



FAMILY: Gelechiidae SUBFAMILY: Gelechiinae TRIBE: TAXONOMIC\_COMMENTS: <i>Keiferia</i> is a genus with 18 described species that occur in the New World. Eight species occur in North America, and the remainder mostly in South America.

FIELD GUIDE DESCRIPTIONS: ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Hayden et al. (2013) TECHNICAL DESCRIPTION, IMMATURE STAGES: Hayden et al. (2013)

ID COMMENTS: The head, thorax, labial palps, and ground color of the forewings are all more or less concolorous and vary from ocherous cinereus, to gray with dark gray and yellowish orange mottling. The head and thorax are often slightly paler than the wings, and the labial palp is recurved and only extends to the vertex. The antenna is pale with darker annulations, and about three-fourths the length of the forewing. The forewing sometimes has a few inconspicuous longitudinal streaks, and a marginal row of minute black dots is often evident at the base of the cilia. The hindwing is light to medium gray and trapezoidal with a long fringe of hairs (Murtfeldt, 1881; Hayden et al., 2013). This is a rather nondescript moth and is best identified by either genitalia or rearing from the host plants. The leaf mines are distinctive.

DISTRIBUTION: <i>Keiferia inconspicuella</i> is found primarily in the southeastern and midwestern United States. The range extends as far north as New Jersey and vicinity, and westward to Nebraska, Iowa, Oklahoma and Texas (Hayden et al., 2013). As of 2022, we have three site records from the western Coastal Plain, eastern Piedmont, and a lower elevation site in the Blue Ridge.

FLIGHT COMMENT: The flight season is poorly documented. The larvae are present on leaves after the host plants are fully leafed out, and there appears to be two or more generations per year. Two adults that Tracy Feldman reared from leaf mines collected in the field emerged on 17 July and 8 August, while Jim Petranka reared adults that emerged on 18 August from a communal mine that was collected on July 29.

HABITAT: Carolina Horsenettle is the only known native host. This species tends to be weedy and can be found in open, disturbed habitats such as agricultural fields, construction sites, pastures, vacant lots, power line corridors, and urban walkways.

FOOD: Larvae feed on <i>Solanum</i>, including the native Carolina Horsenettle (<i>S. carolinense</i>), and reportedly tomato (<i>S. lycopersicum</i>) (Heppner, 2007). In North Carolina, our only records are for Carolina Horsenettle.

OBSERVATION\_METHODS: The adults occasionally come to lights. We recommend searching for the conspicuous leaf mines on Carolina Horsenettle and rearing the adults.

NATURAL HERITAGE PROGRAM RANKS: GNR S2S4

## STATE PROTECTION:

COMMENTS: As of 2022, we have only a few state records that likely reflect undercollecting. More information is need on the distribution and abundance of this species before we can assess its conservation status.