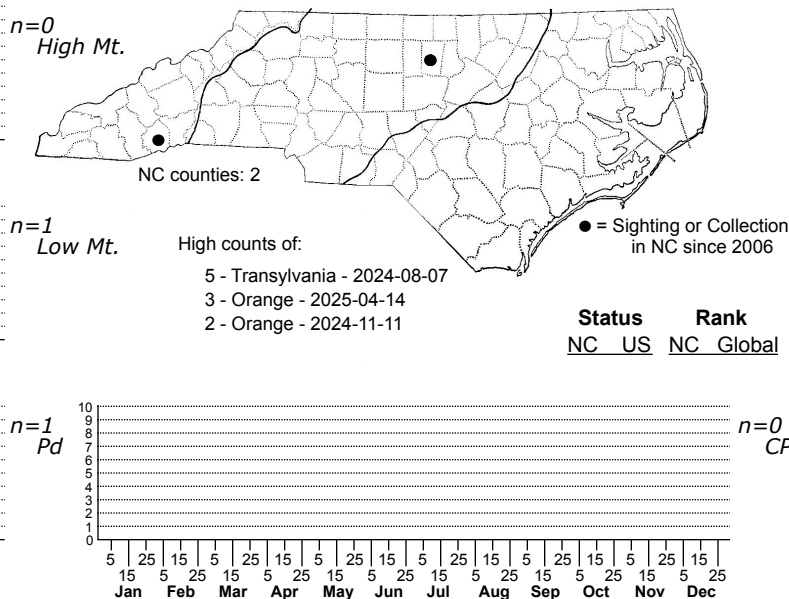
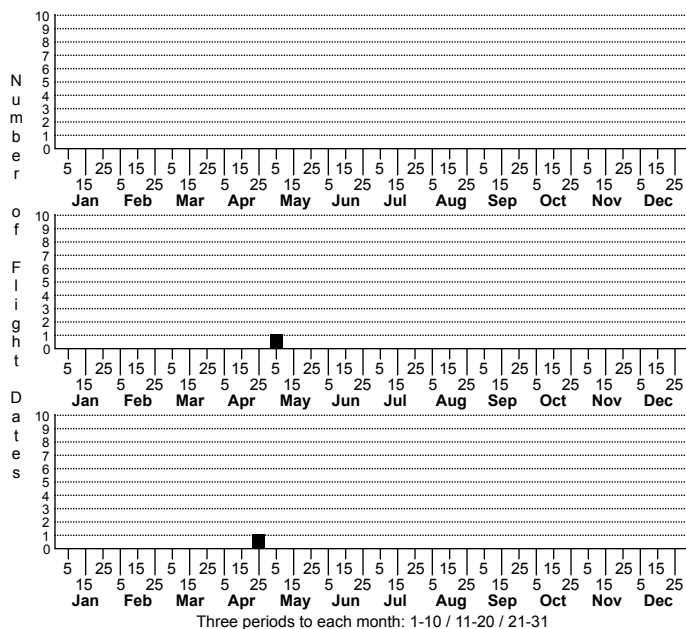


Coleophora new species 1 on Kalmia latifolia No common name



FAMILY: Coleophoridae SUBFAMILY: TRIBE:

TAXONOMIC_COMMENTS: *Coleophora kalmiella* is a uniformly light brown species that specializes on species of *Kalmia*. Eiseman (2021) suspected that there may be two species that are miners of *Kalmia*, with one an undescribed species. Jeff Niznik subsequently reared two adults from *K. latifolia* from North Carolina that are similar, but have a distinct white costal margin on the forewing. These have subsequently been shown through DNA barcoding to be a different, undescribed species (here referred to as '*Coleophora new species 1 on Kalmia latifolia*'). As of 2025, it is uncertain if *C. kalmiella* occurs in the state. Since these two species are easily separated by the presence or absence of the white costal margin, additional rearing will hopefully clarify whether *C. kalmiella* is present in North Carolina.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS:

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The adults have a uniformly light brown forewing except for a white costal margin. The white margin is broadest at the wing base and gradually narrows before fading out at around three-fourths the wing length. The thorax and head are light brown above, with the latter having white scales above the eyes. The antenna is boldly marked with alternating white and dark brown annulations, and the palps are white. This species resembles several of our other *Coleophora* species that have brown forewings within white costal margins and is best identified by rearing of adults from larvae that are collected from the host plant.

DISTRIBUTION: The range of this undescribed species is rather poorly documented. Adults or mines have been found in Canada (Ontario, Quebec, Prince Edward Island and Nova Scotia), and in the US from Vermont and Massachusetts southward along the Atlantic Coast states to North Carolina (Eiseman, 2022). There are also historical records from Kentucky. Jeff Niznik and David George recently discovered this species in the Piedmont of North Carolina, which is the southernmost known record for this species.

FLIGHT COMMENT: The adult emerge from late May in Massachusetts to late June to early July in Nova Scotia (Eiseman, 2021). In North Carolina, our records of adults are from late April to early May.

HABITAT: Local populations are generally associated with *Kalmia* thickets.

FOOD:

OBSERVATION_METHODS: The adults resemble several other *Coleophora* species and cannot be reliably identified from images unless they are reared. We recommend searching Mountain Laurel for the mines and larvae.

NATURAL HERITAGE PROGRAM RANKS: GNR SNR [S1S3]

STATE PROTECTION:

COMMENTS: As of 2025 we have one site record each from the Piedmont and the Blue Ridge. Additional information is needed on the distribution and abundance of this species in North Carolina before we can assess its conservation status.