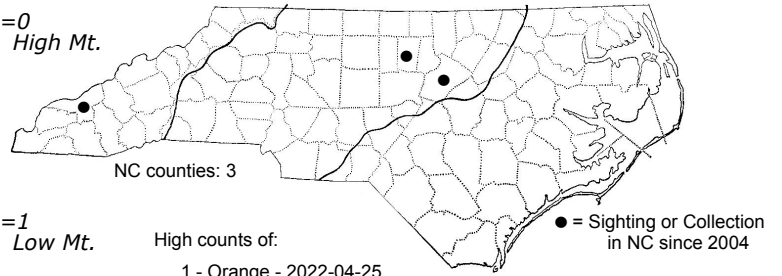
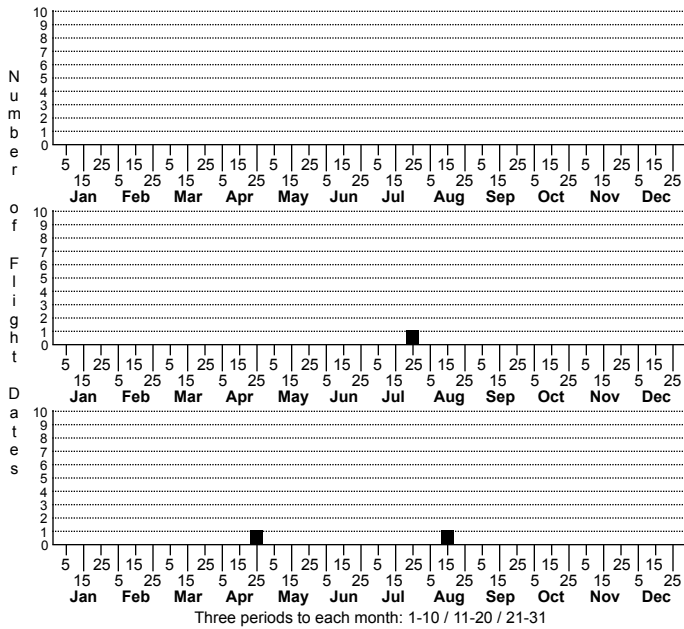


Coptotriche purinosella No common name



High counts of:
 1 - Orange - 2022-04-25
 1 - Swain - 2023-07-30
 1 - Wake - 2023-08-11

Status	Rank
NC	US
NC	Global



FAMILY: Tischeriidae SUBFAMILY: TRIBE:

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:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Braun (1972).

TECHNICAL DESCRIPTION, IMMATURE STAGES: Braun (1972); Eiseman (2022).

ID COMMENTS: This is a distinctive *Coptotriche* that has whitish forewings with concentrations of purplish-brown to blackish scales on the apex, costa, inner margin and tornus. The detailed description that follows is based on that of Braun (1972). The face, tuft, and antennae are whitish and faintly tinged with pale straw or lemon yellow. The ground color of the forewing has the same whitish straw-color, and usually has a faint dusting of dark-tipped scales. A line of blackish-purple or blackish scales extends along the costal margin to just beyond the middle of the costa where it expands into a small and somewhat triangular spot that is very rarely absent. Concentrations of similar-colored scales occur at the apex, along the basal half of the dorsal margin and at the tornus, but these can vary substantially in the degree to which they are expressed. The cilia around the apex is brownish red. It becomes paler toward the tornus, but still retains the reddish tinge.

The hindwing is pale straw-colored and usually has a grayish tinge, while the base of the costa is thickened with dark fuscous scales. The cilia are reddish tinged at the apex of the wing, and the legs are pale straw-colored and dusted with fuscous. The abdomen also is pale straw-colored, and sometimes has a dusting of dark scales above.

DISTRIBUTION: Scattered populations of *Coptotriche purinosella* have been found through many areas of the eastern US and in southern Ontario. In the US, specimens has been documented in Massachusetts, New Jersey, the District of Columbia, Ohio, Indiana, Minnesota, Kentucky, North Carolina, Texas, and Louisiana. As of 2024, our very limited records are from the Blue Ridge and eastern Piedmont.

FLIGHT COMMENT: Local populations are multivoltine, with the flight season spanning from April through November. As of 2024, our very limited records are from late-April to mid-August.

HABITAT: Local populations are associated with hardwood forests, woodlots, fence lines and residential neighborhoods, particularly where White Oak is present.

FOOD: The larvae mine the leaves of oaks, particularly members of the white oak group (Braun, 1972; Eiseman, 2022). The reported hosts include White Oak (*Quercus alba*), Burr Oak (*Q. macrocarpa*), Chestnut Oak (*Q. montana*), Chinquapin Oak (*Q. muehlenbergii*) and Post Oak (*Q. stellata*). The larvae have also been reported to use Southern Red Oak (*Q. falcata*), Darlington Oak (*Q. hemisphaerica*) and Water Oak (*Q. nigra*) in Florida, but these reports need additional verification. As of 2024, we have host records for White Oak in North Carolina.

OBSERVATION_METHODS: The adults are attracted to lights and have been obtained by rearing larvae from mines in White Oak.

NATURAL HERITAGE PROGRAM RANKS: GNR S1S3

STATE PROTECTION:

COMMENTS: *Coptotriche purinosella* appears to be a somewhat rare species in North Carolina despite the fact that the primary host tree (White Oak) is common and widespread in the state. More information is needed on its distribution and abundance before we can accurately assess its conservation status.