in eastern North America, Central America, and the Caribbean. Populations occur in Ontario, Canada, and in the eastern US from New Hampshire, Vermont, and New York southward to southern Florida, and westward to central Texas, central Oklahoma, and Illinois. Geographic isolates are also present in Arizona. As of 2022, we have records for all three physiographic provinces. This species is relatively common in the Coastal Plain and eastern Piedmont and uncommon in the mountains where it is found at lower elevations.

FLIGHT COMMENT: Adults have been found nearly year-round in Florida, and from March to October elsewhere. A seasonal peak in abundance occurs in July and August in areas outside of North Carolina. Most local populations appear to be univoltine in North Carolina, although there is evidence for two broods in the eastern Piedmont. As of 2022, our records extend from mid-April to early October, with most from July through mid-September.

HABITAT: Populations are strongly dependent on partridge-peas as hosts. These are early successional forms that thrive in sunny or partially shaded sites that are disturbed or prone to periodic fires. Typical habitats include woodland borders, roadsides, waste places, weedy fields and edges, and pine woodlands.

FOOD: The reported hosts (Heppner, 2003; Robinson et al., 2010) are Common Partridge-pea (*Chamaecrista fasciculata*) and Sweet Acacia (*Vachellia farnesiana*). The latter is found farther south and does not occur in North Carolina. In the North Carolina Sandhills *P. luteostrigella* also commonly uses Sensitive Partridge-pea (*C. nictitans*).

OBSERVATION_METHODS: The adults are attracted to lights. Information on the larval ecology are needed, so we encourage naturalists to search for the larvae on *Chamaecrista* and document the larval life history.

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 seemingly secure based on the weedy nature of its host plant and its wide distribution within the state.