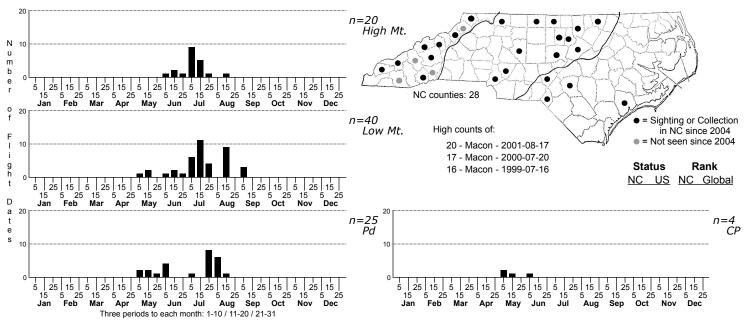
## *Tortricidia flexuosa of authors* Abbreviated Button Slug Moth



FAMILY: Limacodidae SUBFAMILY: TRIBE:

TAXONOMIC\_COMMENTS: The adults of this species and <i>T. pallida</i> are two forms that have been treated as both a single species and two species over the years. Many of the specimens cannot be differentiated based on either the larvae or adult coloration, patterning, or external morphology. Other evidence such as genitalia or molecular barcoding data have also been found to be of little value. Experts that specialize in this group suspect that they are conspecific (Wagner, 2005; MPG). As such they are perhaps best treated as a poorly resolved species complex, T. pallida/flexuosa. We continue to recognize both species, with the caveat that many of our identifications based on external features such as coloration and patterning are provisional.

Another issue involves nomenclature. As noted by Epstein and Fiesler (in Pohl and Nanz, eds.; 2023) and reported here verbatim, the original description of <i>T. pallida</i> by Herrich-Schäffer was only an illustration, one that matches what has been considered to be <i>T. flexuosa</i> by authors since. By priority, this would make the more marked phenotypes to be true <i>T, pallida</i> rather than those with little or no markings: the <i>T, pallida</i> of authors that followed. <i>T ortricidia pallida</i> of authors would be another taxon, perhaps <i>T. flavula</i>, which matches the less marked phenotype but is a darker, more vivid orange-brown. Pending further research, for expediency Epstein and Fiesler treated the species as they have most recently been known, and append "of authors" to both names to reflect the uncertainty in application of the names as they were described. In the text that follows, we refer to "<i>Tortricidia flexuosa<math></i> of authors" as simply <i>Tortricidia flexuosa<math></i>.

FIELD GUIDE DESCRIPTIONS: Covell (1984); Beadle and Leckie (2012) ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Covell (2005) TECHNICAL DESCRIPTION, IMMATURE STAGES: Wagner (2005)

ID COMMENTS: This species has two forms with intermediate variations. The pale (typical) form has a forewing that is pale orange to pale yellow. It is overlain by a brown or reddish AM line (often faint) that extends from the inner margin at about one-third to the costa just beyond the middle where it meets a rounded PM line that extends towards the tornus. The two lines often curve and join at the costa to form a U-shaped pattern. The forewing is sometimes unmarked or very faintly marked and the area inside the AM and PM lines is concolorous with the rest of the forewing. The second form has the area between the AM and PM lines partially or completely filled with dark brown shading, typically with a pale orbicular spot (which is less obvious on the paler "dark" individuals). This gives it a superficial similarity to the dark form of <i>Apoda y-inversum</i>. The hindwing is pale orange to creamy yellow and unmarked. The adults are often indistinguishable from <i>T. pallida</i> and are also very similar to <i>Heterogenea shurtleffi</i>.

The larvae differ only subtly from the other slug-like <i>Tortricidia</i> caterpillars. Each is pale green and oval shaped and all share broad, reddish (sometimes greenish), cross-shaped patches on the dorsum, the lateral "arms" being widest. The side "arms" on <i>T. flexuosa</i> usually extend only about halfway down the sides, whereas those of its congeners extend almost to the bottom edges of the abdominal segments (Wagner, 2005).

DISTRIBUTION: <i>Tortricidia flexuosa</i> is thought to range across much of the eastern US and into southern Canada (Manitoba; Ontario; Quebec; New Brunswick; Nova Scotia; Prince Edward Island). The exact range is difficult to define precisely because of the difficulty of confidently assigning specimens to species (see above). Specimens that we have assigned to this species have been found in all three physiographic regions, but are relatively uncommon in the Coastal Plain.

FLIGHT COMMENT: The adults have been found from April through October, with the peak flight season from June through September. As of 2023, our records range from early May through early September.

HABITAT: Populations are found in deciduous forests, along forest edges, and in semi-wooded residential areas.

FOOD: The larvae feed on deciduous broadleaf trees (Prentice, 1966; Robinson et al., 2010; Beadle & Leckie, 2012). The reported hosts include Sugar Maple (<i>Acer saccharum</i>), Gray Birch (<i>Betula populifolia</i>), Chestnuts (<i>Castanea</i>), apples (<i>Malus</i>), American Plum (<i>Prunus americana</i>), Black Cherry (<i>P. serotina</i>), and Northern Red Oak (<i>Quercus rubra</i>), but caution is warranted in interpreting these reports given the difficulty of correctly identifying the larvae and adults.

OBSERVATION\_METHODS: Readily attracted to lights.

NATURAL HERITAGE PROGRAM RANKS:

## STATE PROTECTION:

COMMENTS: This species is relatively common across the state, but because of the identification challenges, a clear picture of the status of <i>i>T. flexuosa</i> in the state may prove elusive for the near future. Although it is tempting to assign specific names to any adults encountered, it is probably safest to call many of them "<i>Tortricidea</i> sp."

March 2024