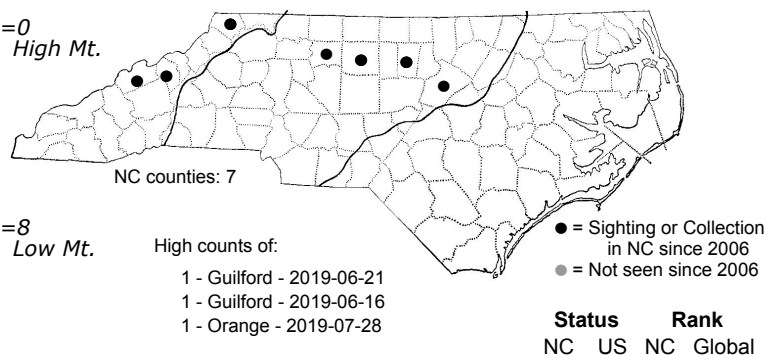
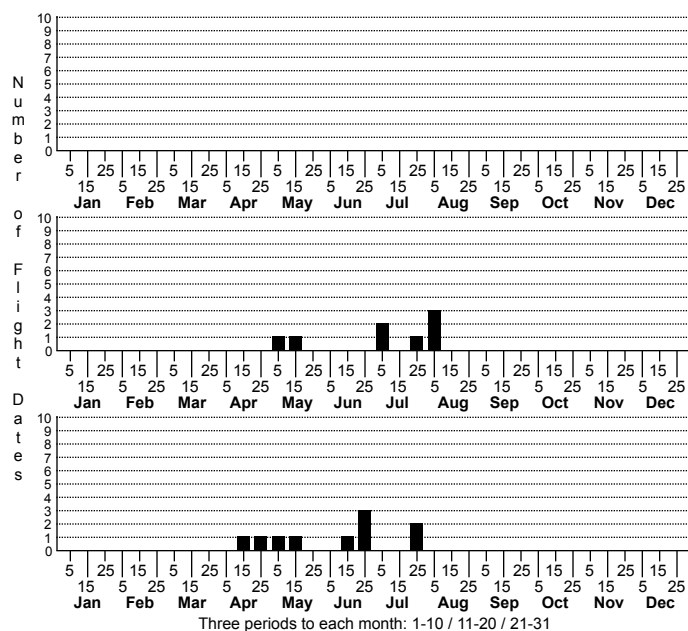


Dichomeris inserrata Indented Dichomeris



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: Beadle and Leckie (2012)

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. *Dichomeris fistuca* from the Coastal Plain also commonly has one or more small teeth or indentions 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 inserrata* is found in eastern North America, including portions of southern Canada (Ontario; Quebec) and much of the eastern US from Maine westward to Wisconsin and Minnesota, and southward to eastern Texas, Louisiana, Mississippi, Alabama and southern Florida. As of 2025, this species appears to be restricted to the Blue Ridge and Piedmont, but more effort is needed to identify specimens using genitalia.

FLIGHT COMMENT: The adults have been observed from March through October in different areas of the range, with a seasonal peak commonly in June and July. As of 2025, our records range from mid-April through early-August.

HABITAT: This species is generally associated with fields, forest edges and semi-wooded residential neighborhoods with goldenrods nearby.

FOOD: Larvae feed on goldenrods (*Solidago* spp.), including Tall Goldenrod (*Solidago altissima*); Hodges, 1986; Loeffler 1994).

OBSERVATION_METHODS: The adults are attracted to lights and the larvae can be found on goldenrods during the summer months.

NATURAL HERITAGE PROGRAM RANKS: GNR [S2S4]

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

COMMENTS: