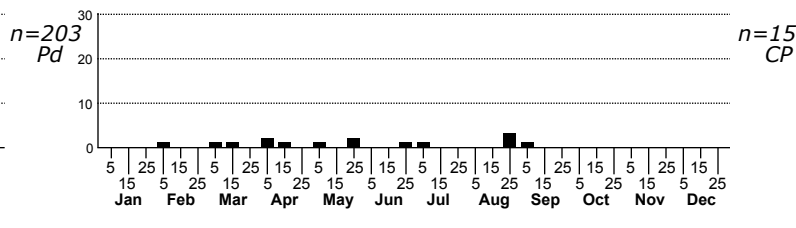
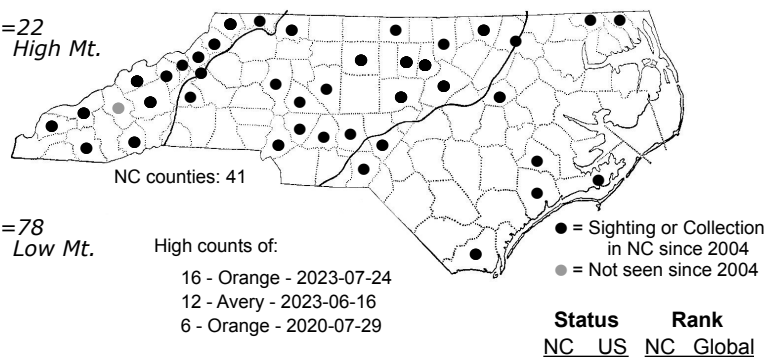
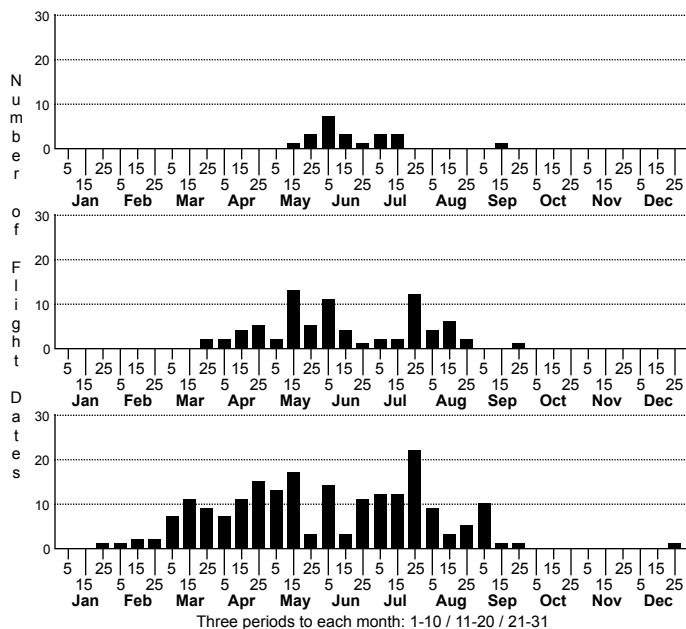


# *Palpita magniferalis* Splendid Palpita Moth



FAMILY: Crambidae SUBFAMILY: Pyraustinae TRIBE: Spilomelini

TAXONOMIC COMMENTS: One of twelve species in this genus recorded in North America north of Mexico (Scholtens and Solis, 2015). Munroe (1952) placed *magniferalis* in his *Illibalis* Species Group, which in North Carolina also includes *arsaltealis*, *illibalis*, *freemanalis*, and *aenesentalis*.

FIELD GUIDE DESCRIPTIONS: Covell (1984); Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Munroe (1952)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following description is based in part on that on Munroe (1952). The labial palp is fuscous and a little longer than the eye, while the frons is dark gray with a white lateral stripe adjacent to the eye. The antenna is dark gray and the vertex pale gray. The thorax and abdomen are pale gray and irregularly marked with fuscous or black shading. The legs are grayish white, and all tibiae and tarsi are banded with fuscous. The forewing has a silvery gray to dull whitish ground color that is mostly masked by brown to blackish scales. In North Carolina specimens, patches of black scales or dense black shading are present on the basal third of the wing, and as a large, diffuse band beyond the cell and near the middle of the wing. The band commonly extends from the costa to the inner margin and is followed by a broad zone of light brown dusting on the apical third. The orbicular and reniform spots are black, but often obscured by the black shading. The subterminal area often has diffuse blackish spotting that is followed by a thin, black terminal line. The fringe is dusky and often weakly checkered with blackish marks. The hindwing is translucent and varies from pale gray to light tan or brown. It has a weak fuscous discocellular line and varying amounts of diffuse speckling or spotting over most of the wing. The terminal line is thin and black, while the fringe is dusky and often weakly checkered with blackish marks.

Individuals of this species exhibit substantial variation in the degree of expression of the darker marks and shading, so expect deviations from the general description above. Munroe (1952) noted that females tend to have more restricted dark markings than the males.

DISTRIBUTION: *Palpita magniferalis* has been documented across much of southern Canada (British Columbia to Nova Scotia) and throughout most of the eastern U.S. where the range extends from Maine to southern Florida, then westward across the Gulf Coast states to eastern Texas, eastern Oklahoma, eastern Kansas, eastern Nebraska, Minnesota and eastern North Dakota. This species occurs statewide in North Carolina, although it is relatively uncommon in the western Coastal Plain.

FLIGHT COMMENT: The adults fly year-round or nearly so in southern locales such as Florida and Louisiana, and mostly from April through September in the northern regions of the range. As of 2023, we have records from early February through late-September. This species appears to produce two or more broods per year in North Carolina.

HABITAT: Our records come from both upland and bottomland deciduous forests that correspond to its association with using both White and Green Ash. Both natural stands are used, as are wooded residential neighborhoods.

FOOD: The larvae feed on ash species (Munroe, 1952; Prentice, 1966; Heppner, 2007; Solis, 2008; Robinson et al., 2010). The reported host include American Ash (*Fraxinus americanus*), Black Ash (*F. nigra*) and Green Ash (*F. pennsylvanica*). A North Carolina record from the Dismal Swamp State Park (NRID, accessed 2022-08-07) indicates it probably uses Carolina Ash (*F. caroliniana*), since that is the only species of *Fraxinus* recorded at that site. Additionally, an adult was reared from a larva that was on Swamp Privet (*Forestiera acuminata*) in Texas (George Smiley, BugGuide, accessed 2022-08-7). That species only reaches as far north as South Carolina. It is not known if *P. magniferalis* can feed on introduced species of *Ligustrum* that are also in the Oleaceae.

OBSERVATION\_METHODS: The adults come well to blacklights.

NATURAL HERITAGE PROGRAM RANKS: GNR S2S4

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

COMMENTS: Wagner and Todd (2016) list this species as having a High Endangerment Risk due to the impacts of the Emerald Ash Borer. Recent (2022) records from a bottomland that has been hard-hit by the Emerald Ash Borer indicate that *P. magniferalis* may be able to use Ash saplings, which are still common; Chinese privet, however, is also present and its use as a larval food plant needs to be determined.