## Catastega aceriella Maple Trumpet Skeletonizer Moth



FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Eucosmini TAXONOMIC\_COMMENTS: The genus <i>Catastega</i> was originally established based solely on the larval habit of forming funnel-like feeding shelters. The genus was later treated as a synonym of <i>Epinotia</i> before being resurrected by Brown (1986) based on genitalic differences.

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012) ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Brown (1986) TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The forewing has a whitish-gray ground color with darker grayish-brown to brownish-black markings. The most prominent mark is a sub-basal transverse band that extends from the middle of the wing to the inner margin at an oblique angle. A smaller and less oblique pretornal band or blotch is usually present at about four-fifths near the inner margin. Just anterior to this, there is often an irregular, and often oval-shaped, blotch near the middle of the wing. The costal margin has a well-defined series of dark bars and lighter strigulae. The hindwing is pale grayish brown with a dark band along the marginal scales (Grehan et al. 1995; Gilligan et al. 2008).

<i>Catastega aceriella</i> resembles <i>C. timidella</i> and a few other olethreutine moths, and is best assigned to genus using genitalia. Brown (1986) noted thatour two <i>Catastega</i> species can usually be identified based on wing patterning. The sub-basal transverse band on <i>C. aceriella</i> typically extends fromthe middle of the wing to the inner margin, while the band terminates before reaching the inner margin in <i>C. timidella</i>. The latter species also has moreextensive dark blotching on the costal half of the wing that produces a weakly two-toned appearance (Brown 1986, Gilligan et al. 2008). Both of our <i>Catastega</i> species produce distinctive tubular frass cases on the undersides of leaves and have different hosts that allow reliable identifications to species. Manyof our locality records for both species are based on larval records.

DISTRIBUTION: <i>Catastega aceriella</i> occurs in eastern North America from New England and adjoining areas of Canada westward to the Great Lakes region, then southward to Kentucky, Tennessee, northern Alabama and western North Carolina. As of 2023, the majority of our records are from the western mountains except for a few records in the Piedmont on <i>Acer floridanum</i> which may represent introduced populations.

FLIGHT COMMENT: This species is univoltine. As of 2022, our North Carolina records for adults extend from late April through early August.

HABITAT: In North Carolina, this species is strongly associated with rich montane forests that support Sugar Maple and Red Maple. Most of our records are from mid- to higher elevational sites.

FOOD: Larvae appear to feed primarily on Sugar Maple (<i>Acer saccharum </i>) in many areas of the range (Grehan et al., 1995), but also use Red Maple (<math><i>A. rubrum </i>) and Mountain Maple (<math><i>A. spicatum </i>) (Eiseman, 2022). As of 2023, most of our larval records for North Carolina come from Sugar Maple and Red Maple, except at the highest elevations where Mountain Maple (<i>A. spicatum </i>) is often used as a host. We also have a few Piedmont records for Florida Maple (<i>A. floridanum </i>). <math><i>Catastega aceriella </i>) has also been reported to use American Beech (<i>Fagus grandifolia </i>) and hawthorns (<i>Catastega sep. </i>) in Canada (Cote and Allen, 1973), which may reflect spillover during outbreaks. We are unaware of any use of these hosts in the southern Appalachians.

In addition to the use of maples, Jim Petranka has observed frass tubes with larvae on leaflets of Yellow Buckeye (<i>Aesculus flava</i>) at several sites in the central and northern mountains that appear to be identical to those seen on maples, although the frass tubes are often larger. John Petranka and David George have also documented frass tubes on Painted Buckeye (<i>A. sylvatica</i>) in the eastern Piedmont. It is uncertain if the buckeye feeders are an undescribed species that is host-specific for <i>Aesculus</i>, or merely a new host record for <i>Catastega aceriella</i>. The use of buckeyes have also been documented in northern Alabama (iNaturalist). We are currently treating these as 'Catastega unidentified'.

OBSERVATION\_METHODS: Local populations can be easily documented by searching for the distinctive tentiform shelters with funnelform feeding structures. The two <i>Catastega </i> species in the eastern US both produce these shelters, but the second species (<i>C. timidella</i>) is a specialist on oaks rather than maples. Adults also readily visit lights and can be locally common in areas with Sugar Maple and Red Maple stands.

## NATURAL HERITAGE PROGRAM RANKS: GNR [S4]

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

COMMENTS: This species can be regularly encountered at mid- to higher elevational forests with Sugar Maple and Red Maple and appears to be secure within the state.