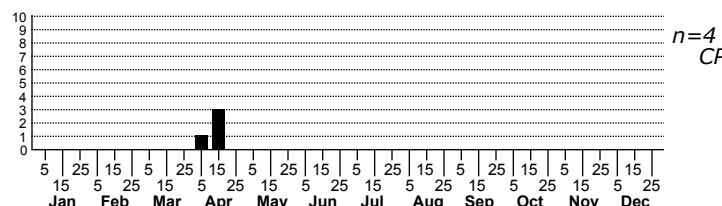
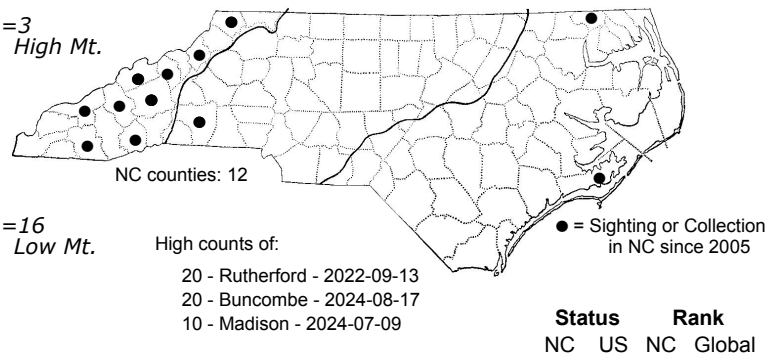
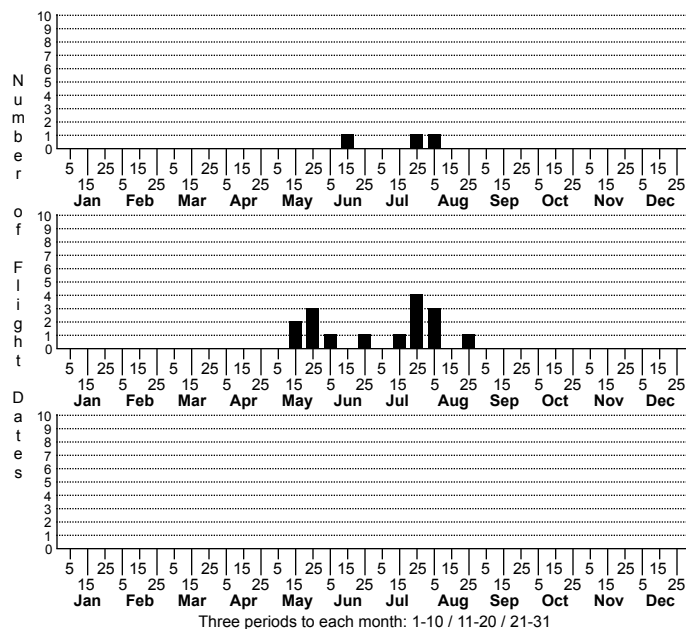


Sinoe robiniella None



FAMILY: Gelechiidae SUBFAMILY: Gelechiinae TRIBE:

TAXONOMIC_COMMENTS: *Sinoe* was traditionally treated as a monotypic genus that is restricted to the eastern US. It has since been split into four species. In a revision of the genus, Lee and Brown (2012) redescribed *S. robiniella* and recognized two additional species (*S. chambersi*; *S. kwakae*) that occur in North Carolina.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Lee and Brown (2012)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Comstock (1880)

ID COMMENTS: The following is based on the description in Lee and Brown (2012). The head and thorax are white with a mixture with gray and brown scales. The antenna is brownish gray and about two-thirds the length of the forewing. On each flagellomere the basal row of scales is dark brown and the apical row gray. On the labial palp, the outer side of the second segment is dark brown, except for a white apex, while the inner side is dark brown and intermixed with white. The third segment has two black annuli. The ground color of the forewing varies from brown to gray. The costa has two conspicuous brownish black spots at one-third and two-thirds the wing length. Some specimens have a third dark brown spot near the base. The subbasal fascia is dark brown with raised scales, and extends from the dorsum obliquely toward the first costal blotch, but ends at about the middle of the wing. The brown basal patch that extends from the subbasal fascia to the base is either absent or incomplete. The discal cell has a small spot rather than a streak, and a median streak is usually present above the pretornal spot. The preterminal area has a dark brown spot beyond the discal cell. The hindwing is light brown to gray with gray fringe.

This species is similar to *S. chambersi* and *S. kwakae* and is best separated by phenology and patterning. *S. chambersi* is active in winter through early spring (typically Jan-March), has dark scaling (basal patch) that extends from the fascia to the wing base, and typically has two dark, longitudinal streaks in the middle of the wing. In contrast, *S. robiniella* flies later in the year (with perhaps a small period of overlap in April in the Piedmont and Coastal Plain), has dark scaling that is either absent or does not extend from the fascia all the way to the wing base, and has the discal streak reduced to a spot. *S. kwakae* is similar to *S. chambersi*, but has dark scaling that does not extend from the fascia all the way to the wing base. This is a more southern form that flies year-round in Florida, Alabama, Mississippi, and other southern locales.

DISTRIBUTION: *Sinoe robiniella* is found in the eastern US from New York to as far west as Wisconsin, and as far south to Mississippi and Arkansas (Lee and Brown, 2012). In North Carolina, all but one of our records as of 2023 are from the Blue Ridge, with one apparent disjunct in the northeastern Coastal Plain.

FLIGHT COMMENT: Adults have been collected from April through September in southern latitudes and from late May through August in northern latitudes (Lee and Brown, 2012). As of 2023, our records extend from April through August.

HABITAT: Local populations appears to primarily use Black Locust as a host, but other species are also used. Black Locust is common in edge habitats such as along roadways or fencerows, but also occurs in mesic hardwood forests in the mountains, particularly where past disturbance has allowed seedlings to become established.

FOOD: Black Locust (*Robinia pseudoacacia*) is the primary host throughout the range. There appears to be a valid record of this species using a *Gleditsia* species (Lee & Brown, 2012), and Robinson et al. (2010) reported False Indigo-bush (*Amorpha fruticosa*) to be a host. Lee & Brown (2012) questioned whether the latter record was valid, but *S. robiniella* was recently documented using Mountain Indigo-bush (*Amorpha glabra*) in North Carolina.

OBSERVATION_METHODS: The adults occasionally visit lights, and the bound leaflets have been found on Black Locust and occasionally on other hosts.

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 sufficient information on the distribution and abundance of populations within the state to assess the conservation status of this species.