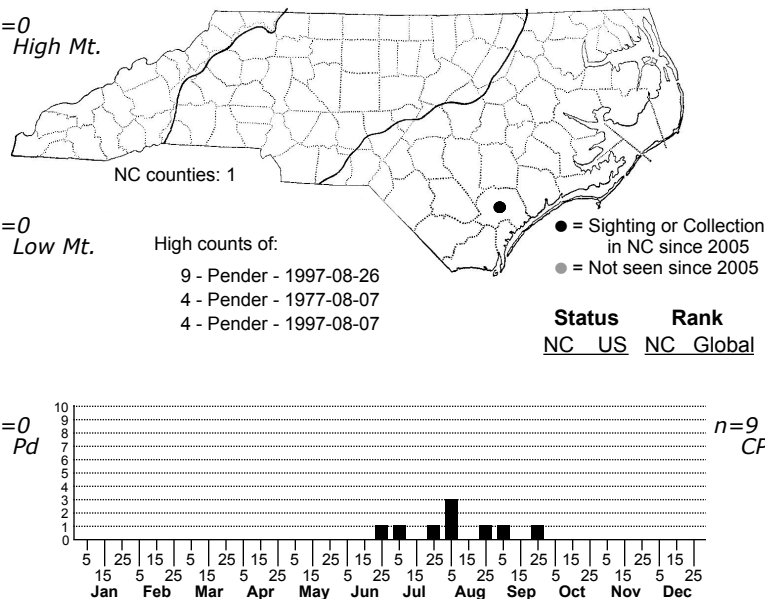


Eucosma paragemellana None



FAMILY: Tortricidae SUBFAMILY: TRIBE:

TAXONOMIC COMMENTS: *Eucosma paragemellana* is a member of the *circulana*-*gemellana* subgroup as recognized by Wright and Gilligan (2015). These three species are very similar in forewing appearance but can be separated by geographic range, genitalia, and other features. *Eucosma paragemellana* is the only member that is currently known from North Carolina.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Gilligan and Wright (2013)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: Gilligan and Wright (2013) note that *E. paragemellana* is indistinguishable in external appearance from *E. gemellana*, which is restricted to Florida. The following description is based on their description of the latter. The frons, vertex, and antenna are creamy white and the labial palp is creamy white with some pale brown tinting on the lateral surface. The dorsal surface of the thorax varies from creamy white to pale brown. The forewing ground color is brown to brownish yellow on the proximal half and phases to golden yellow on the distal half. Most specimens have a creamy white subcostal streak that extends from the base to the mid-wing and creamy-white streaking on the cell, CuP, and A1+2. Males also have a thin grayish-brown streak from the base to the distal end of the fold. The terminal half of the wing is edged with brown along the costa, dorsum, and termen, with the latter having a coarse-grained pattern. The circular ocelloid region extends from the tornus nearly to the costa. It has a golden-yellow central field and a metallic-gray circular boundary, with the anterior and posterior metallic-gray semicircles usually being more-or-less intact. The ocellus consists of two rows of three to five black dots that are separated by metallic-gray scaling, and the hindwing is brownish gray.

Gilligan and Wright (2013) note that *E. circulana* is similar in forewing appearance to *E. paragemellana*, but lacks the whitish subcostal band and basal streaking that is present in *E. paragemellana*. *Eucosma circulana* is a more western form that has yet to be documented in North Carolina.

DISTRIBUTION: *Eucosma paragemellana* has a fragmented distribution in the southeastern Coastal Plain. Specimens have been observed in the Gulf Coast of Alabama and adjoining areas of southern Mississippi and the western panhandle of Florida, and as an apparent disjunct in coastal North Carolina. As of 2024, our records are all from Pender County.

FLIGHT COMMENT: The adults have been collected from April through September. As of 2024, we have records from late-June through late-September.

HABITAT: The adults have been collected from pine savannas and open woods, but the specific habitat requirements are poorly documented.

FOOD: The host plants are unknown.

OBSERVATION_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR [S1-S3]

STATE PROTECTION:

COMMENTS: The population that have been found in Pender County appears to be a major northern disjunct. We currently do not have sufficient information of the specific habitat requirements, host plants, and abundance to accurately assess the conservation status of this species.