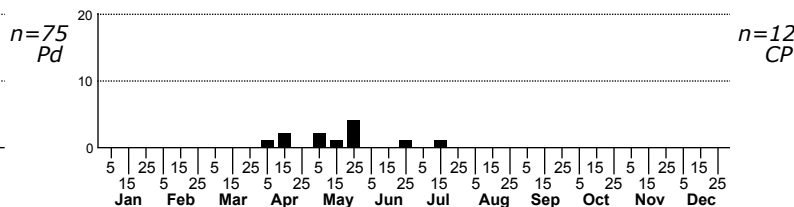
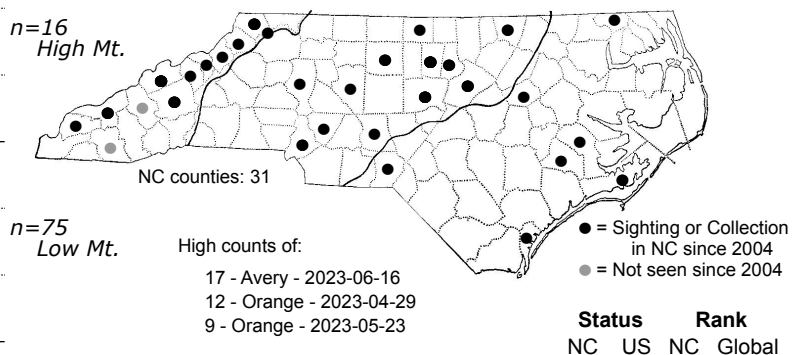
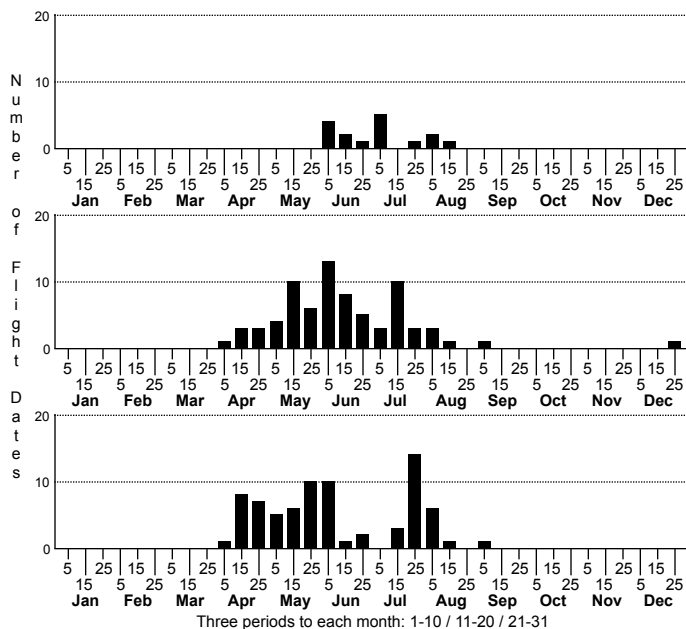


## *Psilocorsis reflexella* Dotted Leaf-tier Moth



FAMILY: Depressariidae SUBFAMILY: [Amphisbatinae] TRIBE: [Amphisbatini]

TAXONOMIC COMMENTS: *Psilocorsis* is a small genus with around 15 described species and several undescribed forms. They range from southeastern Canada to northern South America, but appear to be absent from the West Coast (Hodges, 1974). Seven species occur in North America north of Mexico (Pohl et al., 2016), three of which have been recorded in North Carolina.

