

## Rectiostoma xanthobasis Yellow-vested Moth

FAMILY: Depressariidae SUBFAMILY: Stenomatinae TRIBE: [Stenomatini] TAXONOMIC COMMENTS:

FIELD GUIDE DESCRIPTIONS: ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Duckworth (1964) TECHNICAL DESCRIPTION, IMMATURE STAGES: Marquis et al. (2019)

ID COMMENTS: This is a boldly marked moth with black and lemon-yellow patterning on the basal third that is diagnostic. The following detailed description is based on that of Duckworth (1964). The face and labial palps are lemon yellow. The thorax is brown dorsally except for the lemon-yellow tegulae. The forewing is deep brown with a lemon-yellow triangular area that occupies the basal third except for a short costal lenticular spot and a longer, narrower spot along the posterior wing margin. Both spots are concolorous with the ground color. The apical two-thirds of the forewing has an inconspicuous area of white scales near the mid length of the costal margin, along with a similar, smaller area slightly more distad. There is a faint and somewhat iridescent light transverse band that parallels the distal margin of the yellow area and a small group of scales behind the basal white area. There is a short curved band extending from the distal white area and a submarginal longer straight, iridescent blue violet band parallel to the outer wing margin. The cilia are blackish brown. The hindwing is dark brown with a patch of white on the basal half of the anterior margin. The cilia are brown and edged in white. The legs are dark brown. The foreleg has the coxa entirely white and the tarsus ringed with white. The middle leg has two tibial rings and the tibial spurs and tarsal rings are white. The abdomen is brown with patches of white scales laterally.

DISTRIBUTION: <i>Rectiostoma xanthobasis</i> occurs in the eastern US where it ranges from eastern Massachusetts westward to Missouri, Kansas, and eastern Texas, and southward to Gulf Coast states and southern Florida. It is found statewide in North Carolina.

FLIGHT COMMENT: As of 2020, our records extend from late April through early September. Populations in the mountains may be single-brooded, while those in the Piedmont and Coastal Plain appear to have two or more broods annually.

HABITAT: The larvae exploit a variety of oaks that grow in habitats ranging from moist bottomland forests and mesic slopes to dry ridges and south-facing slopes. Many of our records are from semi-wooded residential neighborhoods.

FOOD: Larvae are specialists on oaks (Robinson et al., 2002; Marquis et al., 2019). Reported hosts include White Oak (<i>Quercus alba</i>), Laurel Oak (<i>Q. laurifolia</i>), Chinquapin Oak (<i>Q. muchlenbergii</i>), Water Oak (<i>Q. nigra</i>), Northern Red Oak (<i>Q. rubra</i>), Post Oak (<i>Q. stellata</i>), and Black Oak (<i>Q. velutina</i>).

OBSERVATION\_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR [S4S5]

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

COMMENTS: This oak specialist occurs statewide and populations appear to be secure.