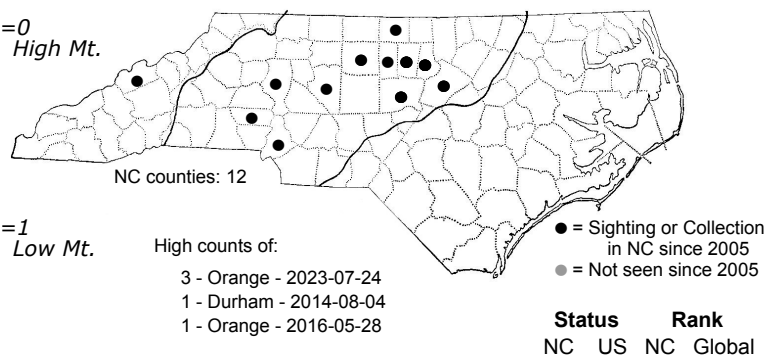
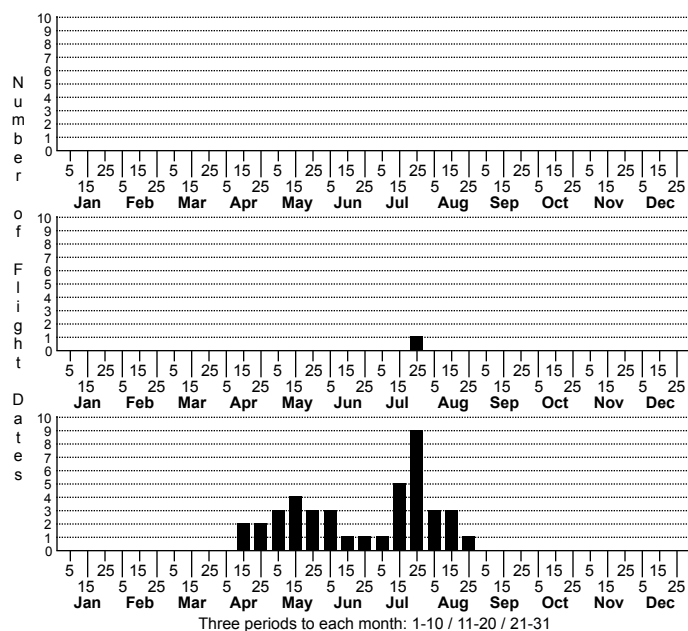


Theisoa constrictella Constricted Twirler



FAMILY: Gelechiidae SUBFAMILY: Anomologinae TRIBE:
TAXONOMIC_COMMENTS:

FIELD GUIDE DESCRIPTIONS: Leckie and Beadle (2018)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Chambers (1874); Forbes (1923)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Heinrich (1920)

ID COMMENTS: This is a distinctive moth that has the dark basal third of the wing contrasting with a whitish antemedial line. Other distinctive marks include a black discal dot, and a black costal spot at two-thirds that abuts a pale costal spot. The following detailed description is based on those of Chambers (1874, p. 76) and Forbes (1923). The labial palp is dull white to light tan and recurved. The third segment is much longer than the second, and the tip extends nearly to the thorax. The face is white, but becomes more ochreous towards the vertex. The antenna is white to pale with dark brown annulations. The thorax and basal third of the forewing are light wood brown to somewhat darker, and contrast with the lighter two-thirds of the wing. The dark basal third abuts a pale whitish antemedial line that is lined internally with black scales. The line is broadly wavy and turns inward on the costal and dorsal margins. It is followed by a paler saffron yellow shade that fills much of the remainder of the wing, and becomes darker towards the apex. A black discal dot is often evident at about two-thirds the wing length. A blackish costal spot is present at about two-thirds that is followed by a pale spot that sometimes extends obliquely to form a short fascia. The fringe is dusky yellowish. The hindwing and cilia are light yellowish-brown.

DISTRIBUTION: *Theisoa constrictella* is found in eastern North America from New Hampshire, Vermont and adjoining areas of southern Canada (Ontario; Quebec) southward to Florida, and westward to central Texas, Oklahoma, Missouri, and Illinois. Populations appear to be uncommon in the Atlantic Coastal Plain from Virginia south to Georgia. As of 2023, we have a single record from the Blue Ridge, with all others from the Piedmont.

FLIGHT COMMENT: Adults have been observed from March through September in areas outside of North Carolina. Populations appear to be bimodal in southern populations, with the first brood in March through May, and the second in July through September. Populations in North Carolina also appears to be bivoltine, with the first seasonal peak in April and May, and the second in July and August.

HABITAT: *Theisoa constrictella* uses elms as hosts. The exact species are poorly documented other than American Elm, which is found in bottomlands, river floodplains, and on the lower, gentler slopes of sites with rich, circumneutral soils.

FOOD: American Elm (*Ulmus americana*) is the only documented host (Robinson et al., 2010), but other elms are likely used.

OBSERVATION_METHODS: The adults are attracted to lights. Host use needs to be better documented, so we encourage naturalists to search for the larvae on elms.

NATURAL HERITAGE PROGRAM RANKS: GNR S3S4

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 relatively secure within the Piedmont, but more information is needed on host use, distribution and abundance before we can accurately assess its conservation status. The historical decline of American Elm may have adversely impacted this species.