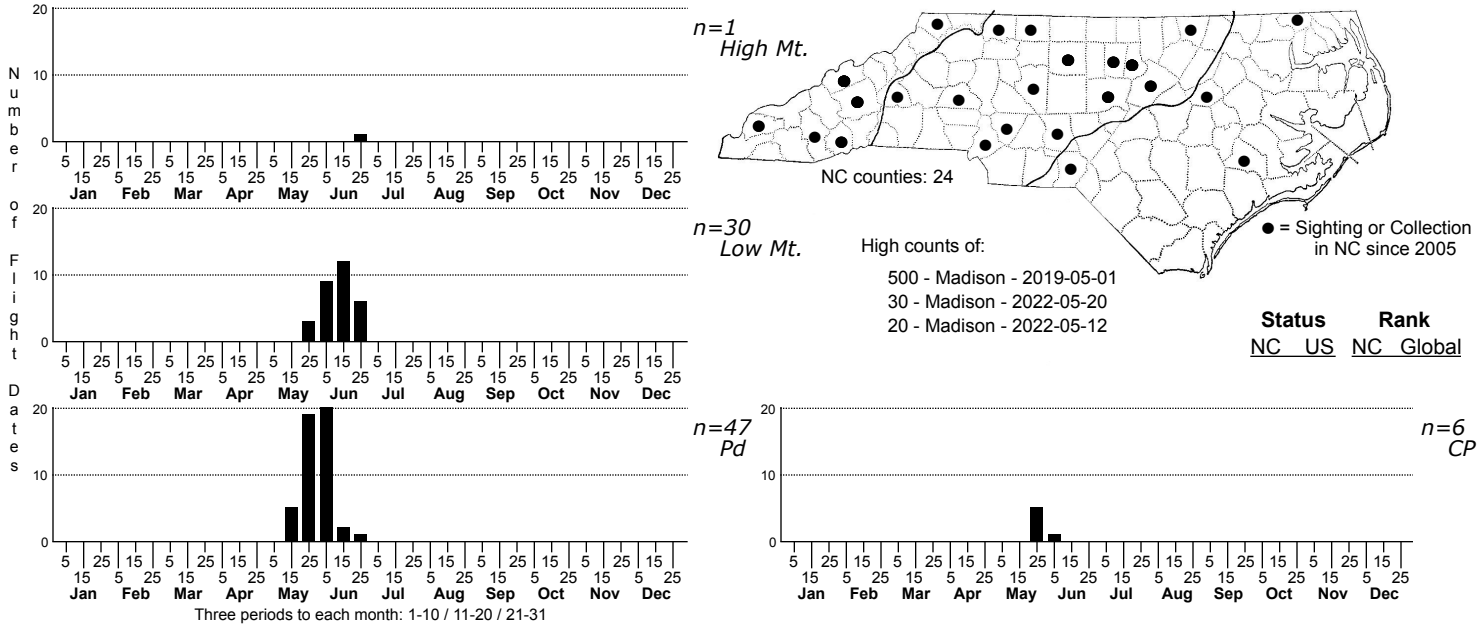
Yponomeuta multipunctella American Ermine Moth



FAMILY: Yponomeutidae SUBFAMILY: Yponomeutinae TRIBE: [Yponomeutinae]
TAXONOMIC_COMMENTS: Y. multipunctella is one of five species of Yponomeuta that occur north of Mexico. Three North American species (Y. euonymella, Y. leucothorax, and Y. semialba) are no longer recognized and are treated as Y. multipunctella (Lewis and Sohn, 2015). A fourth species (Y. atomocella) was transferred to the genus Prays. Four of the five currently recognized North American species of Yponomeuta are introduced, and some have become defoliating pests of apples, cherries and ornamental Euonymus species.

FIELD GUIDE DESCRIPTIONS: Covell (1984); Beadle and Leckie (2012)
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS: Lewis and Sohn (2015); microleps.org
TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: Adults are white with 3-4 rows of black dots. Y. cagnagella is an introduced species that resembles Y. multipunctella, but has fewer black dots, particularly near the middle of the forewing. This species is a pest on ornamental Euonymus species and was first recorded in North America from Ontario in 1967. Y. cagnagella has since spread to the northern US and south to Delaware and Maryland. It could potentially reach North Carolina in the future.

DISTRIBUTION: Almost all records are from the Piedmont and Blue Ridge where the host species are most common.

FLIGHT COMMENT: Single-brooded, with a peak in June.

HABITAT: Populations are restricted to areas that support the host plants, which are Euonymus species (Sperling et al. 1995, Ulenberg 2009). The primary host is the American Strawberry-bush (Euonymus americanus). This species is widespread in mesic to rich forests, but also occurs to a lesser extent in both floodplain forests and drier pine-oak and oak-hickory forests. Two other native Euonymus (E. atropurpureus; E. obovatus) are uncommon and presumably serve as secondary hosts where local populations occur. Several species ofEuonymus from Europe and Asia are widely planted as ornamentals in the eastern US, but Y. multipunctella does not use these as host plants.

FOOD: Larvae feed on Euonymus, including American Strawberry-bush (Euonymus americanus), Eastern Wahoo (E. atropurpureus), and Running Strawberry-bush (E. obovatus) (Godfrey et al., 1987; Beadle & Leckie, 2012). In North Carolina, larvae have been recorded feed on American Strawberry-bush, and have often been found pupating in the leaves of nearby plants.

OBSERVATION_METHODS: This species is easily detected by examining Euonymus americanus in early spring for the distinctive communal webs. The adults readily come to black lights.

NATURAL HERITAGE PROGRAM RANKS: G5 [S4S5]

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

COMMENTS: The American Ermine Moth is rather common in the Piedmont and Blue Ridge, but populations have undoubtedly been adversely affected by White-Tailed Deer. Deer feed heavily on the primary host plant (E. americanus) and can eliminate or nearly eliminate local populations of the host plant where grazing pressure is high. Yponomeuta cagnagella is an introduced species that specializes on Euonymus and could potentially compete with Y. multipunctella. To date, Y. cagnagella is only known to feed on introduced ornamental Euonymus and has not shifted to native species.