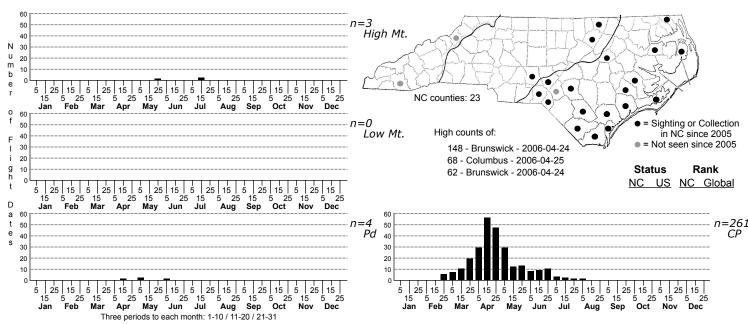
Episemasia solitaria Solitary Ruddy Moth



FAMILY: Geometridae SUBFAMILY: Ennominae TRIBE: Caberini TAXONOMIC_COMMENTS: Two species are found in this North American genus, one occurs in North Carolina, the other in Texas

FIELD GUIDE DESCRIPTIONS: ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Ferguson (2009) TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: Males are far less common in light trap samples than females and are more uniform in maculation. Females have numerous forms (see illustration above) but do not closely resemble other geometrid species. Reference to illustrations of the species should allow determination. It is most likely to be confused with small individuals of <i>lexia intractata</i> or with <i>Cyclophora<math></i> species but should always be easy to identify.

DISTRIBUTION: Most of our records come from the Coastal Plain, but we also have records in the Piedmont and Mountains, including at high elevations.

FLIGHT COMMENT: There is one brood with adults beginning to fly when warm days appear and continuing through May.

HABITAT: The species is abundant in the open savanna and piney woods of the southern Coastal Plain. It also occurs in woodland habitat wherever $\langle i \rangle$ Ilex opaca $\langle i \rangle$, $\langle i \rangle$ I. vomitoria $\langle i \rangle$, $\langle i \rangle$ I. glabra $\langle i \rangle$ or $\langle i \rangle$ I. coriacea $\langle i \rangle$ are growing. A few specimens have come from western counties but the habitat association there is unknown. It is likely associated with habitats supporting $\langle i \rangle$ Ilex opaca $\langle i \rangle$.

FOOD: In the Coastal Plain this species is associated with American Holly ($\leq i$ >Ilex opaca</i>) occasionally but more often with Yaupon Holly ($\leq i$ >I. vomitoria</i>), Inkberry ($\leq i$ >I. glabra</i>), and Large Gallberry ($\leq i$ >I. coriacea</i>) where it can be very common. We suspect American Holly is not a major host as the leaves harden about the time this species is in full flight. In North Carolina, larvae have been recorded on Yaupon.

OBSERVATION_METHODS: Adults readily come to light and can be flushed in the daytime. They are not expected to respond to bait.

NATURAL HERITAGE PROGRAM RANKS: G5 SNR [S4S5]

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

COMMENTS: This species is common and widespread in the Coastal Plain and it occupies a wide range of shrubby and wooded habitats throughout the state. Although its distribution in the western half of the state still needs to be better understood, this species appears to be secure within the state.