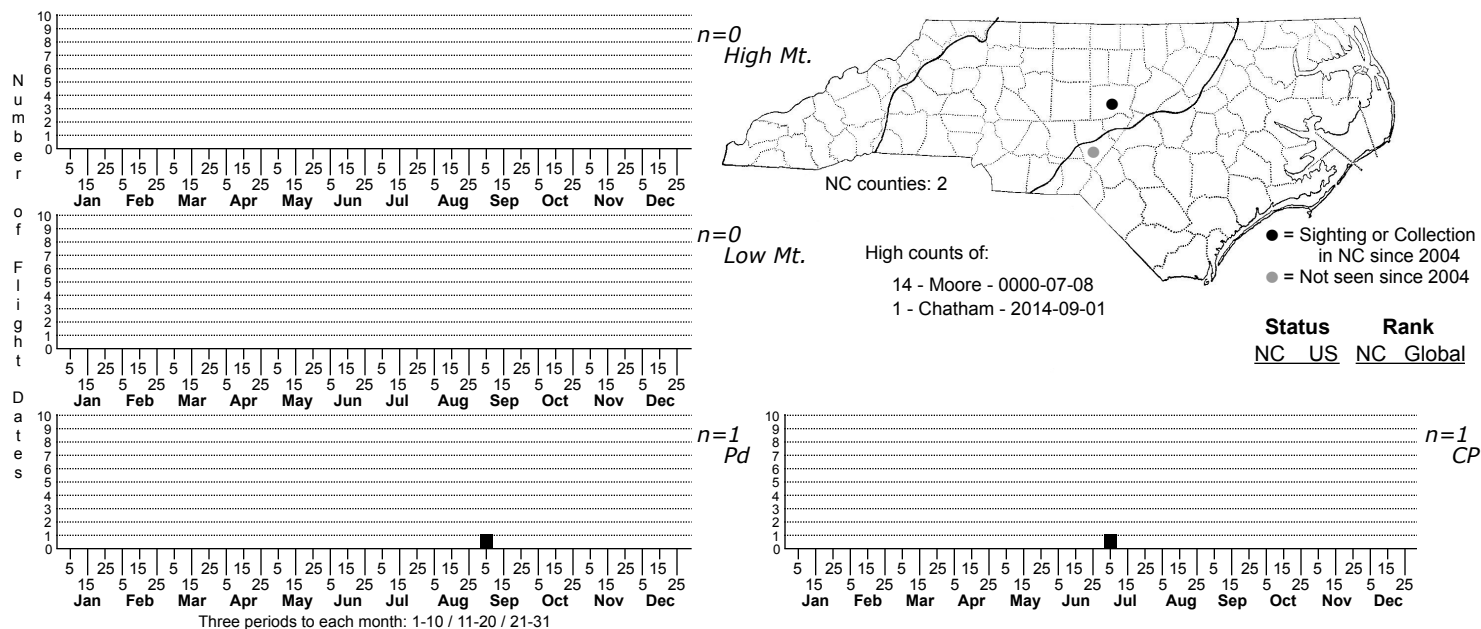


Pelochrista fratruelis No common name



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: Heinrich (1923); Wright and Gilligan (2017)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The head, palps, and antennae are grayish to grayish brown. The thorax and a large basal patch on the forewing are concolorous and are comprised of fine grayish and fuscous striations or vermiculations. The basal patch extends to about one-third the wing length and covers the entire area between the dorsal margin and costa. The remainder of the forewing has an orange ground color that is overlain with a prominent ocelloid region, along with three dull silver bands. These include a straight and rather narrow band at the middle that extends from the dorsal margin to the costa, a shorter band just beyond the middle that extends from the costa to near the middle of the wing, and a slightly curved band at about four-fifths that extends obliquely from the costa to the middle of the termen. The ocellus consists of black spots on a creamy white to tan field that are grouped to form two or three large patches, and often has a few metallic-gray spots embedded within the black patches. The ocellus is surrounded by a field of fuscous to blackish dusting and striations that occupies a large portion of the outer half of the wing. A scattering of metallic-gray spots can be found near the perimeter of the field of dark dusting and striations. The termen and cilia have a salt-and-pepper patterning, while the hindwing is dark brown with paler cilia. *Pelochrista fraudabilis* resembles *Pelochrista fratruelis* but is straw-colored, has two complete fascias (crossbands) on the forewing, and lacks the basal patch.

DISTRIBUTION: Scatter populations of *P. fratruelis* have been found in Coastal Plain habitats from North Carolina to Florida and westward to Louisiana. Wright and Gilligan (2017) examined specimens from North Carolina, Georgia, Florida, Mississippi, and Louisiana. Our only records for North Carolina as of 2022 are from Southern Pines in Moore County where specimens were collected over 100 years ago, and a more recent find (2014) by Parker Backstrom in Chatham County.

FLIGHT COMMENT: The few scattered site records for this species extend from early July through early October. The type series that contained 14 specimens from Southern Pines was collected between July 8 and September 15 (Heinrick, 1923).

HABITAT: The preferred habitats are poorly delineated, but most records are from sandy sites with xeric communities.

FOOD: The host plants are unknown.

OBSERVATION_METHODS:

NATURAL HERITAGE PROGRAM RANKS: GNR S1S2

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

COMMENTS: This species appears to be rare within the state and uncommon to rare elsewhere within its range.