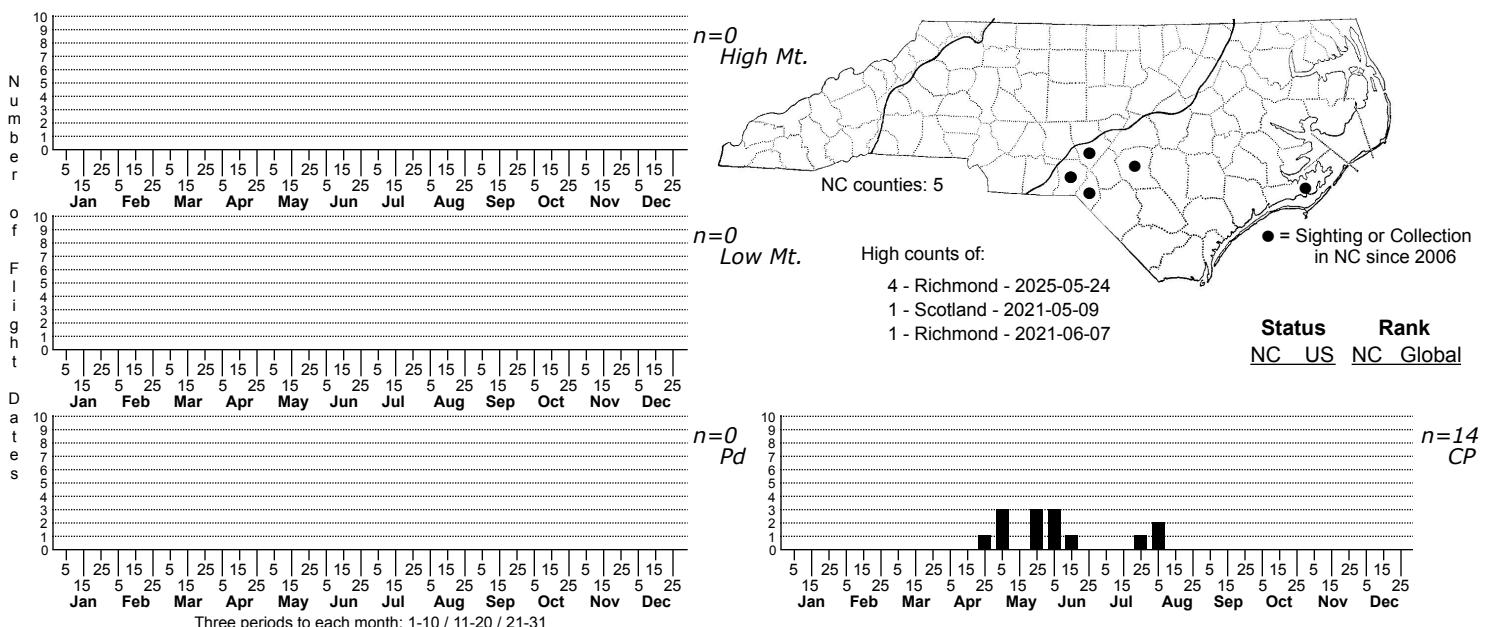


Dichomeris fistuca None



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 leafiers 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:

ID COMMENTS: Hodges (1986) reported that *D. inserrata* and *D. fistuca* have nearly identical external coloration and patterning and require the examination of genitalia for accurate identification. Both species have a two-toned forewing with a creamy-yellow to orangish-yellow region that fills most of the subcostal portion of the wing, along with two large, brownish-black to blackish marks on the remainder of the wing. The first extends from near the wing base along the inner margin and gradually widens near the middle of the wing, then curves inward and terminates on the inner margin at around three-fourths the wing length. The second is a semi-oval mark that fills most of the apical third of the wing. The two marks meet at around three-fourths the wing length and are partially separated by a broadly-angled tooth that tapers to a blunt tip just beyond the middle of the wing. Both species have a noticeable indentation along the edge of the basal mark at around two-fifths the wing length that helps to separate these from *D. flavocostella*.

Although Hodges (1986) favored the use of genitalia for identification, he also noted that the shape of the posterior (inner) margin of the pale costal band in the forewing is useful for sorting these species out. For *D. inserrata*, the posterior margin is generally straight from the wing base to two-fifths the wing length where the black band bulges outward. It is also either straight or slightly convex as it cuts diagonally across the wing from about two-thirds the wing length to the subapical region of the costa. In contrast, the basal and terminal sections are usually bowed inward for *D. fistuca*. When combined with the middle section, these produce a pattern of three concave arches.

In North Carolina, Coastal Plain specimens of *D. fistuca* that have been identified based on genitalia tend to have a dull orangish-yellow color in the subcostal region. In contrast, *D. inserrata* from the mountains that have been identified based on genitalia tend to have a cream-colored to dull white subcostal region. *D. fistuca* from the Coastal Plain also commonly has one or more small teeth or indentations between the wing base and the major indentation at two-fifths, while *D. inserrata* from the Blue Ridge does not. In general, these two groups fit the patterns in maculation described above by Hodges (1986).

Most specimens from the Piedmont resemble *D. inserrata* from the mountains (see examples on iNaturalist), but have not been identified based on genitalia to confirm that they are this species. We elected to treat these as *D. inserrata* based on their maculation and geographic distribution, with the caveat that species from this region need confirmation based on the examination of genitalia. Hodges (1986) reported the range of *D. fistuca* to include Florida northward to coastal South Carolina, which is consistent with our tentative assignment of Piedmont populations to *D. inserrata*, i.e., that *D. fistuca* is rarely found outside of the Coastal Plain.

DISTRIBUTION: *Dichomeris fistuca* appears to be largely confined to Coastal Plain habitats from North Carolina southward to coastal South Carolina and southern Florida, and westward to the Florida Panhandle and an adjoining area in Alabama. A few scattered records have been reported from northern Alabama, western North Carolina and southern Minnesota. As of 2025, our records are mostly from the Sandhills and along the coast in Carteret County. J.B. Sullivan reported two specimens from a bog in Ashe County in the northern Blue Ridge that need further verification. iNaturalist records suggest that this species may be in decline, with recent records only known for North Carolina, a single site in southern Alabama and a small cluster in south-central Florida.

FLIGHT COMMENT: The adults have been observed from March through September in different areas of the range. As of 2025, we have records from late-April through early-August.

HABITAT: Our records are mostly from xeric habitats that are often in close proximity to wetlands. The Blue Ridge records are a mountain bog.

FOOD: The larval host plants appear to be undocumented (Hodges, 1986).

OBSERVATION METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR S2S3

STATE PROTECTION:

COMMENTS: