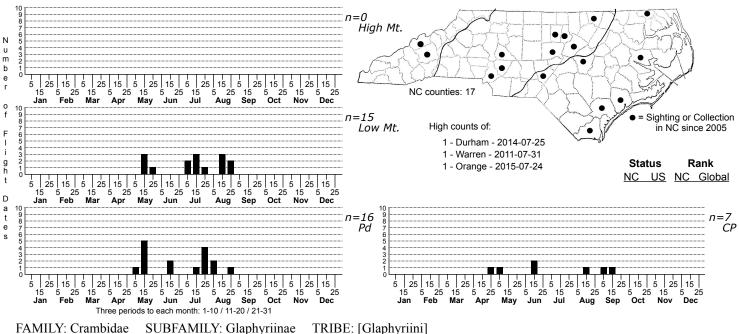
Chalcoela pegasalis Wasp Parasitizer Moth



TAXONOMIC COMMENTS:

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012) ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Forbes (1923); Munroe (1972) TECHNICAL DESCRIPTION, IMMATURE STAGES: Sourakov (2022)

ID COMMENTS: This is a distinctively marked species and can be readily identified based on the forewing and hindwing patterning. The following is based in part on the descriptions by Forbes (1923) and Munroe (1972). The ground of the forewing is chocolate brown and is most evident on the basal third, the apical area and the tornal area. The antemedial line is slightly wavy and outwardly convex, while the postmedial line is broadly angulated outwardly on the costal third. Both lines are white and distinct, with the area between them heavily frosted with light gray to whitish scales. Heavy frosting is also present between the middle of the postmedial line and the terminal line, and a white crescent mark is present just before the apex. The hindwing is more evenly frosted with light gray to whitish scales and has a series of staggered black dots along the middle of the wing margin. These are preceded by a whitish subterminal bar.

<i>Dicymolomia julianalis</i> is generally similar, but has poorly defined antemedial and postmedial lines, along with a light yellowish-brown basal region.

DISTRIBUTION: The range of <i>C. pegasalis</i> is centered on the southeastern U.S. and extends from Delaware and northern Virginia southward to southern Florida. It extends westward to Mississippi, Louisiana, western Tennessee, western Kentucky and southern Illinois. Populations are also known from several Carribean islands. In North Carolina, this species occurs from coastal regions to the lower elevations in the Blue Ridge. It is spottily distributed depending on the presence of <i>Polistes</i> wasps.

FLIGHT COMMENT: The adults have been observed from March through November in Florida, and mostly from April through October in other areas of the range. As of 2023, our records are from late-April through mid-September. Local populations appear to produce two or more broods per year.

HABITAT: Local populations are located in the vicinity of nesting <i>Polistes</i> wasps. These commonly use the eaves of structures such as homes, buildings and barns.

FOOD: Larvae are parasites of paper wasp larvae (Beadle & Leckie, 2018).

OBSERVATION_METHODS: The adults are attracted to lights and the larvae can be found in paper wasp nests during the summer months.

NATURAL HERITAGE PROGRAM RANKS: GNR [S3S4]

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

COMMENTS: This species exploits the nests of paper wasps and its distribution is limited by the presence of the wasps.