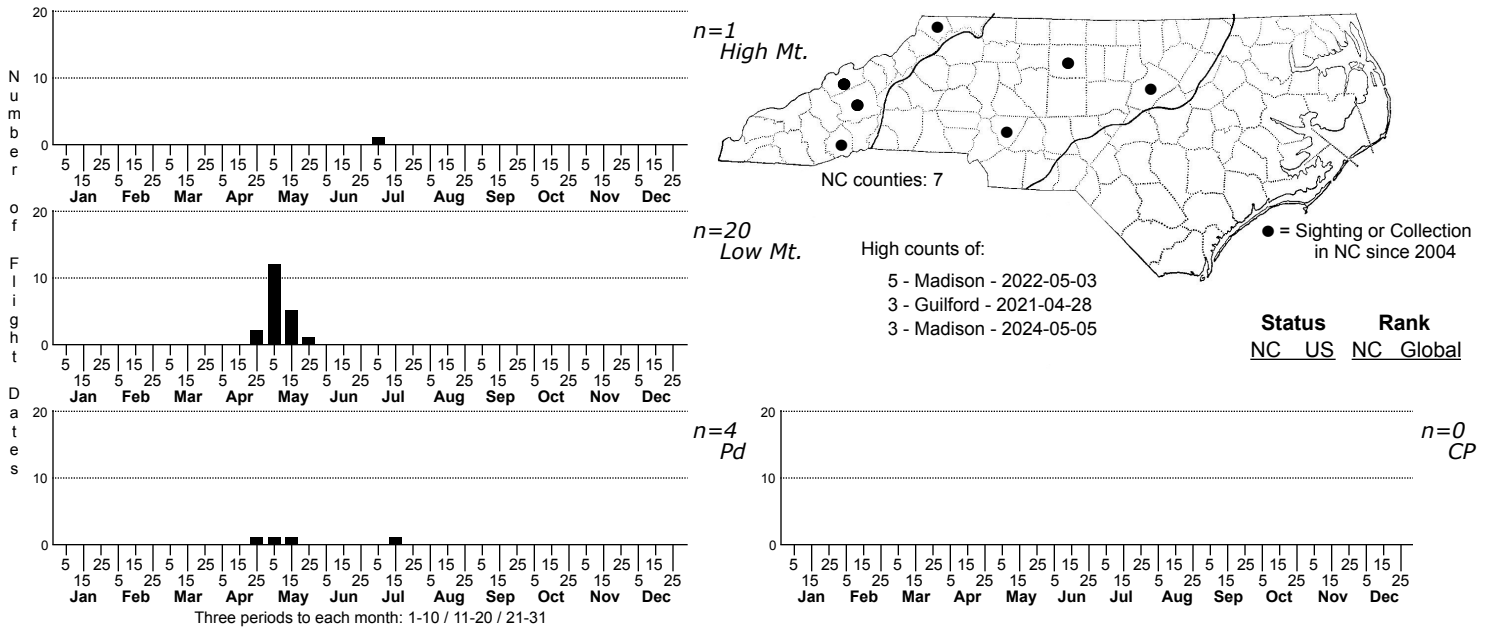


## *Eucosma umbrastriana* Smoky-striped Eucosma



FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Eucosmini

TAXONOMIC\_COMMENTS: *Eucosma umbrastriana* is a member of the *radiatana* species group of Wright and Gilligan (2015). This group includes a complex of 9-13 species that have been difficult to resolve due to their overall external appearances, suspected sexual dimorphism in forewing coloration and patterning in some species, and a scarcity of well-defined diagnostic features in the genitalia. Wright and Gilligan (2015) recognized only nine species in North America and relegated four previously recognized species to synonymy.

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Kearfott (1907); Wright and Gilligan (2015)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following is based in part on Kearfott's (1907) original description. The palps are gray and the head varies from being gray in females to more yellowish brown in males. The antenna is light brown and darker at the base, while the thorax is straw-colored with a thin brown central line and a broader lateral line on each side. In males the forewing ground is straw colored and usually has a diffused median streak of pale amber that extends from the base to where it joins heavier orangish brown shading on the outer third of the wing. In females the orangish brown shading may cover most of the wing. The ocellus consists of a double bar of leaden scales that are often joined below to form a U-shape. The costal lines (strigulae) on the apical third are poorly developed, and the cilia are dark brown and preceded by a line of gray and black dots on the termen. The hindwing is smoky brown with a lighter brown to whitish fringe and is preceded by a darker line. Females tend to have darker hindwings than the males.

Males of *E. umbrastriana* is most likely to be confused with *E. radiatana*. The males are generally similar, but those of *E. umbrastriana* have a heavy wash of orangish-brown on the apical third. In addition, the contrast between the central region of the thorax and the brownish streaks along the sides is less pronounced in *E. umbrastriana* compared with that of *E. radiatana*.

DISTRIBUTION: *Eucosma umbrastriana* appears to be rather broadly distributed across portions of eastern North America from South Carolina, Alabama, and Texas northward to southern Canada. In Canada the range extends from Nova Scotia to as far west as Alberta and British Columbia. Wright and Gilligan (2015) examined specimens from New Hampshire to Alberta, and southward to Maryland, Kentucky, and Colorado. As of 2022, our records are restricted to the Piedmont and Blue Ridge.

FLIGHT COMMENT: Wright and Gilligan (2015) reported a flight season of May through early June. As of 2022, our records are mostly from late-April through May, with a couple of late-season records in July.

HABITAT: Our records are mostly from wooded or semi-wooded habitats.

FOOD: Lam et al. (2011) list a host record for goldenrod (*Solidago* sp.), but we are uncertain of the literature source for this record.

OBSERVATION\_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR [S3-S4]

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

COMMENTS: We currently do not have sufficient information on host use, habitat requirements, distribution, and abundance to accurately assess the conservation status of this species within the state.