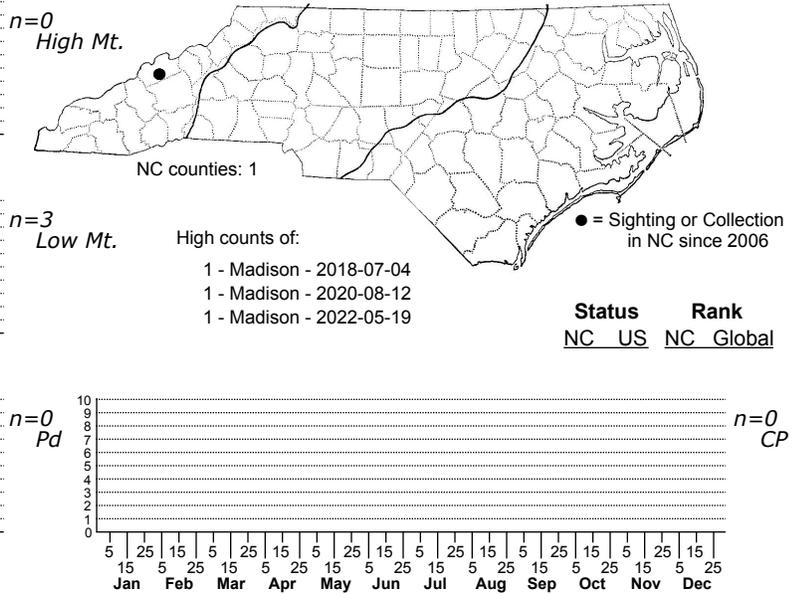
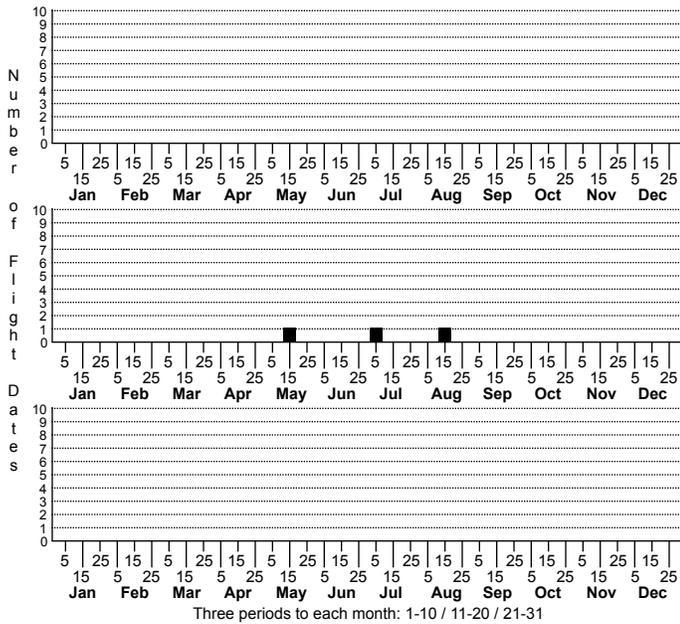


Dichomeris vindex No common name



FAMILY: Gelechiidae SUBFAMILY: Dichomeridinae TRIBE:

TAXONOMIC COMMENTS: *Dichomeris* is a large genus with several hundred species that occur throughout the world. Hodges (1986) recognized 74 species in North America north of Mexico, with 19 species groups. Most are leaf-tiers and they use a taxonomically diverse array of plant hosts, including members of 18 families of plants in North America. As of 2025, North Carolina has 35 documented species, and at least one undescribed species from the Sandhills.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Hodges (1986)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Hodges (1986)

ID COMMENTS: *Dichomeris vindex*, *D. bilobella* and *D. setosella* are three closely related species that have very similar patterning and coloration on the forewings. 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. The prominent dark mark on the basal half of the wing extends to the inner margin.

North Carolina specimens of these three species 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 *D. bilobella* in North Carolina typically varies from 8-9 mm versus 6-7 mm for *D. setosella*. The scaling on the second segment of the labial palps is also diagnostic (Hodges, 1986), with *D. setosella* having a strong ventral tuft at the apex that projects forward. In contrast, *D. bilobella* and *D. vindex* lacks a prominent ventral tuft and have 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 *D. setosella* may not have an obvious projecting tuft and can cause confusion.

Hodges (1986) noted that the shape of the pale-yellow transverse line at two-thirds the wing length is usually helpful in sorting out these species. In *D. setosella*, the line is slightly waved medially and angled slightly toward the base on the costal margin. In *D. vindex* the line is straight medially and angled slightly toward the apex on the costal margin. In *D. bilobella* the line is waved medially and often more broadly angled toward the apex. As of 2025, *D. vindex* has only been found at a single site in Madison County and probably does not occur east of the Appalachians (Hodges, 1986). Because external patterning on the forewing widely overlaps between all three species, specimens should be submitted with both a wing length measurement and a lateral view of the labial palps whenever feasible.

DISTRIBUTION: *Dichomeris vindex* occurs in southern Canada (Manitoba; Ontario; Quebec) and in the US mostly west of the Appalachian Mountains. The range extends from eastern Texas northward to Illinois and Indiana, and eastward to eastern Kentucky, western North Carolina, Mississippi, and the western Florida Panhandle. Isolated records that appear to be valid are also known from northeastern Florida and Maryland. As of 2025, we only have records from a single site in the Blue Ridge. David George and Jeff Niznik have collected several specimens from Chatham and Orange Counties in the Piedmont that appear to be this species, but that need additional verification based on genitalia.

FLIGHT COMMENT: The adults have been documented from March through September in different areas of the range. As of 2025, our three records are from mid-May through mid-August.

HABITAT: Local populations are generally found in sunny or partially shaded habitats such as woodland openings, roadway corridors, fields and prairies.

FOOD: As of 2025, the only known host is Hairy Sunflower (*Helianthus hirsutus*); Hodges, 1986, BugGuide) but other sunflowers might serve as hosts. As of 2025, we do not have any feeding records for North Carolina.

OBSERVATION_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR [S1S2]

STATE PROTECTION:

COMMENTS: