



## FAMILY: Gracillariidae SUBFAMILY: Lithocolletinae TRIBE: [Lithocolletini] TAXONOMIC\_COMMENTS: The genus <i>Cremastobombycia</i> contains seven described species in North American, with at least seven undescribed species that are mostly in the western US (Eiseman, 2017).

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012) ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Braun, 1908 TECHNICAL DESCRIPTION, IMMATURE STAGES: Braun, 1908; Eiseman, 2019.

Cremastobombycia solidaginis None

ID COMMENTS: The following is based on the description by Braun (1908). The antenna is grayish and distinctly annulated with dark brown. The face and palps are yellowish white, while the tuft is brownish ocherous with white along the sides. The ground color of the thorax and forewing is reddish ocherous. A white stripe on each side of the thorax continuous as a rather indistinct whitish basal streak on the forewing. The basal streak ends at about one-third, and is narrow and unmargined. There are four white costal streaks. The first two are posteriorly oblique and situated at one-third and at the middle of the wing length. The third is at two-thirds and is nearly perpendicular, while the fourth is just before the apex and inwardly oblique. All are dark margined on the posterior margin with dark brown that is often only faintly evident, or even missing, on some specimens. The margin of the last streak forms the dusting on the apex. There is a long, oblique dorsal streak that begins near the middle of the dorsal margin. Its dark margin usually unites with the dark margin of the second costal streak, and in some individuals the streaks themselves unite to form an angulated fascia. Opposite the third costal streak there is a very reduced oblique dorsal streak that is indicated by a slightly lighter shade and a few dark scales behind it. The fringe is ocherous and the marginal line in the cilia is brownish and indistinct. The hindwing and cilia are ocherous gray. The legs are whitish with ocherous banding and the tarsal joints are tipped with black. This species is superficially similar to <i>C. ignota</i>, and is most easily distinguished by the presence of the whitish basal streak on the forewing that ends at about one-third (much shorter in <i>C. ignota</i>), and by streaks that are less bold, with the dark scales confined to the posterior margin (on both margins in <i>C. ignota</i>).

DISTRIBUTION: <i>Cremastobombycia solidaginis</i> is found in eastern North America in southern Canada (Ontario; Quebec) and throughout much of the eastern US. In the US, populations have been found from the northeastern states to as far west as Minnesota, and as far south as northern Florida and Oklahoma. As of 2022, we have scattered records from the lower elevations in the mountains to the Coastal Plain.

FLIGHT COMMENT: Many local populations appear to have two broods per year, with a peak in August and a second in October. As of 2022, we have a record of a mine in the Coastal Plain as early as late June. However, most records for occupied mines and adults are from August through late October.

HABITAT: Local populations are dependent on goldenrods as hosts, particularly species that thrive in open, sunny habitats such as roadways, fence lines, open woods, old fields and infrequently mowed meadows.

FOOD: Goldenrods (<i>Solidago</i> spp.) are the primary hosts, but Eiseman (2019) noted one instance of the larvae using an aster (<i>Symphyotrichum</i> sp.). As of 2024, all of our leaf mine records are from goldenrods, including Tall Goldenrod (<i>S. altissima</i>), Wrinkleleaf Goldenrod (<i>S. rugosa</i>), Pine Barrens Goldenrod (<i>S. fistulosa</i>), and Canada Goldenrod (<i>S. canadensis</i>).

OBSERVATION\_METHODS: The adults occasionally visit lights, but most of our records are based on leaf mines or adults that were reared from mines.

## 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: We currently do not have adequate information on the distribution and abundance of this species in North Carolina to assess its conservation status.