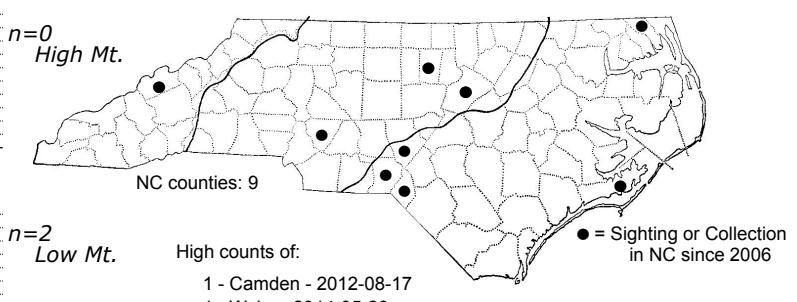
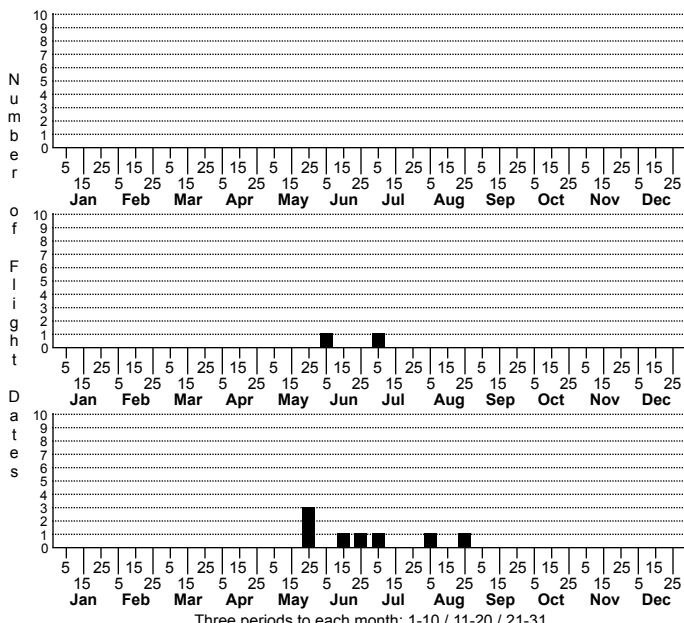


# *Epiblema strenuana* Ragweed Borer Moth



● = Sighting or Collection in NC since 2006

Status Rank  
NC US NC Global

n=7  
CP

FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Eucosmini

TAXONOMIC COMMENTS: In their monograph and revision of *Epiblema*, Wright and Gilligan (2023) placed *E. strenuana* in the *E. strenuana* group and noted that most of the taxonomic history of this group has centered around whether this species and a closely related form, *E. minutana*, are distinct species or not. Various authors have treated them as being both conspecific and heterospecific since the early 1900's. In the most recent study, Gilligan et al. (2020a) treated them as separate species based on DNA barcoding, wing coloration, and the shape of the female sterigma.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Gilligan et al. (2020a)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: In this species, the palps, frons, head, thorax and ground color of the forewings are all medium to dark brown. The interfacial spot in the middle of the wing is variably expressed and ranges from white to bronze. The paired costal strigulae on the distal half of the wing are whitish and usually inconspicuous in most individuals, except for strigula 9 near the apex (Wright and Gilligan, 2023). The associated gray striae extend toward the termen and are usually separated by lines of orangish-brown scales. Examination of genitalia may be needed for many specimens.

This species is most easily confused with *Epiblema minutana*, which is primarily brownish-gray to dark gray. The white costal strigulae are usually well expressed and there are no orangish-brown lines between the striae in the subcostal area near the apex. *E. minutana* also has a whitish face and palps versus a brownish face and palps in *E. strenuana*. Female genitalia are also useful in separating the two species. Forewing length overlaps substantially between the two species, although on average *E. strenuana* is slightly larger (mean FWL = 7.1 mm for *E. strenuana* versus 6.0 mm for *E. minutana*).

DISTRIBUTION: *E. strenuana* is widely distributed across North America, including California, the central and eastern U. S. and adjoining areas of southern Ontario and Quebec. In the eastern U.S., populations occur from Maine southward to Florida, and westward to central Texas, Oklahoma, eastern Kansas, eastern Nebraska, Iowa, Minnesota and northeastern North Dakota. Scattered populations are also known from Colorado, Arizona, Utah, and Montana and the West Indies. As of 2024, we have scattered records from throughout the state, with most from the Sandhills.

FLIGHT COMMENT: The adults fly year-round in Florida and mostly from April through September elsewhere. As of 2024, our records extends from early-April through late-August.

HABITAT: This species is generally associated with open, weedy habitats that support weedy annuals such as ragweeds.

FOOD: Ragweeds (*Ambrosia* spp.) appear to be the primary host in North America, particularly Common Ragweed (*A. artemisiifolia*), but also Giant Ragweed (*A. trifida*) and Weakleaf Bur Ragweed (*A. confertiflora*). Other members of the Asteraceae that are used include Santa Maria Feverfew (*Parthenium hysterophorus*) in Mexico and the West Indies, and cockleburs in Ontario (Heinrich, 1923; MacKay, 1959; Goeden and Rieker, 1976; McClay, 1987; Miller, 1987; Powell and Opler, 2007).

OBSERVATION METHODS: The adults are attracted to lights and the larvae can be found in galls on members of the Asteraceae.

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: