

FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Eucosmini

TAXONOMIC COMMENTS:

FIELD GUIDE DESCRIPTIONS: **ONLINE PHOTOS:** TECHNICAL DESCRIPTION, ADULTS: Wright and Gilligan (2023). TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following description is based on that of Wright and Gilligan (2023). This species is one of the smallest of the North American <i>Epiblema</i> with an average forewing length of only 5.1 mm. The head is white and the labial palps are white and lack dark spots as seen on some  $\langle i \rangle$  Epiblema $\langle i \rangle$ . The whitish antenna has a black mark on the pedicel that is conspicuous in specimens from south Texas, but reduced to absent in individuals from North Carolina. The forewing is white with some gravish tan suffusion and is variably marked with one or more arrays of blackish dots. These include three to five dots at the base of the wing, one relatively large one near the middle of the wing at about one-fourth the wing length, one or two dots on the proximal margin of the ocellus, two in the ocellus, and four to five evenly distributed ones along the inner margin. The ocellus is whitish and often has pale pink tints, while the white costal strigulae are delimited by numerous short blackish dashes. The termen has a narrow salt-and-pepper colored band from the tornus to the apex. The hindwing is grayish brown with a lighter fringe.

DISTRIBUTION: <i>Epiblema separationis</i> is spottily distributed across southeastern coastal regions in what appears to be a series of isolated populations that are known from southern and eastern Texas, Louisiana, Mississippi, Alabama, southern Florida and coastal North Carolina (Wright and Gilligan, 2023). As of 2024, all of our records are from coastal habitats in the southern half of the state.

FLIGHT COMMENT: Wright and Gilligan (2023) noted that in Texas there appear to be two primary adult flights, with one from late March to mid-June, and the second from mid-September to late-December. As of 2024, our records extend from mid-May to early-September, with the exception of one early season record from early-March.

HABITAT: Our records are all from maritime communities and often in close proximity to brackish or saltwater habitats.

FOOD: Sea Oxeye (<i>Borrichia frutescens</i>; Asteraceae) appears to be a host based on museum specimens that Wright and Gilligan (2023) and MacKay (1959) found from south Texas and south Florida. These had label inscriptions, "ex. <i>Borrichia frutescens</i>" or "reared from <i>Borrichia frutescens</i> gall." In North Carolina, Sea Oxeye commonly grows along the drier edges of salt and brackish marshes.

OBSERVATION METHODS: The adults are attracted to lights, but perhaps only weakly so given the dearth of records from throughout the range of the species.

NATURAL HERITAGE PROGRAM RANKS: GNR[S1S3]

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

COMMENTS: <i>Epiblema separationis</i> is rare within the state where it appears as a northern disjunct from the nearest known populations in Florida. Almost all of our records are from Fort Macon State Park in Carteret County, where it appears to be locally common. March 2025