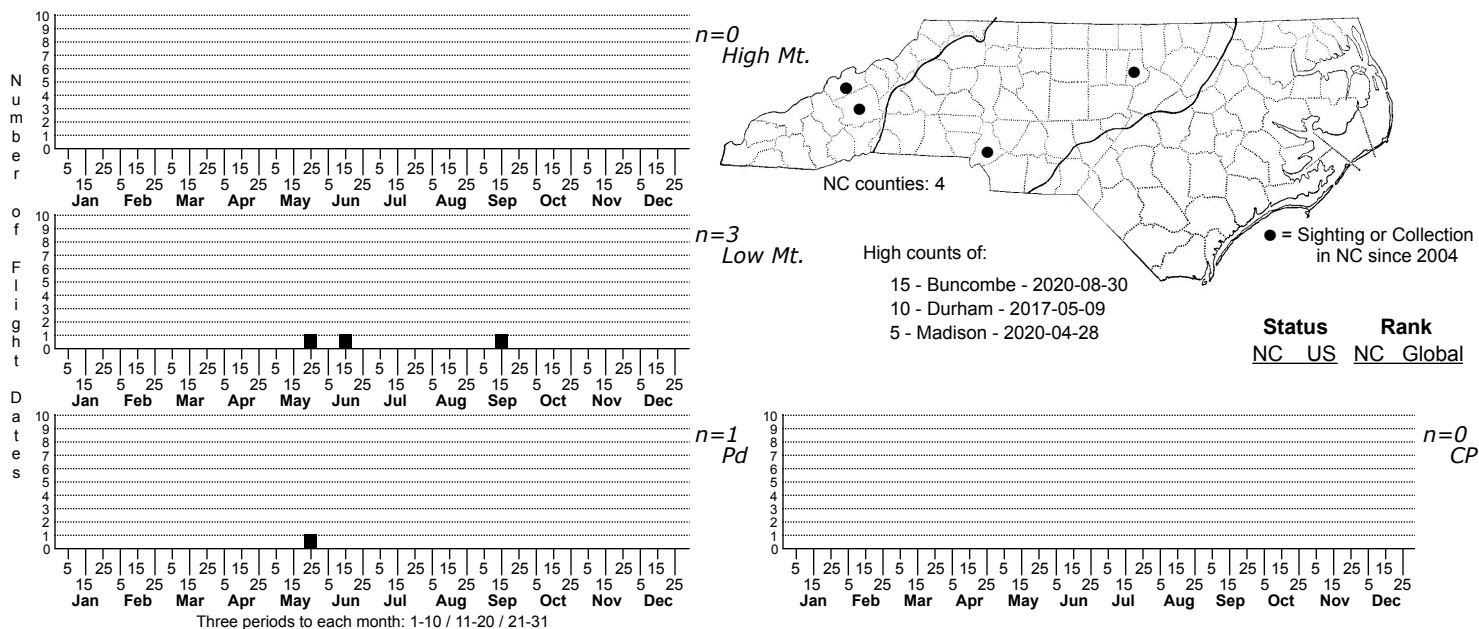


*Mompha argentimaculella* No common name



FAMILY: Momphidae SUBFAMILY: Momphinae TRIBE:

TAXONOMIC COMMENTS: The genus *Mompha* consists of around 46 described species in North America. In addition, numerous species remain to be described that are centered in the southwestern US (Bruzese et al., 2019). The adults are small moths that have two or more tufts of raised scales on each forewing. The larvae either mine leaves, or bore into the stems, flower buds, flowers, or fruits of their hosts. The majority of species feed on members of the Onagraceae, but others feed on species in the Cistaceae, Lythraceae, Melastomataceae, and Rubiaceae.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Murtfeldt, 1900; Forbes, 1923

TECHNICAL DESCRIPTION, IMMATURE STAGES: Murtfeldt, 1900

ID COMMENTS: *Mompha argentimaculella* is variable in coloration and patterning, in part due to bluish iridescence that may or may not be seen depending on the light angle. The following description is based mostly on that of Murtfeldt (1900) and Forbes (1923). The antenna is dark brown and sometimes has pale annulations that tend to be more prominent near the apical third. The labial palp is pale silvery, with the terminal joint in strong light appearing minutely ringed with dark blue. The head and face are smooth. The head is dark above and the face pale golden-metallic. The head, thorax, and ground color of the forewing are shining dark brown to blackish, with many of the scales toward the apex finely white-barred. There are two prominent dark dorsal tufts near the inner margin. The first is at about one-half the wing length and the second at about three-fourths. There are typically three broad, irregular lead gray fascia that may appear light bluish depending on the light angle. The first occurs just before the first dorsal tuft, while the second is just before the second tuft. The third fascia is between the second tuft and the termen and is noticeably angulated outward. In addition to these markings, a dull yellow spot that adjoins the anterior edge of the second fascia is present just above the costal margin at about one-half the wing. The fringe is dark gray with scattered white-tipped scales. The hindwing and abdomen are rich bronzy brown, with the former having a pale brown fringe. The legs are brown to blackish, and are annulated on the tibia with two broad white bands. The tarsi are blackish with three narrow white bands.

DISTRIBUTION: *Mompha argentimaculella* is found in eastern North America, where it has been found at scattered locations in southern Canada (Ontario; New Brunswick) and in adjoining areas of the northeastern US. From there the range extends westward and southward to Illinois, Indiana, Kentucky, and North Carolina, with possibly geographic isolates occurring in Missouri and Texas. As of 2021, we have only a few records from the lower elevations in the mountains and in the eastern Piedmont.

FLIGHT COMMENT: Adults have been observed from April through October in areas outside of North Carolina. Populations show evidence of having two generations per year, with the first peaking in May and June and the second in September and October. As of 2021, we have a series of rearing records, with the adults emerging in May, June, and September.

HABITAT: Local populations are dependent on evening-primroses and their relatives. The known hosts are often found in open, sunny or partially shaded habitats such as forest openings, rock outcrops, roadsides, abandoned fields, woodland borders and powerline clearings.

FOOD: The documented hosts are all species of *Oenothera*, including Common Evening-primrose (*O. biennis*), Narrowleaf Sundrops (*O. fruticosa*), Biennial Beeblossom (*O. gaura*), and Prairie Sundrops (*O. pilosella*). As of 2022, we have records for all of these except *O. biennis*.

OBSERVATION METHODS: The adults appear to only rarely visit lights and all of our records are based on leaf mines and reared adults. We recommend searching for occupied leaf mines on *Oenothera* and rearing the adults. They will typically emerge within a month or so after the mines are collected.

NATURAL HERITAGE PROGRAM RANKS: GNR [SU]

STATE PROTECTION:

COMMENTS: We have only four site records as of 2021, but this species has undoubtedly been undercollected within the state.