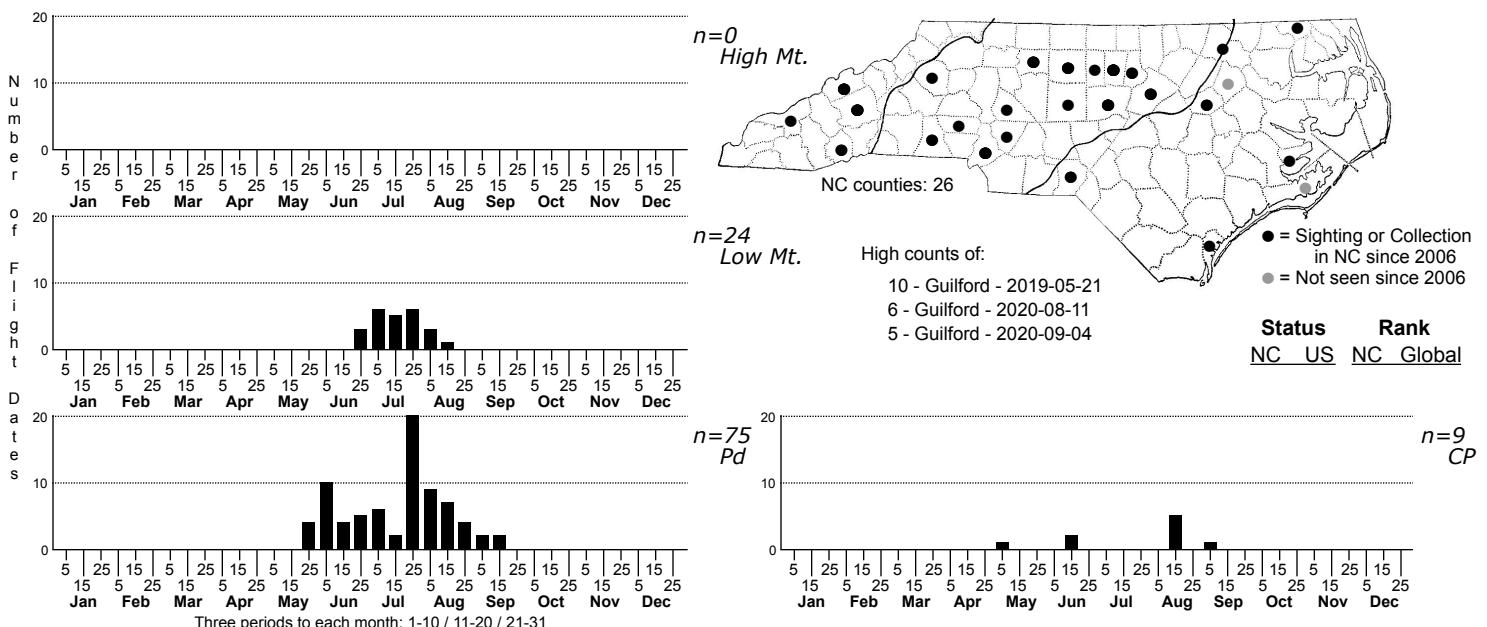


# Dichomeris inversella Inverse Dichomeris



FAMILY: Gelechiidae SUBFAMILY: Dichomeridinae TRIBE:

TAXONOMIC COMMENTS: *Dichomeris inversella* 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: *Dichomeris inversella* has a rather non-descript forewing that is mottled with brown, grayish-brown, and pale yellowish-gray scale patches. It is often heavily peppered with small, irregular, dark-brown spots, with the most conspicuous mark being a well-defined, pale, subterminal line at around four-fifths the wing length that has an outward projecting tooth near the middle. A pair of small, dark spots that are margined with white scales posteriorly are present at the middle of the wing, along with a similar single spot at three-fourths. However, these are often masked by heavy dark dusting in these areas.

The outer surface of the first and second segments of the labial palps are brown, and there is a large dorsal scale tuft on the second segment that has the apices of the scales off-white. The third segment is mostly white except for an incomplete, brown ring at two-thirds the length (Hodges, 1986). The frons, vertex, and occiput are mottled grayish-brown and pale-gray, with white-tipped scales, and with the medial parts paler than the surrounding area. The antenna is dark grayish-brown, and the legs are dark-brown with a few lighter tarsal rings. The hindwing is brown and has a prominent fringe.

*Dichomeris inversella* is often confused with *D. kimbballi*. Hodges (1986) described *D. kimbballi* as having a more washed-out appearance, which we interpret as having a paler and grayer ground color. The best field mark is that *D. kimbballi* has a slender, dark-gray spot on the costal margin that widens inward. It occurs just beyond the middle of the wing and between the pair of dark spots at the middle of the wing, and the single spot at three-fourths, that are usually visible in this species. In *D. inversella*, the costal margin is more-or-less uniformly dark gray from the base to the apex. In addition, the area between the subterminal line and outer margin is darker than the remainder of the wing in *D. kimbballi*, but much less so in *D. inversella*. The third segment of the labial palp is also useful, with *D. inversella* having a white segment except for an incomplete, dark ring below the tip. In contrast, the third segment of *D. kimbballi* is dark at the tip and base, with a gray area in between.

DISTRIBUTION: *Dichomeris inversella* is broadly distributed across most of the eastern US and in adjoining areas of southern Ontario. In the US, the range extends from New Hampshire and Vermont southward to southern Florida, and westward to central Texas, central Oklahoma, Missouri, Iowa, Illinois and southeastern Nebraska. As of 2025, we have records from all three physiographic provinces, with relatively few from the western Piedmont and eastern Coastal Plain, and none from the high mountains.

FLIGHT COMMENT: *Dichomeris inversella* flies year-round in Florida and from May through September in areas farther north. As of 2025, our records range from early-May through late-September, with a seasonal peak in June through August.

HABITAT: Our records come mainly from semi-wooded residential neighborhoods, and both riparian and upland forested sites. This species is rarely observed in xeric woodlands, unlike *D. kimbballi* that is common taken in such habitats.

FOOD: Although the adults are commonly taken at lights, the host plants are largely undocumented. The larvae possibly feed on Pecan (Hodges, 1986). This information appears to come from the label on a single specimen from Edgecombe County, NC. Hodges (1986) was unsure whether it was actually reared on Pecan or whether the adult -- a worn specimen -- was collected on it.

OBSERVATION METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR [S4S5]

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

COMMENTS: