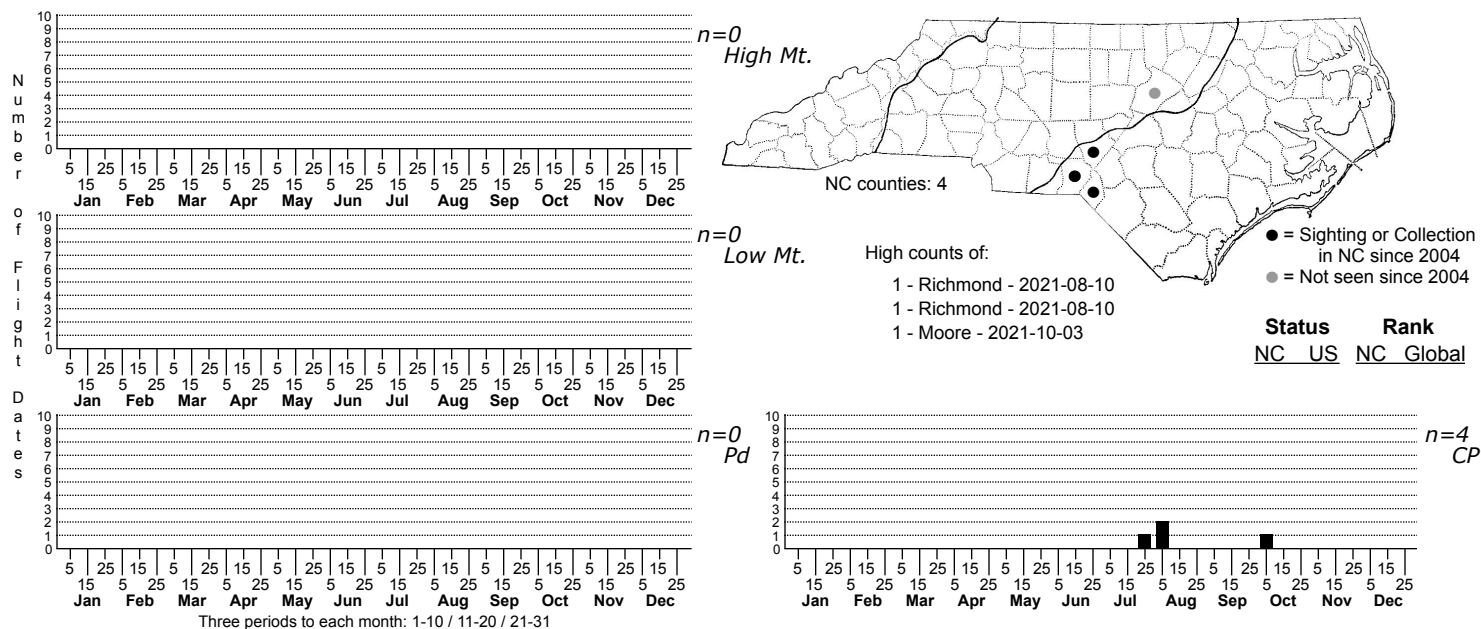


## *Diastictis argyralis* White-spotted Orange Moth



FAMILY: Crambidae SUBFAMILY: Pyraustinae TRIBE: Spilomelini

TAXONOMIC\_COMMENTS: North Carolina has three described species of crambid moths in the genus *Diastictis* that are so similar that they cannot be identified using external morphology. The patterns and colors vary a lot within species, and the overlap between species is sufficiently high to require either genitalia or molecular barcoding for identification. *Samea baccatalis* was recently transferred to the genus *Diastictis* (Pohl and Nanz, 2023) based on unpublished data on genitalia differences, but a molecular analysis that we conducted suggests that *Samea baccatalis* doesn't belong to either genus. We have elected to leave this as *Samea baccatalis* until a more comprehensive study is conducted to determine the appropriate placement of this species with regards to genus.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Munroe (1956)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: North Carolina has three described species of crambid moths in the genus *Diastictis* that are so similar that they cannot be identified using external morphology and require either genitalia or molecular barcoding. The following is a general description that applies to all. The ground color of the forewing can vary for brown to yellowish or yellowish orange. The ground is overlain with silvery spots that commonly are arranged in the following sequence: 1) one or two basal (antemedial) spots near the middle of the wing at about one-fourth the wing length, with the one nearer the inner margin the larger, 2) two spots near the middle of the wing, with the one nearer the inner margin the larger, 3) a triplet of small spots close to the costa at around three-fourths the wing length, and 4) a second triplet of spots in the subterminal area and closer to the anal angle. Expect significant variation from the general pattern above. In particular the antemedial spots may or may not be present, the spots may or may not have a thin black margin, the spots may vary from being prominent to being minute or obscure, and certain spots on the terminal half may or may not be present. The hindwings are unmarked and typically light brown to grayish-brown.

DISTRIBUTION: The distribution of this species is poorly documented due to the unreliability of species identifications based on museum records or photographs. Munroe (1956) identified specimens from Florida, Alabama, South Carolina and North Carolina, but this is undoubtedly not the complete range. As of 2023, all of our records are from the Sandhills except for one Piedmont record.

FLIGHT COMMENT: As of 2023, our records range from late-July through mid-October.

HABITAT: Our records are mostly from xeric Longleaf Pine communities and early-successional, dry hardwood communities in the Sandhills.

FOOD: The hosts are apparently undocumented.

OBSERVATION\_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR S2S3

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, but more information is needed on its distribution, abundance, and hosts before we can accurately assess its conservation status.