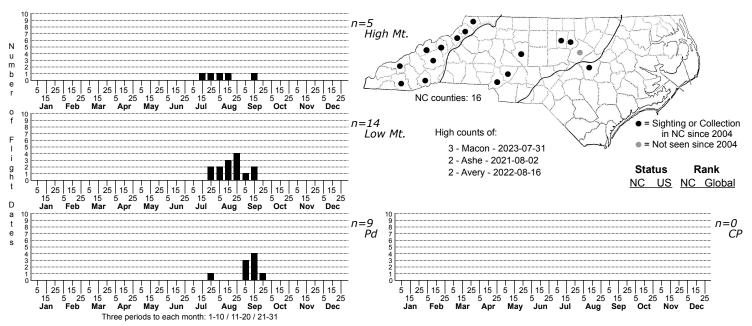
## Eucosma parmatana Aster Eucosma



FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Eucosmini

TAXONOMIC\_COMMENTS: <i>Eucosma parmatana</i> is one of five species with similar genitalia that Wright and Gilligan (2015) recognized as the <i>parmatana</i> species group. This species (sensu Wright and Gilligan, 2015) has had a complex taxonomic history with numerous species being described with <i>parmatana</i> like phenotypes, and mostly differing in the size of the interfascial spot on the inner margin of the forewing. Miller (1983) treated five of these as synonyms of <i>E. parmatana</i> and Wright and Gilligan (2015) relegated a sixth species to synonymy, while retaining one western form (<i>E. oregonensis</i> as a separate species. The authors noted that a thorough study in needed of the complex before any additional taxonomic changes are made.

FIELD GUIDE DESCRIPTIONS: ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Wright and Gilligan (2015) TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following description is mostly based on that of Wright and Gilligan (2015) and applies best to the typical forms that are found in North Carolina. The head and palps vary from grayish to brown. The ground color of the forewing is similar and is overlain with a weakly expressed, blackish-brown, subbasal and median fascia. The most conspicuous mark is a variably expressed white patch on the inner margin. It is located near the middle and between the subbasal and median fascias, and when fully developed terminates near the center of the wing. The ocellus is conspicuous, with the central field crossed by two or three black dashes. The costal strigulae are well-defined and often white, but sometimes concolorous with the grayish ground color. The hindwing varies from grayish-brown to brown and has a slightly paler fringe. Wright and Gilligan (2015) have illustrations of many of the phenotypic variants that occur across the range, as well as a comprehensive summary of the taxonomic history of this species.

DISTRIBUTION: <i>Eucosma parmatana</i> (sensu Wright and Gilligan, 2015) occupies a broad area of North America from the Rocky Mountains eastward to the Atlantic Seaboard. The authors examined specimens from Nova Scotia to Alberta, and as far south as Alabama, Louisiana, and Arizona. Pohl et al. (2018) have records for Canada that extend from the Yukon Territory and British Columbia eastward to Prince Edward Island. As of 2022, most of our records are from the Blue Ridge, with a few others from the Piedmont.

FLIGHT COMMENT: The adults have been observed from April through September, with a seasonal peak typically in July through August. As of 2022, our records are from late-July through mid-September.

HABITAT: Local populations occur in both forest and forest edge habitats, as well as more open habitats that support asters.

FOOD: Members of the  $\langle i \rangle E$ . parmatana $\langle i \rangle$  complex have been found feeding on the flower heads of asters, including Bigleaf Aster ( $\langle i \rangle Eurybia macrophylla \langle i \rangle$ ), White Panicle Aster ( $\langle i \rangle Symphyotrichum lanceolatum var. lanceolatum \langle i \rangle$ ), and Lindley's Aster ( $\langle i \rangle S$ . ciliolatum  $\langle i \rangle$ ).

OBSERVATION\_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR [S3-S5]

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

COMMENTS:

March 2024

The Moths of North Carolina - Early Draft