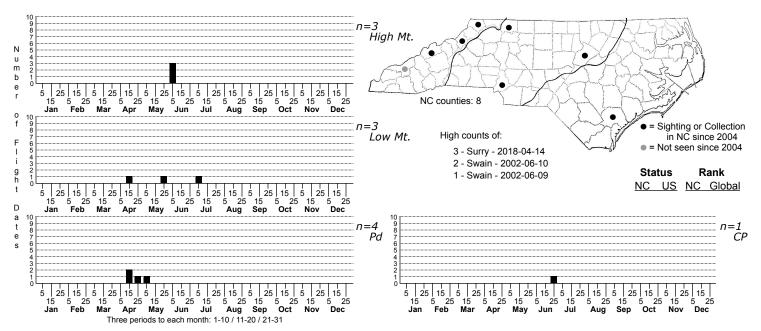
## **Dichomeris setosella** Hairy Dichomeris



FAMILY: Gelechiidae SUBFAMILY: Dichomeridinae TRIBE: [Dichomeridini] TAXONOMIC\_COMMENTS:

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Hodges (1986)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: <i>Dichomeris setosella</i> and <i>D. bilobella</i> are two closely related species that have very similar patterning and coloration on the forewing. The basal half has a dull, pale-yellow wash except for a conspicuous dark mark along the inner margin. The mark begins basally as a roughly triangular-shaped feature that contracts posteriorly to a narrow neck before expanding again into a broad, weakly curved, diagonal bar that projects towards the costa. The bar terminates before reaching the costa and is followed posteriorly by a wide zone of grayish to grayish-black wash in the post-medial area. Within this is a small black spot at the end of the cell that is bordered basally and distally to varying degrees with pale-yellow scales. The grayish zone is followed by a narrow, pale-yellow, transverse line that can vary from straight to wavy, particularly in the medial area. The subterminal portion of the forewing has a similar grayish to grayish-black wash, but is often a shade darker than that in the postmedial region. A line of dark dots is present at the base of the termen, with the dots having varying degrees of yellow scaling posteriorly.

North Carolina specimens are best identified using either genitalia, size, or the morphology of the labial palps. For a large series of specimens that have been identified using genitalia (J.B. Sullivan, pers. comm.), the wing length of <i>D. bilobella</i> typically varies from 8-9 mm versus 6-7 mm for <i>D. setosella</i> the scaling on the second segment of the labial palps is also diagnostic (Hodges, 1986), with <i>D. setosella</i> having a strong ventral tuft at the apex that projects forward. In contrast, <i>D. bilobella</i> lacks a prominent tuft and has scales on the ventral side that are more or less appressed to the second segment. The most conspicuous scaling is on the dorsal surface. Worn specimens of <i>D. setosella</i> may not have an obvious projecting tuft and can cause confusion. Another feature is that helpful is that the third palp segment is much wider in <i>D. bilobella</i> about twice the width of that in <i>D. setosella</i> (J.B. Sullivan, pers. comm.).

Because external patterning on the forewing widely overlaps between these two species, specimens should be submitted with either a wing length measurement or a lateral view of the labial palps.

DISTRIBUTION: Monroe (1986) noted that <i>D. setosella</i>, <iD. bilobella</i>, and <iD. vindex</i> (a more northern species) have commonly been misidentified or confused and many records are unreliable. He reported this species to occur from northwestern New York southward to southern Florida, and westward to Manitoba, eastern Kansas, central Oklahoma, and Brownsville, Texas. This speies probably occurs statewide in North Carolina, but additional information is needed on its distribution within the state.

FLIGHT COMMENT: Please refer to the flight charts.

HABITAT: Local populations are generally associated with open woods, woodland edges or fields where the host plants occur.

FOOD: The larvae are leaf folders that feed mostly on members of the Asteraceae, including species of <i>Ageratina</i>, <i>Eupatorium</i>, <i>Pluchea</i>, <i>Solidago</i>, <i>Verbesina</i> and <i>Vernonia</i> (Hodges, 1986; Heppner, 2007; Robinson et al., 2010). Specific hosts that have been reported include White Snakeroot (<i>Ageratina altissima</i>), Saltmarsh Fleabane (<i>Pluchea odorata</i>) and White Crownbeard (<i>Verbesina virginica</i>). Prentice (1966) reported two isolated cases of this species using Northern White Cedar (<i>Thuja occidentalis</i>) and Eastern White Pine (<i>Pinus strobus</i>) in Canada that seem unlikely (Monroe, 1986) and need additional verification.

OBSERVATION\_METHODS: The adults occasionally visit lights. More information is needed on host use and the larval life history, particularly in North Carolina.

NATURAL HERITAGE PROGRAM RANKS:

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

COMMENTS: