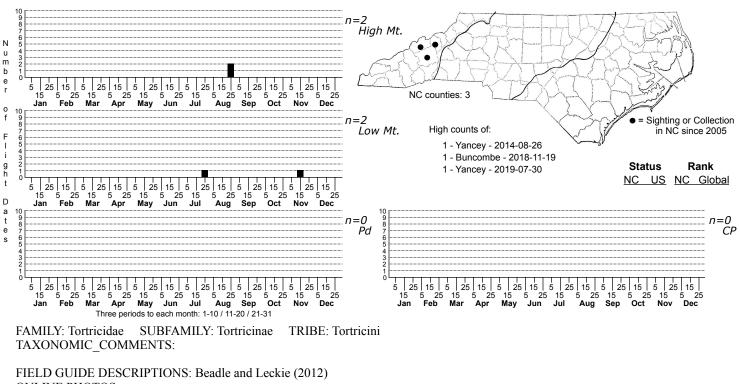
Acleris celiana Celiana's Acleris



ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: <i>Acleris celiana</i> has two common color morphs that include one with a predominantly dark brown forewing with a bold white longitudinal stripe that runs along the costa before tapering off at around three-fourths the wing length, and a second with a mostly reddish-brown forewing with a prominent silvery-gray oblique band on the basal fourth of the forewing. In the latter the palps and head are predominantly ashy-gray. The thorax can vary from ashy-gray to reddish, with an incurved dark line on the anterior end and a dark spot or longitudinal dash near the posterior tip. A broad, oblique, ashy-gray to silvery-gray band with darker internal striations extends from the costa at around one-fourth the wing length to the inner margin at around one-half. Two blackish scale tufts often occur immediately behind it on the dorsal half of the wing. The area that precedes the band is commonly filled with a poorly organized mix of silvery-gray scale patches or striated darker and lighter lines, along with dark brown to blackish patches that predominate near the wing base. The costal triangle that is common on many <i>Acleris</i> species is absent, with the remainder of the wing being mostly reddish-brown with varying amounts of dull-gray frosting often present on the apical third. The hindwing varies from grayish to light-brown and has a slightly lighter fringe.

DISTRIBUTION: <i>Acleris celiana</i> has northern affinities and occurs in Canada from British Columbia eastward to Nova Scotia and Prince Edward Island. In the U.S. it occurs from Maine and other New England states westward across the Great Lakes region to Minnesota and northeastern North Dakota, and as a southern disjunct in western North Carolina and southwestern Virginia. Isolated records are also known from Colorado and Washington State. As of 2024, we have only two site records, including two specimens from Mt. Mitchell.

FLIGHT COMMENT: The adults have been observed from February through December in different areas of the range, with seasonal peaks commonly from March through May and again in September and October. As of 2024, our very limited records are from late-August, late-July and mid-November.

HABITAT: This species is generally associated with forests containing birches. Our collection sites at Mt. Mitchell have a mixture of Yellow Birch and spruce and fir trees.

FOOD: The larvae mostly feed on members of the Betulaceae (McDunnough, 1934; Prentice, 1966; Brown et al., 2008; Robinson et al., 2010). The reported hosts include alders (<i>Alnus</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Dwarf Birch (<i>B. nana</i>), Paper Birch (<i>B. papyrifera</i>), hazelnuts (<i>Corylus</i>), Choke Cherry (<i>Prunus virginiana</i>) and willows (<i>Salix</i>). The hosts that are used in North Carolina are undocumented.

OBSERVATION_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR[S2S3]

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 rare in North Carolina where it is at the southern limit of its range and is restricted to the Blue Ridge.

March 2025

The Moths of North Carolina - Early Draft