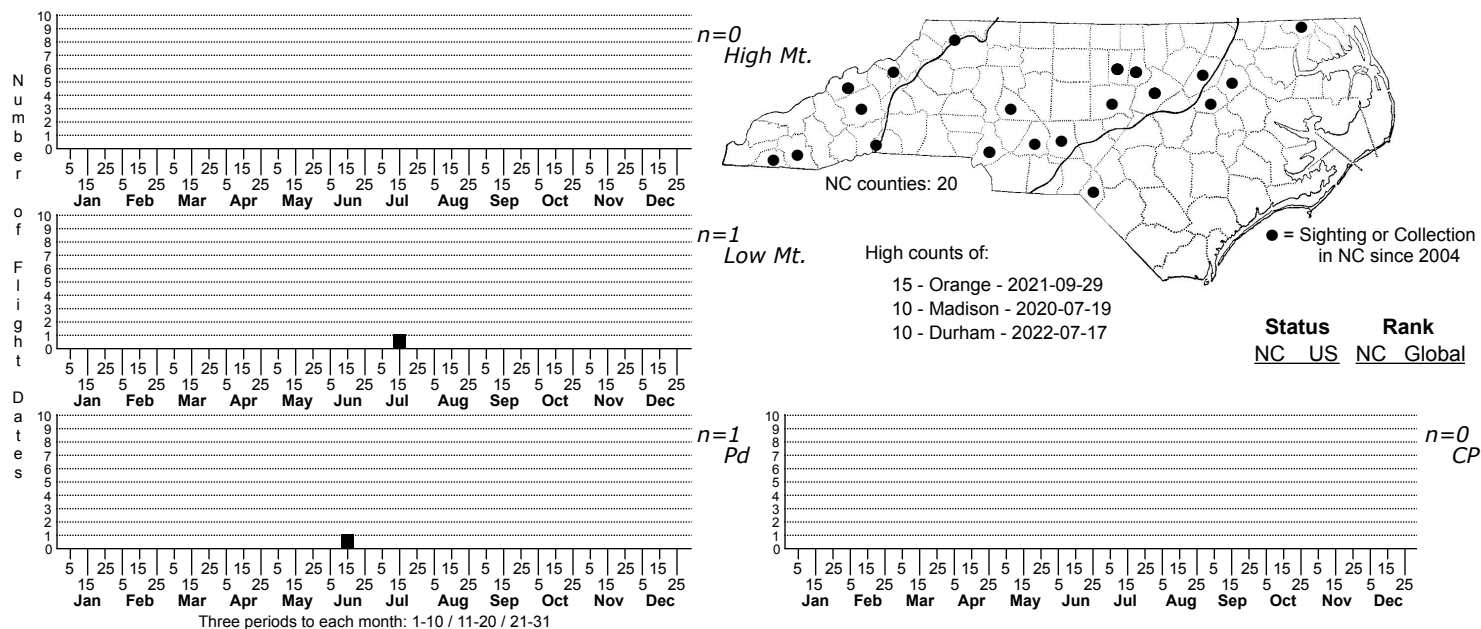


## *Ectoedemia platanella* Sycamore Leaf Blotch Miner



FAMILY: Nepticulidae SUBFAMILY: Nepticulinae TRIBE: Trifurculini

TAXONOMIC\_COMMENTS: Wilkinson and Newton (1981) divided the North American *Ectoedemia* into four species groups based primarily on genitalic differences. The *platanella* group consists of four species (*E. clemensella*; *E. platanella*; *E. similella*; *E. virgulae*) that have similar traits, such as the presence of multi-branched setae on the inner sides of the valves.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Wilkinson and Newton (1981)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Braun, 1917; Eiseman, 2019.

ID COMMENTS: The following description of this tiny moth is based primarily on descriptions by Braun (1917) and Wilkinson and Newton (1981). The palps are buff and the eye-cap is shining white. The antenna is dark brown. The collar, vertex, and tuft on the front of the head are pale ochreous, while the thorax and abdomen are dark grayish brown. The ground color of the forewings is dark brown to blackish with a bronze luster. The fringe is whitish, with an apical band of dark brown wing-scales. At the middle of the costal margin there is a small oblique silvery streak, along with an opposing streak on the dorsal margin. The dorsal streak is usually larger than the costal streak and broader on the margin. In rare instances, both spots can be very minute. Occasionally, the two streaks meet to form a more or less interrupted concave fascia. The last row of scales at the apex are pale yellowish at their bases, thus forming a dark line in the cilia. The ground color and fringe of the hindwing are pale gray, and a lance-shaped chitinous plate extends along the fore edge to the middle of the costa. The legs are buff, with areas of dark brown.

*Ectoedemia platanella* and *E. clemensella* both mine the leaves of *Platanus occidentalis*, and can be distinguished using several characters (Wilkinson and Newton, 1981). *Ectoedemia platanella* is almost always larger and browner than *E. clemensella*, and the males have a lance-shaped hindwing scale, which is absent in *E. clemensella*. The linear portion of the leaf mine is longer in *E. clemensella*, and it enlarges into a blotch more gradual than in *E. platanella*. The male genitalia differ in the nature of the saccus, which is markedly bilobed in *E. clemensella*, and the scales of the valves, which are shorter and less furcate in *E. clemensella*. The female genitalia differ from those of *E. similella* and *E. virgulae* by the spines of the accessory sac, which are large and single in *E. platanella*.

DISTRIBUTION: *Ectoedemia platanella* is found in Ontario, Canada and across much of the eastern US where sycamores occur locally. Populations occur as far south as Alabama and Florida. As of 2022, we have records from the low mountains, Piedmont, and Coastal Plain. This species is presumed to be rare in much of the eastern Coastal Plain where American Sycamore is uncommon or rare.

FLIGHT COMMENT: Braun (1917) noted that there are three broods per year, with the first during June. As of 2022, we have records of mines in North Carolina that occur as early as mid-May, and records of occupied mines through late July.

HABITAT: Local populations are found in association with the American Sycamore. Sycamores are common along stream banks and in other wet habitats, particularly where scouring or soil disturbance reduces the leaf-litter layer and allows seedlings to become established.

FOOD: The only known host is American Sycamore (*Platanus occidentalis*) (Eiseman, 2022).

OBSERVATION\_METHODS: Almost all locality records are based on leaf mines, which are rather conspicuous on sycamore leaves. Photographic records of adults are needed, and we encourage participants to rear and photograph the adults.

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: This species is spottily distributed within the state due to its dependence on sycamore trees for reproduction.