FAMILY GUIDE DESCRIPTIONS: Covell (1984); Beadle and Leckie (2012); Leckie and Beadle, 2018

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Clarke (1941); Hodges (1974)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Hodges (1974)

ID COMMENTS: The head is ferruginous-brown and the labial palp is light ochreous with dark stripes. The second segment has some fuscous shading exteriorly. The thorax and forewing are ochreous and sometimes strongly overlaid and mottled with reddish fuscous. The inner and outer discal spots are usually ill defined and blackish fuscous. The terminal row of spots (adterminal line) is smaller than those of other *Psilocorsis* species, and is sometimes not readily evident. The cilia are yellowish fuscous with a dark subbasal band. The hindwing and cilia are yellowish fuscous, and the cilia have a dark subbasal line. The legs are whitish ochreous and suffused with dull fuscous, while the abdomen is fuscous above and whitish ochreous beneath. *Psilocorsis reflexella* varies substantially in coloration and patterning. It usually has a darker ground color, but some of our individuals have a paler ground color and lack the dark mottling or striae typical of this genus.

This species is most similar to *P. quercicella* but is much larger. Two small discal spots are usually evident, and the diffuse dark shading that extends from the middle of the wing to the inner margin is usually greatly reduced relative to that seen in *P. quercicella*. The fringe of *P. reflexella* is lighter, and the basal band in the fringe is rather faint, versus blackish and more conspicuous in *P. quercicella*. It also has a more poorly marked adterminal line compared with that of *P. quercicella*. Specimens that are light colored and weakly marked superficially resemble *Machimia tentoriferella*. The labial palps offer an easy way to distinguish between these two. In *Psilocorsis* the palps are smooth-scaled, slender, strongly recurved and reach back to the prothorax. In *M. tentoriferella* they are rougher-scaled, particularly the second segment, and shorter. *Machimia* also has a black mark at the posterior edge of the thorax, and the subbasal band on the cilia is absent.

DISTRIBUTION: *Psilocorsis reflexella* is broadly distributed across the eastern US, and in southern Canada from Saskatchewan eastward to Nova Scotia and Prince Edward Island. Populations in the US occur as far west as Minnesota, Iowa, and Oklahoma, and as far south as the Gulf Coastal region and southern Florida. This species occurs statewide in North Carolina. It is well represented in all three physiographic provinces, including at both lower and higher elevations in the mountains.

FLIGHT COMMENT: Adults have been recorded between February and October in different areas of the range, with peak seasonal activity from April through August. As of 2020, our records extend from early April through August, with one record in December. Hodges (1974) noted that most populations appear to be single brooded, but our data suggest that Piedmont populations may be bivoltine.

HABITAT: The larvae are polyphagous and require hardwoods as hosts. Our records come from wooded residential neighborhoods as well as more natural habitats such as upland hardwood slopes in the mountains. Local populations can be expected in a variety of other habitats that support hardwoods, including bottomland forests in coastal regions.

FOOD: Larvae feed on a wide range of hardwood trees and shrubs, including maples, birches, hickories, hazelnuts, beech, poplars, willows, basswoods and oaks (Forbes, 1974; Robinson et al., 2010; Marquis et al., 2019). Some of the specific hosts include Yellow Birch (*Betula alleghaniensis*), Paper Birch (*B. papyrifera*), Pecan (*Carya illinoensis*), Shagbark Hickory (*Carya ovata*), Balsam Poplar (*Populus balsamifera*), Bigtooth Aspen (*P. grandidentata*), Quaking Aspen (*P. tremuloides*), American Beech (*Fagus grandifolia*) and American Basswood (*Tilia americana*). Oaks that are used include White Oak (*Quercus alba*), Chinquapin Oak (*Q. muehlenbergii*), Pin Oak (*Q. palustris*), Post Oak (*Q. stellata*), Black Oak (*Q. velutina*) and Northern Red Oak (*Q. rubra*).

OBSERVATION METHODS: The adults are attracted to lights. We need data on host use in North Carolina, and encourage naturalists to search for the larvae and document the larval ecology.

NATURAL HERITAGE PROGRAM RANKS: GNR S4S5

STATE PROTECTION: Has no legal protection, although permits are required to collect it on state parks and other public lands.

COMMENTS: Populations are common and appear to be secure in the Piedmont and mountains. The status of Coastal Plain populations is less certain.