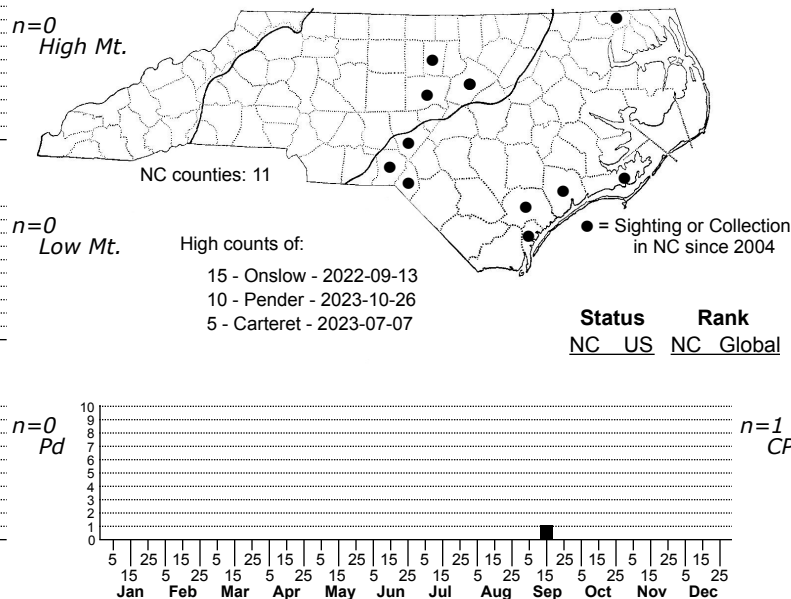
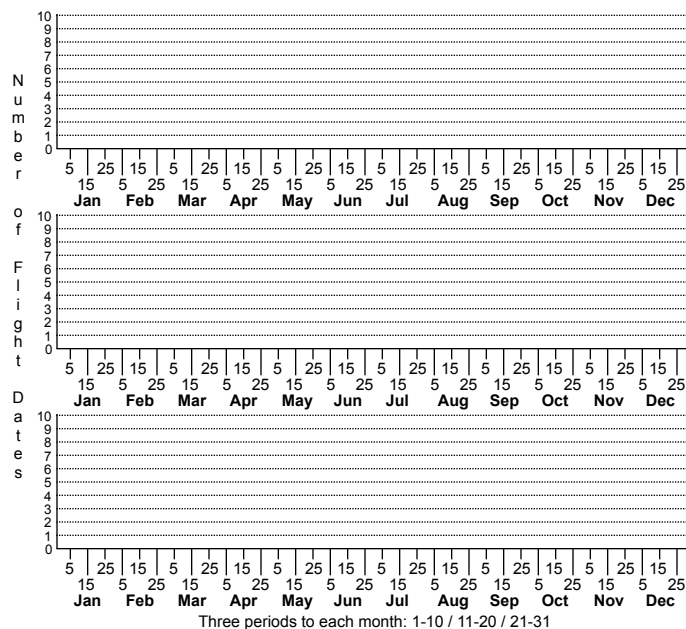


Coptodisca diospyriella Persimmon Leaf Miner



FAMILY: Heliozelidae SUBFAMILY: TRIBE:

TAXONOMIC_COMMENTS: This New World genus includes 18 described North American species of small leaf-mining moths, as well as several undescribed species. When mature, the larva cuts a disc of tissue out of the leaf and uses it to form a cocoon. All known species of *Coptodisca* feed on woody plants, and most are restricted to a single plant genus.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Chambers, 1874.

TECHNICAL DESCRIPTION, IMMATURE STAGES: Eiseman, 2019

ID COMMENTS: The head, thorax, and ground color of the forewings is silvery white with a faint golden-yellow tinge just before the paired costal streaks. At about three-fourths the wing length there is a matched pair of white, triangular-shaped costal and dorsal streaks with black borders. The dorsal streak is slightly anterior to the costal streak, and both curve slightly posteriorly. A light golden-yellow patch occurs immediately posterior to the costal streak. Posterior to the dorsal streak is an extensive zone of blackish scales that fades into the fringe. A large, fan-shaped apical patch occurs at the end of the wing that contrasts with the surrounding whitish cilia. This species has wing patterning that is similar to several closely related *Coptodisca* that are host-specific. Remarkably few specimens have been collected or reared since the species was described by Chambers in 1874, and there is much to learn about phenotypic variation within the species. Male genitalia of *Coptodisca* are difficult to dissect and embed in a fixed position. However, reliable identification can be achieved by rearing adults from their host plants or through DNA analysis.

DISTRIBUTION: Scattered populations of *Coptodisca diospyriella* have been found in the eastern US, including in New Jersey, Maryland, Oklahoma, Texas, Tennessee, Kentucky, North Carolina, Alabama and Florida (Eiseman, 2019). As of 2023, we have only a few records for the state that are all based on leaf mines from the eastern Piedmont and Coastal Plain.

FLIGHT COMMENT: The flight season is poorly documented. Individuals appear to be on the wing primarily during the summer months. We have occupied leaf mine from mid-May, which suggests that the adults emerge as early as the first week of May in North Carolina.

HABITAT: Populations in North Carolina use American Persimmon. This species is often found along fencerows, forest edges, or in abandoned fields, but also occurs in bottomland, and in mesic to dry forests.

FOOD: Larvae are leaf miners of American Persimmon (*Diospyros virginiana*) (Robinson et al., 2010; Eiseman, 2019)

OBSERVATION_METHODS: We recommend collecting leaf mines from persimmons and rearing the adults. This is the only *Coptodisca* that mines persimmons in North Carolina, so any mine found on this species can be reliably assigned to *C. diospyriella*.

NATURAL HERITAGE PROGRAM RANKS: [GNR] S2S4

STATE PROTECTION:

COMMENTS: