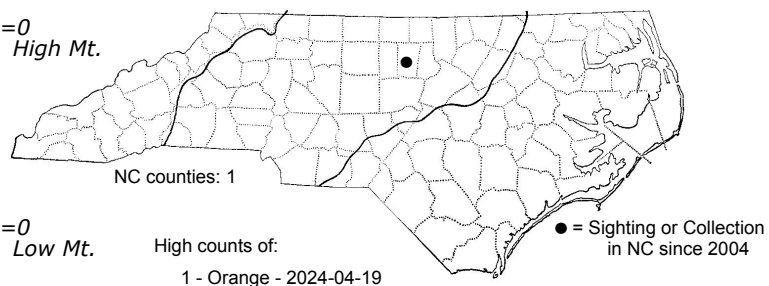
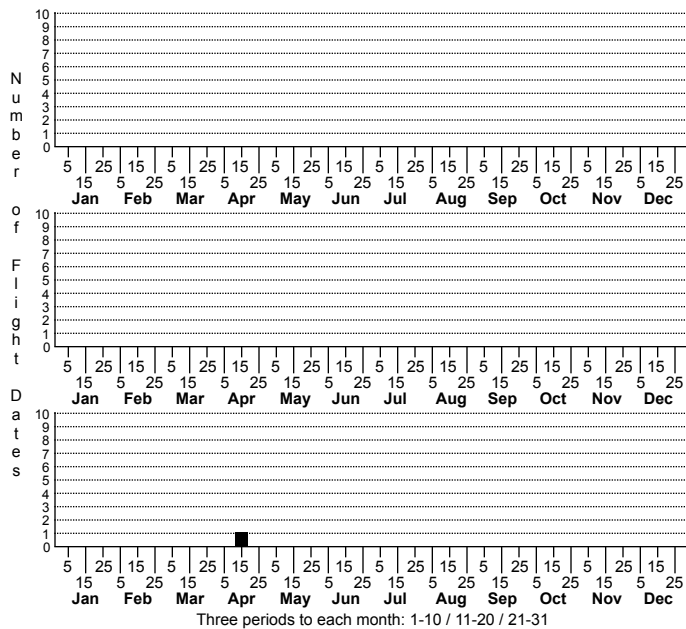
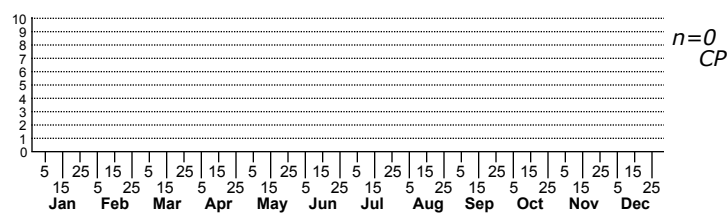


*Cosmopterix floridanella* No common name



Status	Rank
NC	US
NC	Global



FAMILY: Cosmopterigidae SUBFAMILY: Cosmopteriginae TRIBE:  
 TAXONOMIC\_COMMENTS: *Cosmopterix* is a very large genus of small, colorful moths that are found on every continent except Antarctica. There are 31 species that are currently recognized in North America, and all are leafminers.

FIELD GUIDE DESCRIPTIONS:  
 ONLINE PHOTOS:  
 TECHNICAL DESCRIPTION, ADULTS: Koster (2010)  
 TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following description focuses on forewing and antenna patterning, and is based on a more detailed description presented by Koster (2010). The antenna is dark brown with a white line from the base to beyond one-half that is followed towards the apex by four white, two dark brown, two white, two dark brown, one white, three dark brown, two white, two dark brown and eight white segments at the apex. The vertex has two lateral and a medial whitish line, while the thorax has a white median line. The adjoining tegulae are lined with white inwardly.

The forewing varies from grayish brown to brown and has five white lines in the basal area. These include 1) a short and broad costal line from one-quarter the wing length to the transverse fascia, 2) a subcostal line from the wing base to one-quarter the wing length that slightly bends away from the costa, 3) a medial line above the fold from one-fifth to two-fifths, 4) a shorter subdorsal line from one-quarter almost to the transverse fascia and 5) a narrow dorsal line from the wing base to one-third the wing length. A broad pale-yellow transverse fascia is present beyond the middle that narrows towards the dorsum (inner margin). It has an apical protrusion and is bordered at the inner edge by two pale grayish golden metallic tubercular subcostal and subdorsal spots. The subcostal spot is outwardly edged by a patch of blackish brown scales, while the subdorsal spot that is displaced farther from the wing base is inwardly edged with dark brown. A shining white apical line extends from the apical protrusion to the apex. The cilia are concolorous with the ground color of the wing, but a shade lighter, with the color a bit paler towards dorsum. As with other *Cosmopterix*, antenna patterning is helpful in identifying species.

DISTRIBUTION: *Cosmopterix floridanella* is restricted to the eastern US and the Caribbean. Koster (2010) identified and reported specimens from Louisiana, Mississippi (Hodges, 1978), Alabama, Florida, Tennessee and Arkansas, as well as the Cayman Islands (Grand Caymen), Cuba, Jamaica, and the US Virgin Islands (St. Croix). Stephen Dunn recently found this species in Orange County, which is our only record as of 2024.

FLIGHT COMMENT: Adults have been collected from April to May in the eastern US and from December to May and in August on Caribbean islands (Koster, 2010). Local populations probably have two or more generations per year. Our one record as of 2024 is from mid-April.

HABITAT: The preferred habitats are poorly documented.

FOOD: The host species are undocumented.

OBSERVATION\_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR [S1-S3]

STATE PROTECTION:

COMMENTS: As of 2024, we have a single record from North Carolina. More information is needed on the preferred habitats, host plants, distribution and abundance before we can accurately assess the conservation status of this species in North Carolina.