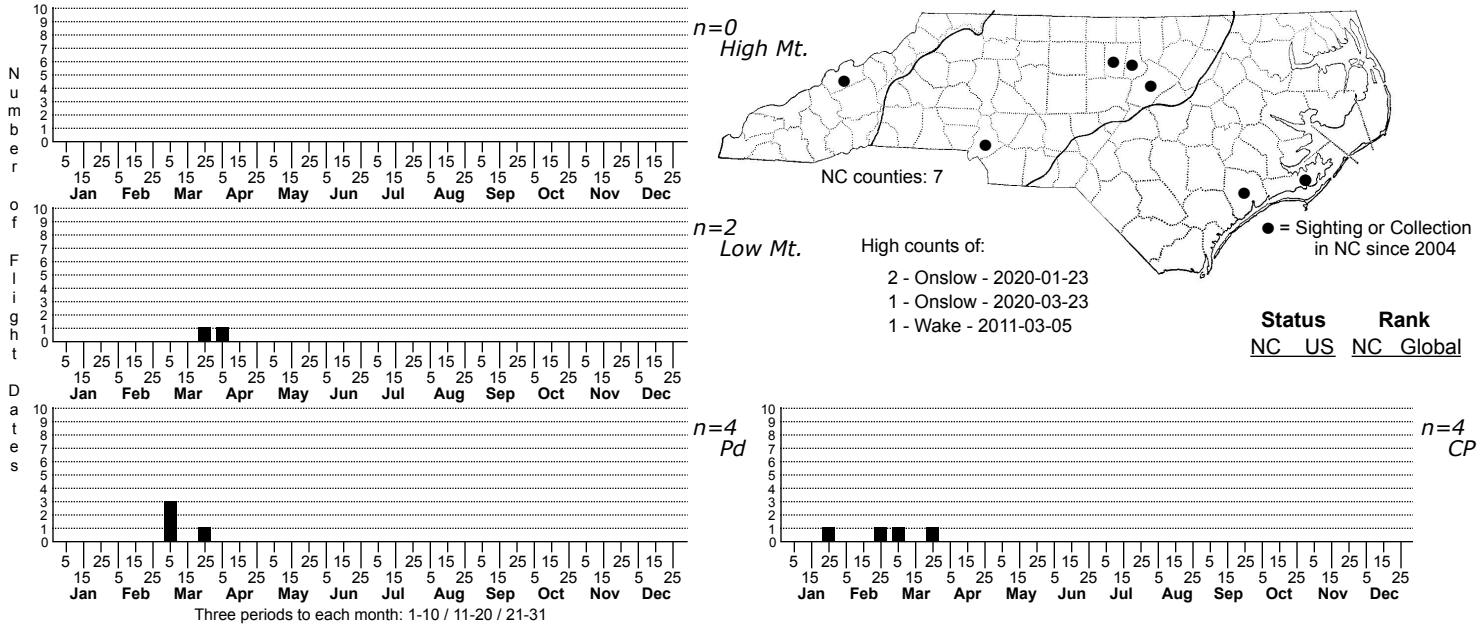
Sinoe chambersi No common name



FAMILY: Gelechiidae SUBFAMILY: Gelechiinae TRIBE: Litini
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:

ID COMMENTS: The following is based on the description in Lee and Brown (2012). The head is white with a mixture with gray and brown scales, while the thorax is gray mixed with white 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 in some individuals, while the inner side is white. The third segment is white with 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 on near base. The subbasal fascia is dark brown and extends from the dorsum obliquely toward the first costal blotch, but ends at about the middle of the wing. A patch of brown scales (basal patch) extends from the fascia to the base of the wing. The discal cell has a dark brown longitudinal median streak that is followed by a second streak posteriorly. 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. robiniella and S. kwakae and is best separated by phenology and patterning. Sinoe chambersi is active in winter through early spring (typically Jan-March), has dark scaling 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 early April in the Piedmont and Coastal Plain), has dark scaling that does not extend from the fascia all the way to the wing base, and has the discal streak reduced to a spot. Sinoe 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 chambersi is found in southern Canada from Alberta to Quebec, and in the eastern US. A disjunct population in California may be an introduction (Lee and Brown, 2012). In the eastern US, it ranges from Pennsylvania westward to Michigan and Indiana, and southward to Tennessee, North Carolina, and Mississippi. As of 2022, our records are from the Coastal Plain and eastern Piedmont.

FLIGHT COMMENT: This is an early season species. Lee and Brown (2012) reported the flight season to be from late January through March in southern latitudes, and March through June in northern latitudes such as Canada. As of 2022, our few records are from late January to late March.

HABITAT: The preferred habitats are poorly documented. As of 2022, our three records are from a second growth hardwood forest, a partially wooded residential neighborhood, and a maritime shrub/forest community.

FOOD: The hosts are unknown. Lee and Brown (2012) noted that the adults are typically active before the spring leaf-out, which suggests that this species may not be a leaftier on woody legumes as is S. robiniella.

OBSERVATION_METHODS: All records to date are for adults that were attracted to lights. The larval ecology is unknown, so we encourage naturalists to search for the larvae and document the life history.

NATURAL HERITAGE PROGRAM RANKS: GNR SU

STATE PROTECTION:

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.