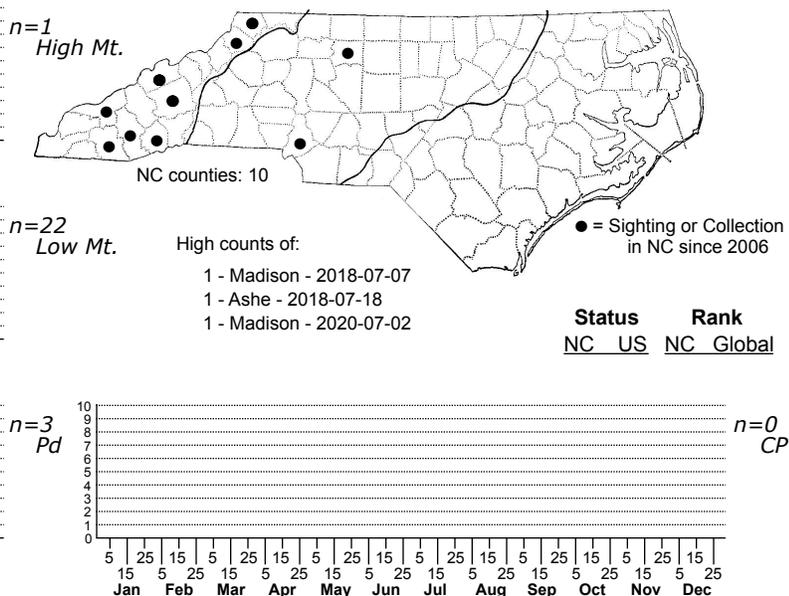
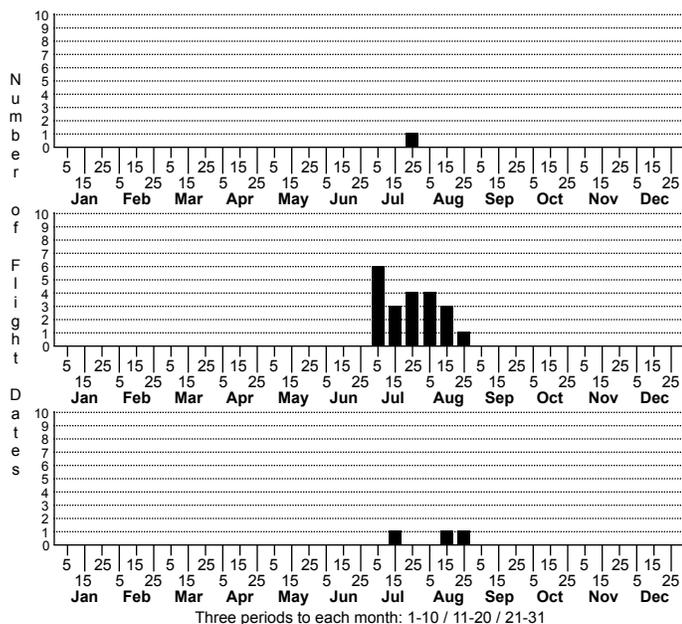


# *Epiblema brightonana* Brighton's Epiblema



FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Eucosmini  
 TAXONOMIC\_COMMENTS:

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012)  
 ONLINE PHOTOS:  
 TECHNICAL DESCRIPTION, ADULTS: Kearfott (1907b).  
 TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: This is a relatively small *Epiblema* with a broad forewing that is marked with two prominent dark marks that are outlined with white. The following description is based on those by Kearfott (1907b) and Wright and Gilligan (2023). The head, palps and thorax vary from grayish-brown to brownish-gray, while the palps, abdomen and legs are fuscous. The forewing is also predominantly grayish-brown to brownish-gray, with the most prominent mark being a broad, triangular, dorsal spot at around one-third the wing length whose rounded apex reaches slightly beyond the middle of the wing. The spot is narrowly outlined with white except on the inner margin. A smaller spot of the same shape and color is present along the inner margin in the pretornal region. The pretornal spot is usually at least weakly connected to a narrow, irregular, and outwardly oblique white line that extends from the middle of the costa. The line is shaded inwardly with a diffuse dark brown band that narrows as it approaches the pretornal spot. Beyond this is a paler grayish-brown band that begins on the costa and widens inwardly to surround the dull-colored ocellus. The apical third of the costal usually has three or four pairs of dull-whitish strigulae that are interspersed with lines of dark-brown scales. The hindwing is smoky fuscous and the fringe is brownish-gray.

Wright and Gilligan (2023) noted that a second color form with genitalia that are identical to those of the typical form described above has been found at numerous locations and appears to be conspecific with the typical form. In this form, the smaller triangular mark along the inner margin in the pretrial region is greatly reduced or missing, and the dark band that extends from the middle of the costa arcs backwards in a zig-zag fashion to the apex.

DISTRIBUTION: *Epiblema brightonana* is found throughout much of the eastern U.S. and in adjoining areas of southern Canada (Manitoba; Ontario; Quebec; New Brunswick; Nova Scotia). It is generally absent from the southeastern Coastal Plain, and at least one isolate has been found in British Columbia where it may have been introduced. The range in the U.S. extends from Maine southward to western North Carolina, central Alabama and eastern Mississippi, and westward to eastern Tennessee, Arkansas, eastern Nebraska, Iowa and Minnesota. As of 2024, we have records from the Piedmont and Blue Ridge, with the great majority from lower-elevation sites in the Blue Ridge.

FLIGHT COMMENT: The adults have been observed from June through September in different areas of the range, with a seasonal peak typically in July and August. North Carolina populations are univoltine, which appears to be the case throughout the range. As of 2024, our records extend from early-July through late-August.

HABITAT: Our records are mostly from mesic habitats, including rich forests, forest edges and semi-wooded residential neighborhoods.

FOOD: The hosts are apparently undocumented.

OBSERVATION\_METHODS: The adults are attracted to lights.

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: This species appears to be uncommon in North Carolina. More information is needed on its host plants and preferred habitats before we can accurately assess its conservation status.