



FAMILY: Gracillariidae SUBFAMILY: Lithocolletinae TRIBE: [Lithocolletini]

TAXONOMIC_COMMENTS: *Cameraria* is a genus of leaf-mining micromoths. Many species are stenophagous and specialize on a small number of closely related host species. There are currently more than 50 described species in North America.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Braun, 1908.

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following description of the adults is based on Braun (1908). The antennae are whitish and banded above with dark brown. The face and palpi are white. The tuft is ochreous towards the front, but whitish towards the rear. The thorax and forewings are reddish ochreous. A whitish streak on each side of the thorax is continuous with a short, whitish streak on the forewings. There are two white fasciae with dark margins on the posterior edge. The second is near the middle of the wing and is indistinctly obtusely angled near the costa. The first fascia is half way between the second and the base of the wing, and is broken near the costa. Its dorsal arm is more oblique and diverges from the second fascia. At the beginning of the cilia is a small costal spot, and opposite it a longer almost perpendicular dorsal streak. These both have black margins posteriorly. Black dusting of varying intensity occurs near the apex, and is edged internally by an oblique white streak that sometimes unites or almost unites with the dorsal streak. The cilia are ochreous, with a slightly darker line through their middle. The hindwings and cilia are gray with an ochreous tinge, and the abdomen is gray with an ochreous tuft. The front and middle legs are white with black banding on the tarsi, while the rear legs are white with one or two joints faintly tipped with black. Traits that can be used to distinguish *Cameraria aesculisella* from similar species include the first fascia, which is interrupted near the costa, the white streak on each side of the thorax that is continuous with the streak on the forewing, the whitish head tuft, and the whitish rear legs that contrast with the boldly patterned front and middle legs.

DISTRIBUTION: *Cameraria aesculisella* is patchily distributed in the eastern US. It is currently known from Ohio, Illinois, Kentucky, West Virginia and Pennsylvania southward to North Carolina, Florida and Louisiana. As of 2024, we have records from the Blue Ridge and the eastern Piedmont.

FLIGHT COMMENT: Populations appear to be univoltine, with the adults active primarily in June and July in Ohio and vicinity. The adults emerge as early as mid-May in North Carolina based on a collected adult.

HABITAT: The larvae feed on Buckeyes (*Aesculus* spp.), which are generally associated with rich hardwood forests, including riparian zones and mesic slopes.

FOOD: The known hosts include Yellow Buckeye (*A. flava*), Ohio Buckeye (*A. glabra*), Red Buckeye (*A. pavia*) and Painted Buckeye (*A. sylvatica*; Eiseman, 2019; Robinson et al., 2010). As of 2024, we have host records for Yellow Buckeye and Painted Buckeye in North Carolina.

OBSERVATION_METHODS: The adults appear to rarely visit lights. Records are best obtained by searching for the leaf mines in June and July and rearing the adults. Mines with overwintering larvae can also be found at other times of the year.

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: