

## 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 <i> Coptodisca</i> 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: Snodgrass, 1920

ID COMMENTS: The following description is primarily based on the descriptions by Chambers (1874) and Forbes (1923). The head is bronzy, while the antenna is fuscous with a golden tinge. The forewing in leaden gray from the base to the middle, with a shiny luster. The ground color from the middle to the wing tip is golden. There is a broad, nearly straight, metallic, silvery streak at about two-thirds that extends from the costa to the middle of the wing. The streak is widest at the costa and is margined by converging black lines on both sides. Nearly opposite the costal streak is a matching dorsal streak of the same hue that also has converging dark margins. Beyond this there is a dark brown blotch that adjoin the streak, then the dorsal fringe with a blackish basal line. Beyond the large triangular costal streak is a shorter, blackish brown line in the costo-apical cilia that runs nearly perpendicular to the costa. At the wing tip is a conspicuous black, often triangular-shaped, apical spot, with a few metallic, silvery scales in its center. It is bordered by silvery scales of the cilia above and below it. A conspicuous straight black streak extends from the apical spot to the apex of the cilia. The cilia are light gray to light yellowish brown, and the hindwing is leaden gray. <i> Coptodisca splendoriferella</i> is one of several <i> Coptodisca</i> species that have very similar markings. Male genitalia of <i> Coptodisca</i> are difficult to dissect and embed in a fixed position. Fortunately, most species specialize on different host plants and can be identified by either rearing adults or by genetic analyses. This is the only species east of the Mississippi River that is a specialist on members of the Rosaceae.

DISTRIBUTION: <i>Coptodisca splendoriferella</i> is a rather poorly documented species that has been found at scattered locations in Ontario and the eastern US. Populations are known from Massachusetts, Missouri, Michigan, Ohio, Kentucky, Tennessee, and North Carolina. As of 2020, our only records are from a single county in the Coastal Plain and another in the lower mountains.

FLIGHT COMMENT: Based on observations made by Snodgrass (1920) in New York and vicinity, local populations have at least two generations per year.

HABITAT: This species occupies a variety of habitats, including open woodlands and forest edges, mesic forests, orchards, and urban settings.

FOOD: The adults use woody species in the Rosaceae (Eiseman, 2019), including members of the following genera: <i>Crataegus</i> (hawthorns), <i>Cydonia</i> (quince), <i>Malus</i> (apples and crabapples), <i>Mespilus</i> (medlar), <i>Prunus</i> (plums and cherries), and <i>Pyrus</i> (pears). The few records that we have from North Carolina are from Black Cherry (<i>P. serotina</i>).

OBSERVATION\_METHODS: The adults appear to rarely visit lights and are best obtained by rearing from the host plants. Rearing is the best way to identify species since many species appear to be indistinguishable from one another (Forbes, 1923).

NATURAL HERITAGE PROGRAM RANKS: GNR S2S3

## STATE PROTECTION:

COMMENTS: The distribution and abundance of this species within the state are poorly documented since the adults rarely visit lights and the leaf mines are easily overlooked.