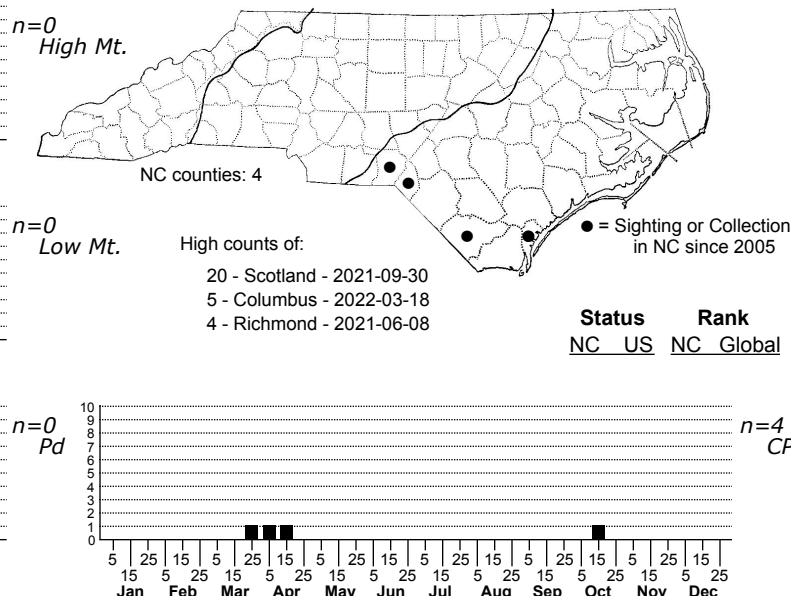


Cameraria conglomeratella Conglomerate Oak Leafminer Moth



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: Covell (1984)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Braun (1908)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Braun (1908)

ID COMMENTS: The following description is based primarily on that of Braun (1908). The thorax is saffron yellow to reddish brown, and on some specimens the dorsum may have a central whitish line. The upper head is similar, but somewhat lighter, and the face and palps are whitish. The antenna is closely annulated with brown, and the annulations often become obsolete toward the base. The ground color of the forewing is dull saffron yellow to reddish brown, and there are two short whitish, oblique, costal streaks just before and after the middle that are narrowly edged with black. A third short oblique costal streak is present near the apical fringe, but on some specimens may be masked by black dusting and represented as a series of small white spots. Along the dorsal margin, there is a narrow white streak that extends from the base to near the tornus. The streak often terminates or becomes indistinct before reaching the tornus. From there, it angles inward towards the third costal streak, and forms the inner margin of an extensive area of black apical dusting. Extensive black dusting is also often present from the tip of the second costal streak towards the apex. The cilia are yellowish gray, and the fringe often has a somewhat faint darker band through the middle region. The fore and middle tarsi are white and spotted with black, while the hind tarsi is mostly white. The hindwings are gray with lighter cilia. Braun (1908) noted that the amount of dark dusting in the apical third of the forewing is variable and in some individuals is poorly developed. In others it may be so extensive that it obscures to varying degrees the deflexed dorso-basal streak that extends from the tornus.

Cameraria conglomeratella resembles *C. ulmella*, but the latter is smaller, has a paler ground color on the forewings, has costal streaks that are slightly more oblique, and has dark annulations on the antenna that are restricted to the apical two-thirds. In *C. conglomeratella* the annulations extend along the entire length, although they are sometimes indistinct toward the base (Braun, 1908). This species is also closely resembles *C. quercivorella*, but the dorso-basal white streak on *C. quercivorella* extends only a short distance beyond the middle of the wing to produce a reddish gap between the dorso-basal streak and the oblique dorsal white streak.

DISTRIBUTION: *Cameraria conglomeratella* is found in the eastern US from New Jersey to as far south as Florida, and westward to southern Wisconsin, Illinois, Oklahoma and Texas. As of 2021, our records are from xeric habitats in the Sandhills and vicinity.

FLIGHT COMMENT: The adults have been documented from March through December in Florida. Elsewhere, they show evidence of being bivoltine except in the northernmost areas of the range, with the first brood in March through June, and the second in August through October. As of 2022, we have three rearing records, with the adult emerging in early April, early June and early to mid-October.

HABITAT: The larvae feed on oaks, including species that inhabit mesic to dry forest communities. As of 2022, our three records are all from xeric sites with oaks.

FOOD: The documented hosts include White Oak (*Quercus alba*), Swamp White Oak (*Q. bicolor*), Blackjack Oak (*Q. marilandica*), Post Oak (*Q. stellata*), and Live Oak (*Q. virginiana*) (Eiseman, 2022). In North Carolina, we have records from Blackjack Oak, Post Oak, and Darlington Oak (*Q. hemisphaerica*).

OBSERVATION_METHODS: The adults appear to only occasionally visit lights and are best obtained by rearing larvae.

NATURAL HERITAGE PROGRAM RANKS: GNR S2S4

STATE PROTECTION: Has no legal protection, although permits are required to collect it on state parks and other public lands.

COMMENTS: As of 2022, we have only three records of this species from the state. More information is needed on its distribution and abundance before we can assess its conservation status.