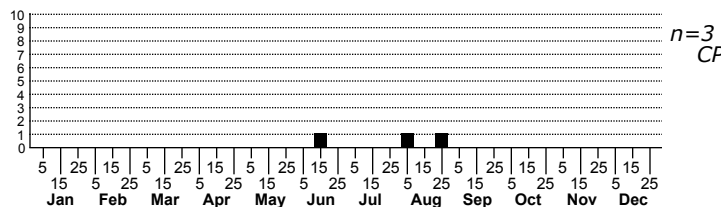
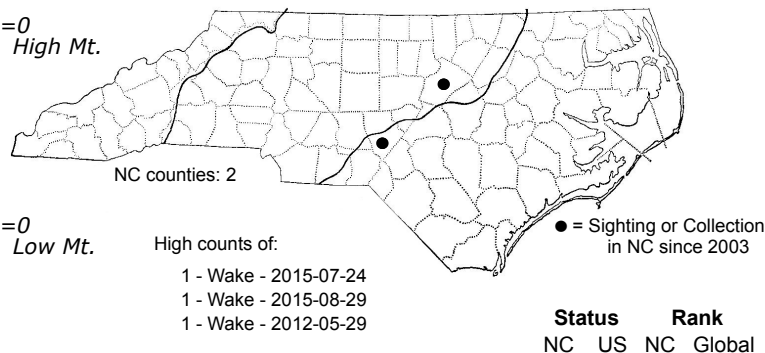
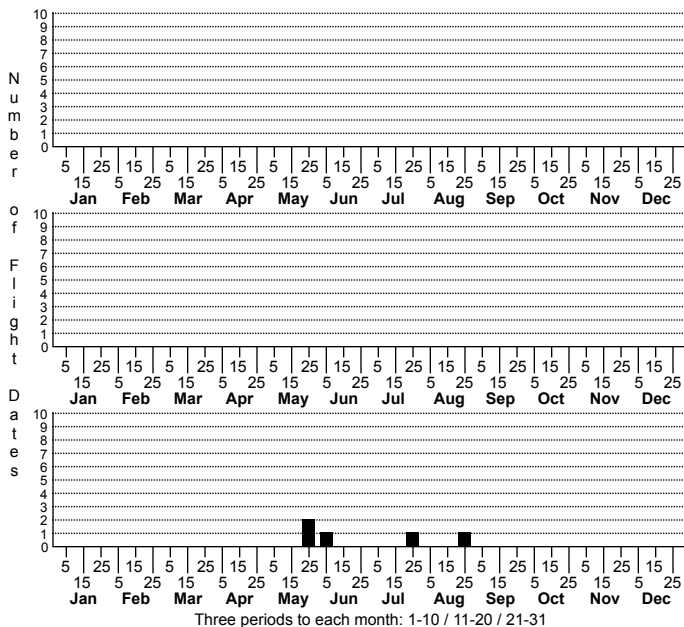


Mompha murtfeldtella No common name



FAMILY: Momphidae SUBFAMILY: Momphinae TRIBE: [Momphini]

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: Leckie and Beadle (2018)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS:

TECHNICAL DESCRIPTION, IMMATURE STAGES: Chambers (1879)

ID COMMENTS: The following is based in part on the description by Chambers (1875b). The head and thorax are silvery white and the antenna brown. The labial palp is silvery white, with the second joint brown on the outer surface, and the third dusted with brown beneath. The forewing ground color is brown, and faintly streaked or marbled with ochreous and whitish scales. At the base of the forewing, there is a broad, silvery white bar that extends from the inner margin before terminating just before the costa. This, together with the thorax, produces a large white, oval region. Along the inner margin at about one-half the wing length, there is a whitish scale tuft that is partly grizzled by brown scales. The tuft extends inwardly and becomes fragmented into smaller elements. A second whitish or pale tuft is present in the PM area. Both tufts are weakly margined posteriorly with brownish black scales. At about four-fifths, there is a thin, longitudinal, black dash near the middle of the wing, along with a white spot on the costa below the dash. The remainder of the wing is very coarsely mottled with light brown and darker brown regions. The hindwing is brown and the cilia on both wings grayish brown. The legs are brownish with pale to whitish regions near the joints.

DISTRIBUTION: *Mompha murtfeldtella* is widely distributed across North America. In the West, it occurs from British Columbia, Alberta, California, Arizona, and Colorado. In the East, it is found in southern Canada (Ontario; Quebec; Newfoundland) and the eastern US from Maine southward to Florida, and westward to central Texas, Oklahoma, Kansas, and Minnesota. As of 2022, we have only seven records from two counties in the eastern Piedmont and Sandhills.

FLIGHT COMMENT: This wide-ranging species has been found nearly year-round, with a peak in seasonal activity in May through August. As of 2021, our two records are from late May and early June.

HABITAT: The larvae feed on evening-primroses, but the specific hosts and habitat requirements in North Carolina are undocumented.

FOOD: Murtfeldt (as cited in Chambers, 1879) noted that the larvae feed on both cultivated and wild species of *Oenothera*, particularly Missouri Evening-primrose (*O. macrocarpa*). This species does not occur in North Carolina, where other *Oenothera* are undoubtedly used.

OBSERVATION_METHODS: The adults occasionally visit lights. We also recommend inspecting the flowers and developing buds of native *Oenothera* species and rearing the adults in order to better document host use within the state.

NATURAL HERITAGE PROGRAM RANKS: GNR [SU]

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

COMMENTS: As of 2022, we have only two county records for North Carolina. We are uncertain if this represents true rarity, or undercollecting.