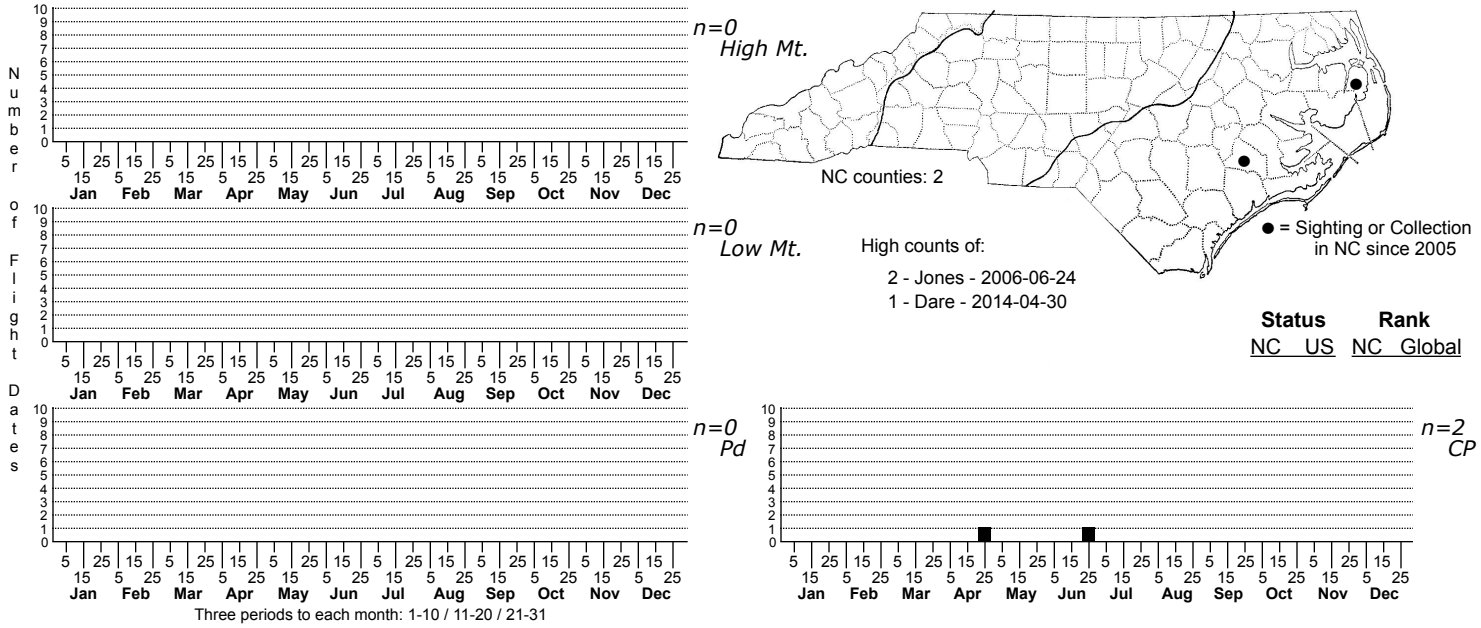
Chilo plejadellus Rice Stalk Borer Moth



FAMILY: Crambidae SUBFAMILY: Crambinae TRIBE: Chiloini (=unplaced)
TAXONOMIC_COMMENTS:

FIELD GUIDE DESCRIPTIONS:
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS:
TECHNICAL DESCRIPTION, IMMATURE STAGES: Smith (1986).

ID COMMENTS: The adults are rather nondescript with the palps, head, thorax and forewings being pale brown, yellowish-brown, or dull yellowish-white with darker dusting. The forewings are dotted or dusted with numerous dark brown or black scales, with these often aggregated to form an oblique line of small dark blotches near the center of the wing and just beyond one-half the wing length. A faint light brown to silvery subterminal line is often evident that runs outwardly oblique from the costa for about one-fifth of its length, then runs parallel to the outer margin to the sub-tornal region. The terminal line is represented by a line of seven black dots. Small groups of silvery or golden scales are often present adjoining the terminal dots, along the subterminal line, and occasionally in the center of the wing is association with the dark blotches. The fringe is medium brown and the hindwing is pale white.

DISTRIBUTION: Chilo plejadellus is associated with marshes and rice fields and is found in two general areas in eastern North America. The first includes populations that are found in northeastern North Dakota and Minnesota southeastward through the Great Lakes region of the U.S. to northern Ohio, then northeastward through southern Canada and adjoining areas of the northern U.S. to Vermont, New York, Ontario and Quebec. The second group follows the Atlantic coastline from Massachusetts and New Jersey southward to North Carolina, Georgia and Florida, then westward across the Gulf Coast to the rice fields and marshlands of Louisiana, Texas and Arkansas. As of 2023, we have only two records, including from a coastal wetlands site in Jones County, and along the Outer Banks.

FLIGHT COMMENT: The adults have been observed from April through September in different areas of the range. Our two records as of 2023 are from April and June.

HABITAT: This species is generally associated with open marshy habitats and rice fields.

FOOD: The larvae feed on cultivated rice (Oryza sativa) in the U.S. and can be a minor pest. Other reported hosts (Smith, 1986; White et al., 2005) include Annual Wild-rice (Zizania aquatica), Southern Wild-rice (Zizaniopsis miliacea), Saltmarsh Cordgrass (Spartina alterniflora), and Big Cordgrass (Spartina cynosuroides). Saichuk (2012) noted that the larvae in Louisiana initially feed on other grass hosts on the margins of rice fields, then use rice as the stem diameters of the rice plants become large enough to support tunneling larvae. This is supported by the fact that whiteheads of cultivated rice are more numerous on the edges of rice fields, on edges adjacent to levees, and in nearby ditches. We do not have any feeding records in North Carolina.

OBSERVATION_METHODS: The adults are attracted to lights and the larvae can be found in the stalks of rice or other hosts that show evidence of damage.

NATURAL HERITAGE PROGRAM RANKS: GNR [S1-S2]

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 rare in North Carolina and in many areas along the Atlantic Coast where it frequents marshlands. More information is needed on its preferred habitats and host species before we can accurately assess its conservation status within the state.