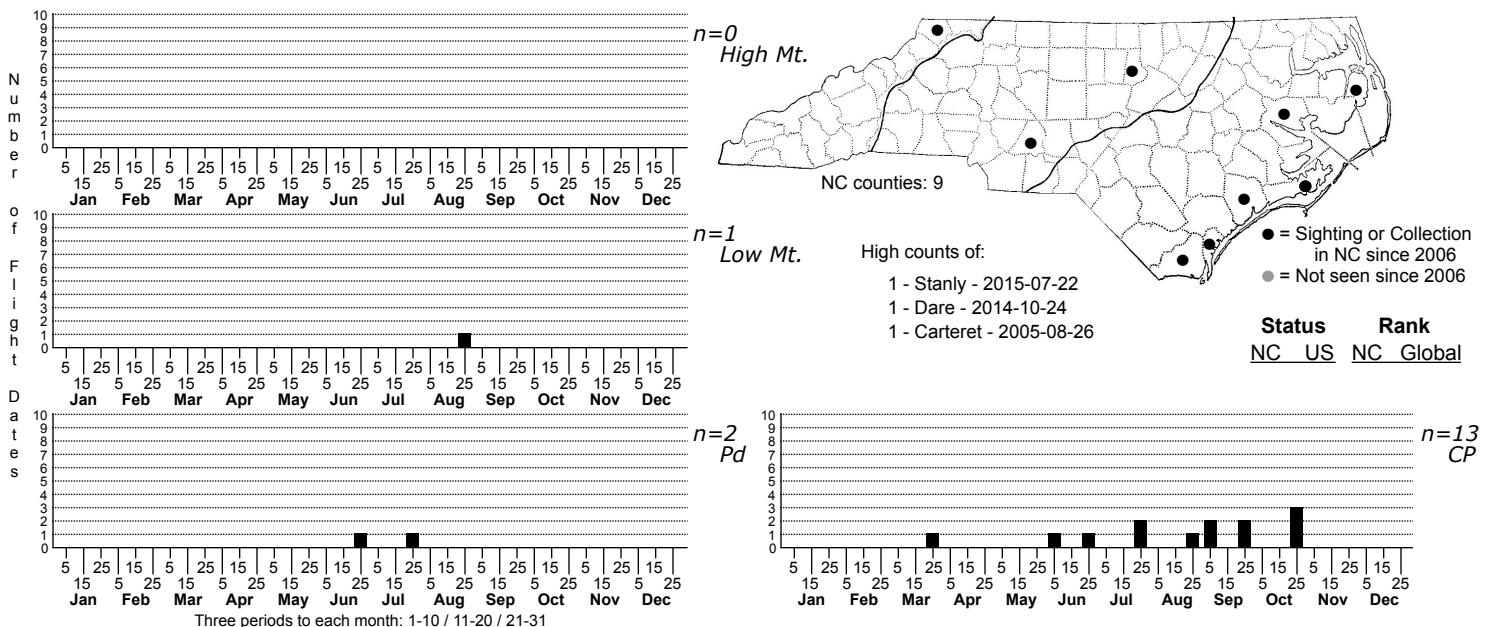


Diacme elealis Paler Diacme



FAMILY: Crambidae SUBFAMILY: Pyraustinae TRIBE: Spilomelini
TAXONOMIC COMMENTS:

FIELD GUIDE DESCRIPTIONS: Covell (1984); Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS:

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The Paler Diacme (*Diacme elealis*) and the Darker Diacme (*D. adipaloides*) are two closely related species that occur in North Carolina and are very similar in size and external markings. *Diacme adipaloides* generally appears somewhat darker overall, but light-colored forms are common, and the general shade of the forewing and abdomen is not useful in separating the species. Both species typically rest with the forewings spread to reveal a broad, brownish to purplish-brown subterminal band on both the forewing and hindwing. The remainder of the wing surfaces consist of a light caramel-colored to yellowish ground that is overlain with a series of dark brown to purplish brown lines, along with two dark, rectangular patches on the forewing that extend inward from the costa. The first patch occurs just before the middle of the costa and is followed by a shorter one that occurs just beyond the middle. The costa can vary from various shades of brown to brownish yellow along its length, or be solid brown on the more darkly shaded individuals. Dark-shaded individuals often have the veins shaded with brown to produce localized, reticulated patterning. This tends to be most prevalent on the apical third of the forewing.

A recent study (see BugGuide) found a mark that appears to be diagnostic for separating the two species based on verification with barcoded specimens. It consists of a short, inwardly curved, basal line on the hindwing that is only present on *D. adipaloides*. When viewing a resting individual from above, the line appears to originate at abdominal segment two. This mark may be masked in very darkly shaded individuals, and can be faint in light colored individuals. Here, we consider the presence of this mark to be diagnostic for *D. adipaloides*. A less reliable feature is that the lines that cross both wings tend to be narrower and often broken in *D. elealis*, with the ones on the basal half of the hindwing represented as two dark spots. In addition, the basal area of the forewing is typically yellowish in *D. elealis* versus being dusted with brownish scales in *D. adipaloides*.

DISTRIBUTION: *Diacme elealis* is restricted to the southeastern and south-central U.S. The range extends from North Carolina southward to southern Florida, and westward to western Texas, southeastern New Mexico, Arkansas and western Tennessee. As of 2023, most of our records are from the eastern Coastal Plain, with two scattered records from the Piedmont and Blue Ridge.

FLIGHT COMMENT: The adults fly year-round in Florida and Texas, and mostly from April through October elsewhere. As of 2023, our records range from late-March to late-October.

HABITAT: Many of our records are from sandy, xeric coastal communities, but also from more mesic settings inland.

FOOD: The host plants (if any) are undocumented.

OBSERVATION METHODS: The adults regularly appear at lights.

NATURAL HERITAGE PROGRAM RANKS: GNR [S3-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 reach its northern limit in North Carolina. We need additional information on its habitat requirements, trophic ecology, and distribution and abundance before we can accurately assess its conservation status within the state.