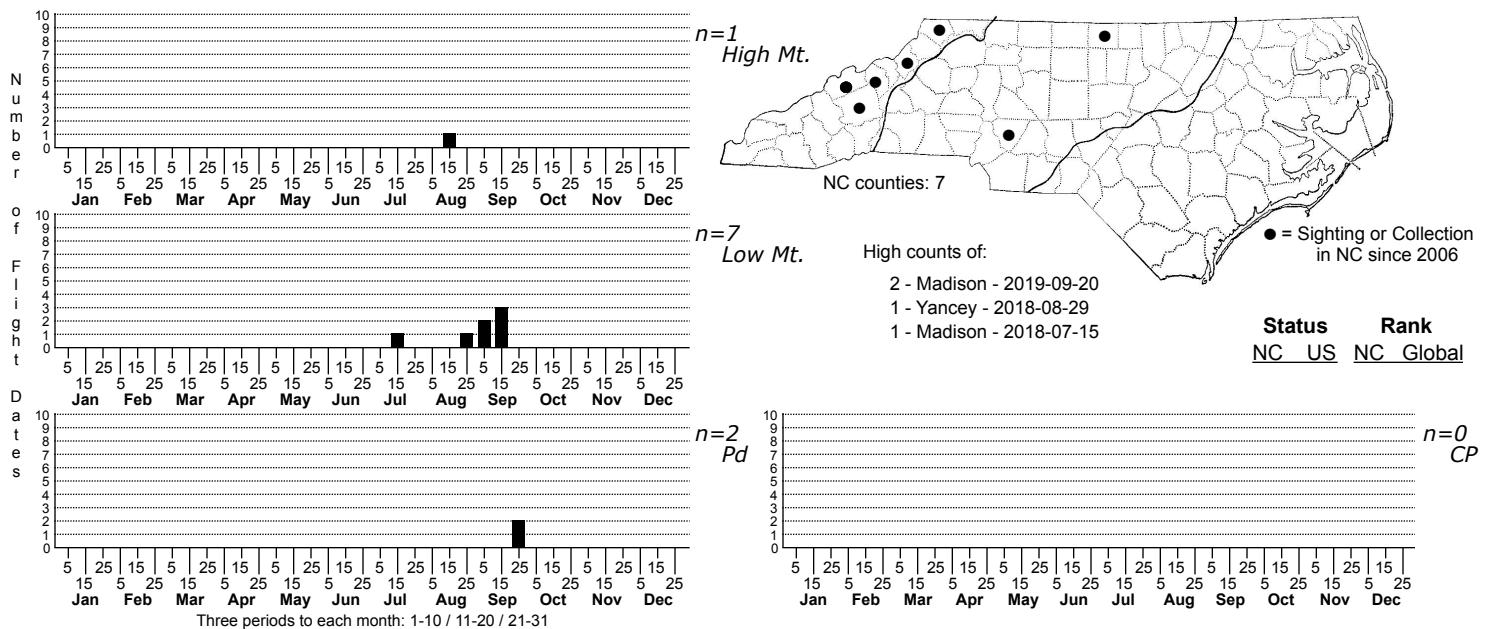


## *Eucosma tomonana* Aster-head Eucosma



FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Eucosmini

TAXONOMIC COMMENTS: *Eucosma tomonana* is one of five species with similar genitalia that Wright and Gilligan (2015) recognized as the *parmatana* species group.

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012)

ONLINE PHOTOS:

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

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following is primarily on the description by Kearfott (1907a). The head, palps, antennae and thorax are hoary-gray. The forewing ground is also hoary-gray with very faint strigulations, and is overlain with two conspicuous blackish-brown dorsal patches. The first is a half crescent-shaped mark at one-third the wing length that curves obliquely outward and terminates near the middle of the wing. The second is semi-ovate patch that occurs at about two-thirds and only extends about a fourth of the way inward. The costa is streaked with long lines of light coppery-tan to grayish-brown. A fragmented one at the middle curves towards the second dorsal patch where it often meets and broadens at its terminus, while a second one just beyond the middle curves all the way to the anal angle. Beyond this are shorter lines that curve outwardly towards the middle of the termen. The ocellus is gray with two or more horizontal black dashes or dots. The fringe is speckled gray, and the hindwing is light smoky-gray with a paler fringe. *Eucosma tomonana* resembles *Suleima helianthana*, which occurs farther east in the Piedmont and generally has a less prominent post-median patch and a more prominent ocellus.

DISTRIBUTION: *Eucosma tomonana* is restricted to eastern North America where it occurs in southern Canada (Ontario; Quebec; Nova Scotia) and in the US from Maine westward to Minnesota, Nebraska and Kansas, and southward to North Carolina and Tennessee. As of 2022, all of our records are from the Blue Ridge Mountains.

FLIGHT COMMENT: Local populations appear to be univoltine with adults flying from July through September in different areas of the range. As of 2022, all of our records are from late-August through mid-September, with the exception of one early seasonal record from mid-July.

HABITAT: This species is generally associated with sunny or partially shaded habitats that support asters and other composites.

FOOD: Records for host use are largely lacking. Putman (1942) reported that the larvae feed on the flower heads of New England Aster (*Sympyotrichum novae-angliae*). Other species of asters or perhaps other composites are likely used in North Carolina since New England Aster is not present at several of our collection sites.

OBSERVATION METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR [S2-S3]

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

COMMENTS: This species is at the southern limit of its range in the western mountains and appears to be uncommon within the state.