

FAMILY: Tischeriidae SUBFAMILY: TRIBE:

TAXONOMIC_COMMENTS: <i>Coptotriche</i> 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: ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Braun (1972) TECHNICAL DESCRIPTION, IMMATURE STAGES: Braun (1972); Eiseman (2019).

ID COMMENTS: The following is from Braun's (1972) description based on studies of 15 specimens from throughout the range of the species. The face, the forward projecting scales of the tuft, and the antennal scape are all white, while the crown varies from whitish to ocherous. The forewing is typically reddish ocherous, but sometimes paler, while the costal margin, the apical fourth of the wing, and the outer half of the dorsal margin are reddish fuscous. The scales in the apical fourth are dark-tipped. Dark specimens have a purplish tinge in the outer half of the costal margin where the line of dark scales widens. The cilia are typically reddish ocherous, but are more reddish fuscous in dark specimens. They become paler toward the tornus only in pale specimens. The hindwing is very narrow, pale ocherous, and usually has a reddish tinge. The cilia are reddish ocherous. The legs are pale ocherous, and the posterior tarsi are shaded with fuscous. The abdomen is pale ocherous, with fuscous dusting beneath and sometimes above.

DISTRIBUTION: <i>Coptotriche fuscomarginella</i> is spottily distributed in the eastern US where it has been documented in Ohio, Kentucky, New York, Massachusetts, New Jersey, Virginia, and the Carolinas (Braun, 1972; Eiseman, 2019). Eiseman (2019) reared specimens from North and South Carolina (localities not reported), and Tracy Feldman reared an adult from a mine collected from Scotland Co.

FLIGHT COMMENT: Based on scattered records from the eastern US, the adults appear to be active from late spring through August.

HABITAT: This species is dependent on chestnuts and oaks for reproduction and is presumably restricted to forests or successional habitats with oaks or chestnuts.

FOOD: The larvae mine the leaves of chestnuts and oaks. Braun (1972) reared Kentucky specimens from American Chestnut (<i>Castanea dentata</i>), Chestnut Oak (<i>Quercus montana</i>) and Chinquapin Oak (<i>Q. muchlenbergii</i>). Eiseman (2019) also listed Bear Oak (<i>Q. ilicifolia</i>), Willow Oak (<i>Q. phellos</i>), and Black Oak (<i>Q. velutina</i>) as hosts. As of 2022, we have three records that are from Blackjack Oak (<i>Q. marilandica</i>) in the Sandhills and Southern Red Oak (<i>Q. falcata</i>) in the mountains.

OBSERVATION_METHODS: <i>Coptotriche fuscomarginella</i> appears to be uncommon in North Carolina. Direct searches for the mines beginning in late spring or early summer may be the best way to document local populations. This should be coupled with the rearing of adults. Mine characteristics -- in combination with the presence of dark-tipped scales on the apical fourth of the forewings -- should be sufficient to distinguish this species from other species that mine oaks such as <math><i>C. zelleriella</i>. Most records from the eastern US are from reared adults, suggesting that this species is not strongly attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: [GNR] S1S3

STATE PROTECTION:

COMMENTS: