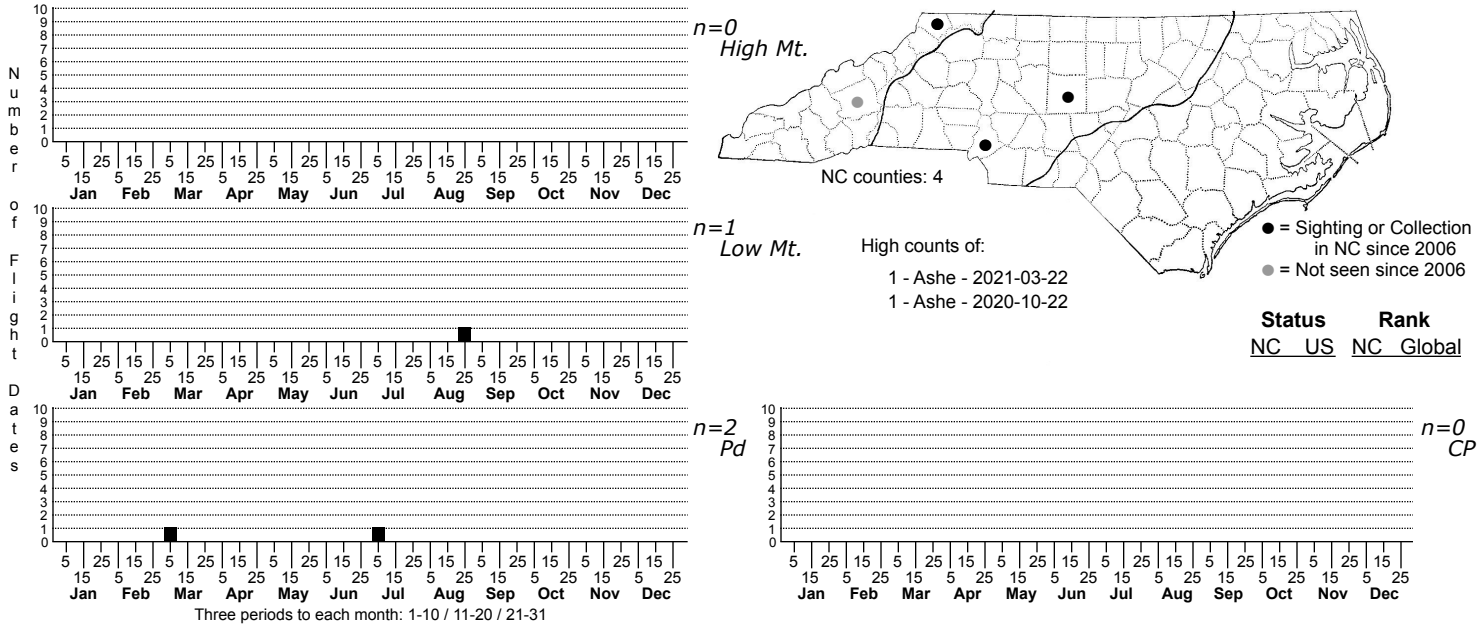
Coptotriche zelleriella None



FAMILY: Tischeriidae SUBFAMILY: [Tischeriinae] TRIBE: [Tischeriini]
TAXONOMIC_COMMENTS: Coptotriche is a genus of specialized leafminers that currently consists of 27 recognized Nearctic species. Most species fall within one of two major groups. Members of the first group typically have orangish to yellowish forewings (rarely white) and specialize on oaks and chestnuts, while members of the second group have dark gray, brown, or blackish forewings and mostly feed on members of the Rosaceae (Braun, 1972; Eiseman, 2019).

FIELD GUIDE DESCRIPTIONS: Covell (1984; as Tischeria zelleriella)
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS: Braun, 1972.
TECHNICAL DESCRIPTION, IMMATURE STAGES: Braun, 1972.

ID COMMENTS: The following is from Braun's (1972) description of adults based on studies of 95 specimens from throughout the range of the species. The face is whitish ocherous, while the scales of the vertex and crown vary from whitish ocherous to brownish ocherous. The scales project forward as a bifurcated tuft. The antennal scape is usually paler than the crown, with the shaft pale ocherous and faintly annulated. The forewing is somewhat shining, especially in males. It varies from pale ocherous to reddish or brownish ocherous, and shades to reddish or brownish ocherous at the apex. The apical area is not contrasting in the darkest specimens. The cilia are concolorous around the apex, and pale ocherous toward the tornus. On the underside of the wing there is a narrow fold along the costa to three-fourths. The entire discal area of the male is clothed with long hair-scales directed outwardly and projecting beyond the cell. Females lack these specialized scales. The hindwing of the male is whitish ocherous and distinctly yellower at the apex. The cilia are ocherous (often fuscous-tinged), and are as wide as the forewing. The costal margin abruptly bends downward at three-fourths and joins the dorsal margin at an acute angle. The costal cilia are long from the base to the bend of the costa, then very short from there to the apex. The hindwing of the female varies from pale grayish fuscous to dark gray and is two-thirds the width of the forewing. The cilia are concolorous with the wing, but often reddish tinged. The legs of both sexes are whitish ocherous and densely dusted with dark fuscous on the hind tibiae and tarsi. The abdomen is yellowish and densely dusted above with fuscous scales, especially on the terminal segments.

The male of this species is unusual in having a hindwing that is about as wide as the forewing and that abruptly narrows to an acute apex. Long cilia extend along the anterior margin of the hindwing from the base to about three-quarters, but the cilia are very short from there to the apex (Braun (1972; Microleps.com). Females have narrow hindwings as seen in most Coptotriche and normal cilia on the apical region. The larvae are typical of the genus, but have heads that are proportionate larger relative to the width of the thoracic segments compared with other Coptotriche species.

DISTRIBUTION: Coptotriche zelleriella occurs in Ontario, Quebec, and much of the eastern US to as far south as Texas and Florida (Braun, 1972; Eiseman, 2017). We have only three county records for North Carolina as of 2023, including records from Wake and Scotland counties (BugGuide).

FLIGHT COMMENT: Please refer to the flight charts.

HABITAT: This species uses oaks and chestnuts as hosts and is restricted to habitats with the host species.

FOOD: The larvae are miners in leaves of American Chestnut (Castanea dentata) and several species of oaks, including White Oak (Quercus alba), Swamp White Oak (Q. bicolor), Post Oak (Q. stellata), Chestnut Oak (Quercus montana) and Northern Red Oak (Q. rubra). As of 2024, we have rearing records for Chestnut Oak, Northern Red Oak, White Oak, Swamp Chestnut Oak (Quercus michauxii), and Turkey Oak (Q. laevis).

OBSERVATION_METHODS:

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: