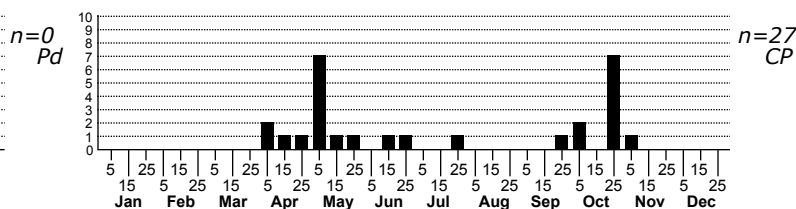
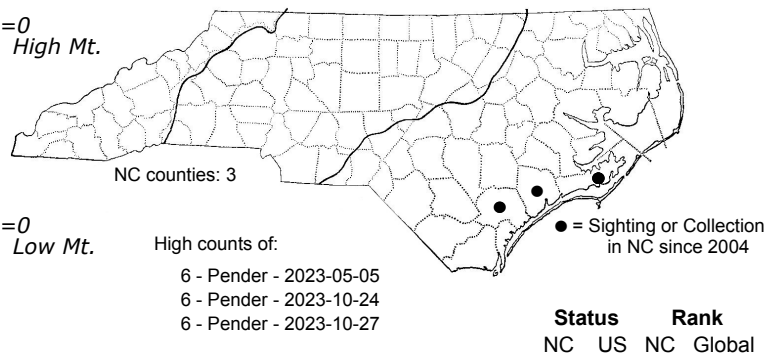


Pelochrista guttulana Speckled Pelochrista Moth



FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Eucosmini

TAXONOMIC COMMENTS: *Pelochrista* is a large Holarctic genus of tortricids with around 75% of the 226 described species being native to North America (Wright and Gilligan, 2017). The highest species richness occurs in the western half of North America. The genus has a long and confusing taxonomic history, with many of the species formerly placed in the genus *Eucosma*. Gilligan et al. (2014) conducted a comprehensive phylogenetic analysis of *Pelochrista*, *Eucosma*, and related genera and redefined the genus *Eucosma* and *Pelochrista* based on differences in female genitalia. The great majority of *Pelochrista* species are known only from adults, which likely reflects the fact that the larvae of most species bore into stem bases and roots and are concealed from view. Members of the Asteraceae are the likely hosts for most species (Wright and Gilligan, 2017), but much work need to be done to identifying the hosts.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Wright and Gilligan (2017)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: *Pelochrista guttulana* is a distinctive species that varies from medium brown to blackish gray and is sprinkled with lighter markings. The head, palps, and thorax have a mixture of whitish and brown or blackish-gray scales and the antenna is medium to dark brown. The forewing ground color varies from brown to blackish gray and is extensively sprinkled with small white spots or patches of varying sizes and shapes (Wright and Gilligan, 2017). The costa has a series of poorly organized white spots along its length, with a relatively large one in the subapical region. The ocellus consists of a large, white, irregular patch that is often fragmented and that resembles that of *P. robinsonana* in having pinkish bars on the lateral margins. The white speckles sometimes align into what resembles highly fragmented versions of the white markings in *P. robinsonana*. The fringe is paler than the ground, and the tarsi are white with bold banding that matches the ground color. The hindwing is brown with a paler fringe.

Pelochrista guttulana is closely related to *P. robinsonana* and is a little larger (mean FWL = 8.6 vs. 6.8 mm). Wright and Gilligan (2017) noted that there are no substantial differences in genitalia between the two species.

DISTRIBUTION: *Pelochrista guttulana* is primarily restricted to the southeastern Coastal Plain. Scattered records occur from Oklahoma and Texas eastward to central Florida. From there the range extends northward to North Carolina. Most records are from coastal habitats in the Gulf and Atlantic states. As of 2022, all of our records are from coastal communities in the lower Coastal Plain.

FLIGHT COMMENT: The adults have been found in most months of the year except January and February. Wright and Gilligan (2017) examined specimens that were collected between 1 March and 10 November. As of 2022, our records suggest that local populations may be bivoltine, with adults flying from early April to late-June, then again in late-September and October.

HABITAT: Populations are typically found in sandy, xeric communities and largely in communities such as dunes and maritime forests with herbaceous ground cover. In North Carolina, this species is fairly common in the dune grasslands of barrier islands (J.B. Sullivan, pers. obs.).

FOOD: The host plants are undocumented, but *Heterotheca subaxillaris* is suspected since it is almost always present where local populations occur in North Carolina (J.B. Sullivan, pers. obs.).

OBSERVATION_METHODS: The adults are attracted to lights. Like most *Pelochrista*, the host plants are unknown and in much need of study.

NATURAL HERITAGE PROGRAM RANKS: GNR S1S3

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

COMMENTS: This species reaches its northern limit in North Carolina and appears to be restricted to dunes and maritime communities. It can be locally abundant in dune habitats.