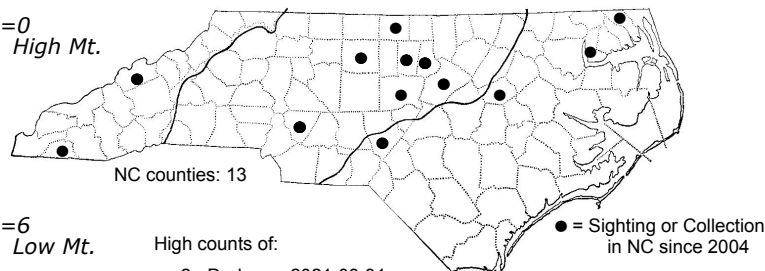
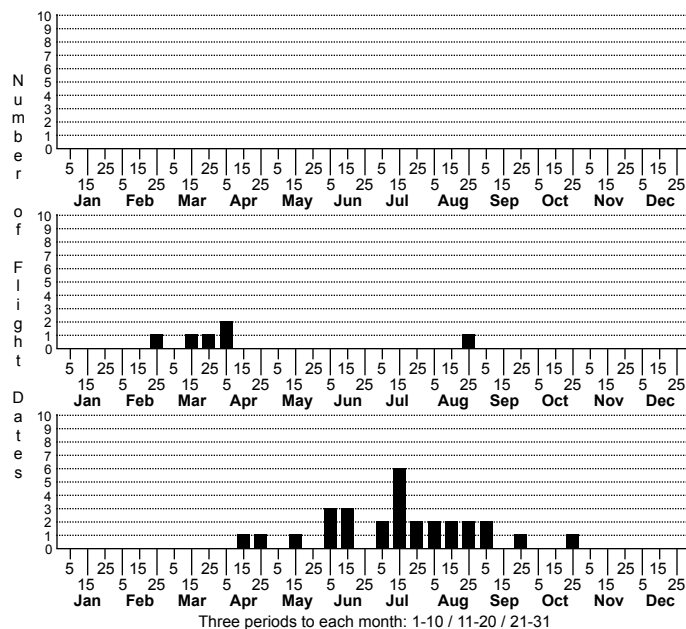


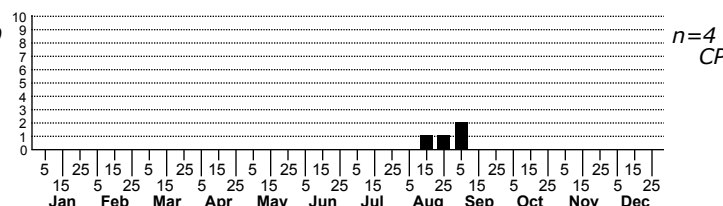
# Palpita freemanalis Freeman's Palpita Moth



High counts of:

- 2 - Durham - 2021-08-31
- 2 - Orange - 2023-07-06
- 1 - Madison - 2019-04-10

Status Rank  
NC US NC Global



FAMILY: Crambidae SUBFAMILY: Pyraustinae TRIBE: Spilomelini  
TAXONOMIC\_COMMENTS:

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Munroe (1952)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: This species has two distinct forms that appear to be seasonal morphs. In the winter form, the ground color is gray and the dark markings are fuscous, while in the summer form, the ground color is white and the dark markings are bright orange or light brown. Intermediate specimens sometimes occur in which the ground color is white but the markings are brown or fuscous (Munroe, 1952). The following descriptions are based mostly on those of Munroe (1952).

In the gray (winter) form, the labial palp is fuscous above and light gray below, and is relatively short. The frons is fuscous in the middle and light gray on the sides, and the antenna and vertex are gray. The thorax and abdomen are gray with black patches. The legs are pale gray and the fore tibia has black basal and distal rings. All of the tarsi are ringed with fuscous. The apex of the forewing is rather blunt. The forewing has a silvery gray ground color that is heavily irrorated with black or dark brown except at the cell. An oblique brown shade is often present beyond the end of the cell. The reniform and orbicular spots are black, and there is an irregular fuscous patch behind and contiguous with the reniform spot. The hindwing is pale gray, with the distal third heavily speckled with fuscous. The discocellular line is narrow and light fuscous. Both the forewings and hindwings have a narrow, fuscous, marginal line, while the fringes are pale gray with a dark gray, checkered, median line. The orange summer form has similar markings, but the pale areas are creamy white and the dark markings are orange or light brown. According to Munroe (1952), there are no obvious sexual differences in maculation.

The dark forms of *Palpita freemanalis* can be confused with *P. magniferalis*, but the latter has more pronounced dark blotching on the forewing, including a blotch near the wing base. The irregular fuscous patch behind and contiguous with the reniform spot is about the same size as the reniform spot in *P. freemanalis*, but much larger than the reniform spot in *P. magniferalis* and often extends to the inner margin. Size differences are also helpful, with the forewing length being 9-10 mm for *P. freemanalis* versus 12-13 mm for *P. magniferalis*.

DISTRIBUTION: The range of *Palpita freemanalis* is centered on the southeastern U.S. and extends from Pennsylvania westward through Ohio and Indiana to eastern Oklahoma, and southward to central Texas, the Gulf Coast states, the Florida Panhandle and Georgia. As of 2023, most of our records are from the Piedmont, with a few scattered records from the Blue Ridge and northern Coastal Plain.

FLIGHT COMMENT: The adults have been found from February through December in different areas of the range, with northern populations typically flying from May to September. As of 2023, our records range from mid-March through late-October.

HABITAT: Our records come from residential neighborhoods and from both mesic and dry natural habitats.

FOOD: The larval host plants are undocumented, but presumably are one or more members of the Oleaceae.

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:

March 2024

The Moths of North Carolina - Early Draft