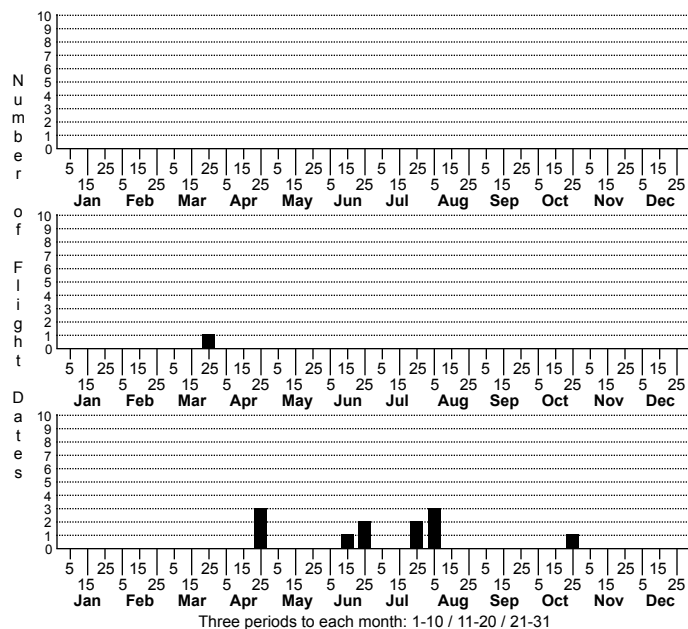


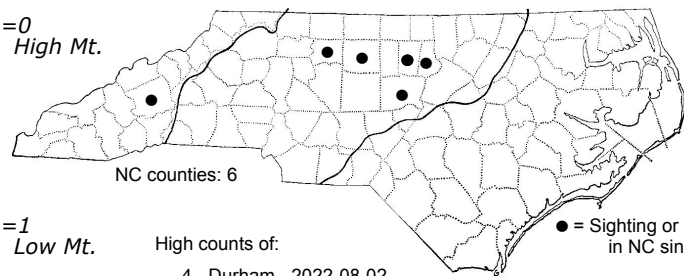
Helcystogramma hystricella Lanceolate Helcystogramma



n=0
High Mt.

n=1
Low Mt.

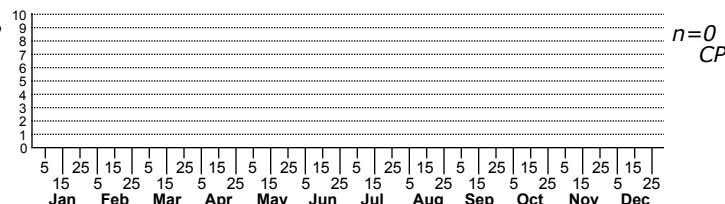
n=12
Pd



High counts of:

- 4 - Durham - 2022-08-02
- 3 - Durham - 2022-08-02
- 2 - Orange - 2024-04-24

Status Rank
NC US NC Global



FAMILY: Gelechiidae SUBFAMILY: Dichomeridinae TRIBE:
TAXONOMIC_COMMENTS:

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Hodges (1986)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Braun (1921)

ID COMMENTS: *Helcystogramma hystricella* is a distinctive species with a spear-shaped body form when resting, and a rich-brown color with pale veins that produce a striated appearance. The following description is based mostly on that on Braun (1921) who reared specimens from the Cincinnati area.

The face is pale straw-colored and the head reddish-brown. The labial palp is long, recurved and finely-tapered, with the tip reaching to the back of the head. The palp is light reddish-brown and finely-scaled, with the upper and lower edges having a fine white line from the base to the apex. The antenna is brownish and banded beneath with white, while the thorax is reddish-brown with a pale stripe through the midline.

The forewing varies from reddish-brown to fuscous and has the veins distinctly outlined with a pale straw color. The costal and dorsal margins, and a streak from the middle to the end of the cell, are also pale to whitish. The wing has three black spots that are edged with pale or white scales. These include a pair at around two-fifths the wing length from the base -- with one in the middle of the cell and the other in the fold -- and a third spot at the end of the cell at around three-fifths the wing length. The outer margin has a narrow line of blackish scales that contrasts sharply with the paler scales at the base of the fringe. The cilia has two parallel fuscous lines, with the outer one usually darker and broader. The hindwing is whitish-tan or grayish, and the legs straw-colored.

DISTRIBUTION: *Helcystogramma hystricella* is found in eastern North America and mostly in regions with moderate to cooler climates. The range extends from Massachusetts, Vermont and New York westward across the Great Lakes region (including southern Ontario) to Nebraska, Wisconsin and Minnesota, then southward to Oklahoma, Missouri, northern Tennessee, Kentucky, West Virginia, northern Virginia, and North Carolina. As of 2025, we have a cluster of records from the eastern Piedmont, as well as one from a lower-elevation site in the Blue Ridge.

FLIGHT COMMENT: The adults have been found from April through October in different areas of the range. As of 2025, our records are from late-April through late-October, with local populations likely producing three broods per year.

HABITAT: Local populations are typically found in mesic to moist hardwood forests or mixed pine-hardwood forests. Bottlebrush Grass, which appears to be the primary host, prefers circumneutral to basic, nutrient-rich soils.

FOOD: Larvae have been observed feeding on Eastern Bottlebrush-grass (*Elymus hystricella*) (Braun, 1921), which appears to be the primary host. There is also a BugGuide record (Michael Palmer, 2017) of a larva feeding on Hairy Woodland Brome (*Bromus pubescens*) in Oklahoma.

OBSERVATION_METHODS: The adults are attracted to lights. More information is needed on host use in North Carolina and elsewhere.

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 is a primarily northern species (Moth Photographers Group, accessed 2022-06-21). We have records from eight sites for this species in North Carolina as of 2025, with all but one within the Piedmont. The distribution of its host plant indicates that it could be more widespread, at least within stands of mesic forests.