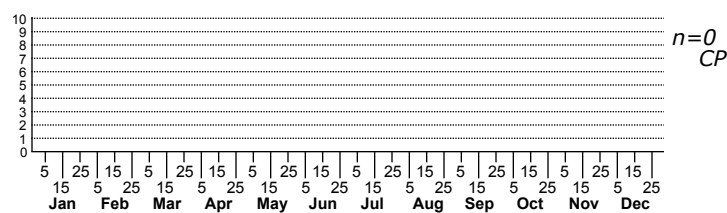
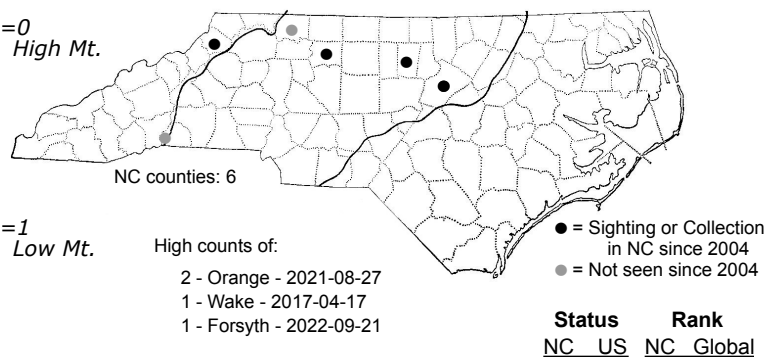
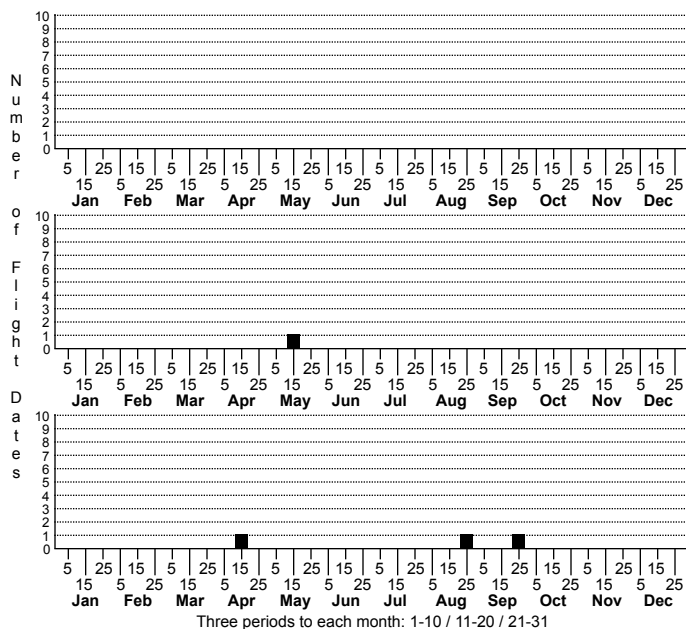


Grapholita prunivora Lesser Appleworm Moth



FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Grapholitini
 TAXONOMIC_COMMENTS:

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1923); Gilligan et al. (2008)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following is based in part on the description by Forbes (1923). The face and palps are whitish and the vertex and antennae brown. The thorax is often two-toned with the anterior portion brown and concolorous with the vertex, and the posterior portion pale yellowish brown. The forewing ground varies from golden-orange to brownish-yellow and is heavily overlain with varying levels of brownish to blackish dusting and mottling, along with fine horizontal striations near the middle of the wing. The middle of the inner margin has a light patch that consists of a series of outwardly oblique and alternating blackish and cream-colored to whitish striations. The patch extends to the middle of the wing where it often joins a pair of outwardly oblique pale silvery blue striae that originate on the middle of the costa. Two additional silvery blue striae occur apically. The first originates on the costa at around two-thirds and angles towards the ocellus and subterminal region of the inner margin, while the second originates at around three-fourths and projects towards the middle of the termen. A well-developed orangish ocellus is present in the middle of the wing in the subterminal region that has silvery bars of the anterior and posterior sides and 3-4 horizontal black dashes. A black terminal line is present on the termen that is preceded by a zone of yellow-orange scales. The costal margin has a series of pale-yellow to whitish costal strigulae that are mostly restricted to the apical half, and the hindwing is medium brown with a paler fringe.

DISTRIBUTION: *Grapholita prunivora* is native to North America and occurs throughout southern Canada, in much of the eastern U.S., and in California, Oregon, and Washington in the West. In the eastern US, the range extends from Maine southward to central Alabama and westward to Oklahoma, Illinois, and Minnesota. This species has likely expanded its range since European colonization in association with the widespread planting of apples and other fruit crops (Hull et al., 1995). As of 2022, we have records from the Piedmont and a lower elevation site in the Blue Ridge.

FLIGHT COMMENT: Most populations appear to be bivoltine with a spring and summer brood. Adults have been documented from April through November, with most flying between May and September. As of 2022, our very few dated records are from April-May and September, which is consistent with a bivoltine life cycle.

HABITAT: Local populations are associated with deciduous forests and forest edge habitats, residential neighborhoods, as well as commercial and abandoned orchards.

FOOD: The larvae feed almost exclusively on members of the Rosaceae (Heinrich, 1926; MacKay, 1959; Prentice, 1966; Chapman and Lienk, 1971; Robinson et al., 2010; Gilligan and Epstein, 2014; Bragard et al., 2018). The reported hosts include serviceberries (*Amelanchier* spp.), hawthorns (*Crataegus* spp.), Quince (*Cydonia oblonga*), apples and crabapples (*Malus* spp.), Christmasberry (*Photinia* spp.), cultivated apricots, peaches, cherries and plums (*Prunus* spp.), American Plum (*P. americana*), Fire Cherry (*P. pensylvanica*), pears (*Pyrus* spp.) and roses (*Rosa* spp.). The larvae can also develop in aphid galls on elms (*Ulmus* spp.) and oaks (*Quercus* spp.; Heinrich, 1926). Prentice (1966) also reported larvae feeding within a black-knot fungus.

OBSERVATION_METHODS: The adults are attracted to lights and pheromone traps, and the larvae can be found in fleshy fruits.

NATURAL HERITAGE PROGRAM RANKS: GNR S2-S4

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

COMMENTS: This species appears to be uncommon within the state where it is close to its southern range limit.