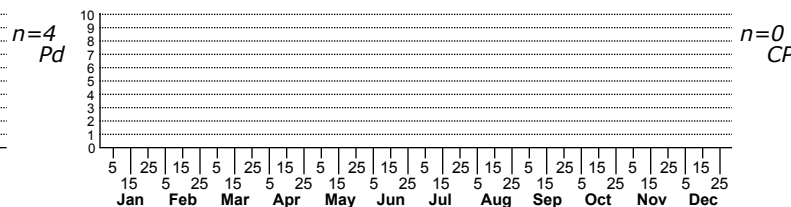
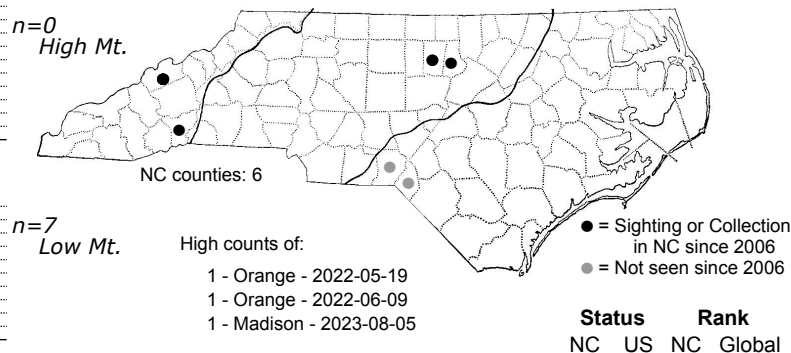
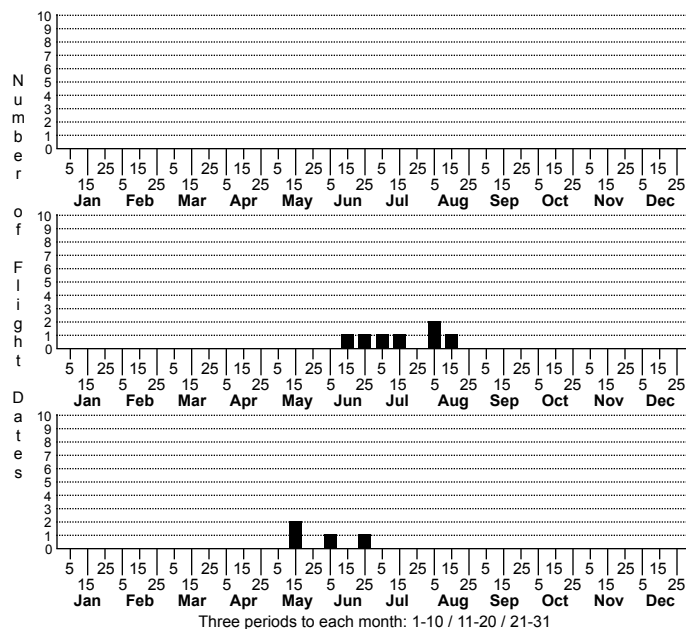


# *Sonia canadana* Canadian Sonia



FAMILY: Tortricidae SUBFAMILY: TRIBE:

TAXONOMIC COMMENTS: *Sonia* that occur in the southeastern US are a taxonomically difficult group that likely reflect several lineages that are in various stages of evolutionary divergence and that do not differ markedly in genitalia. Populations in Coastal Plain of North Carolina have proven to be challenging and likely contain at least two of these ill-defined lineages, including one that resembles *S. canadana* from the Blue Ridge. Here, we treat all of these that occur in North Carolina as *S. canadana*, with the understanding that they may be members of a cryptic species complex.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Wright and Gilligan (2023)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The forewing of this species is dark reddish-brown to blackish brown with a wide interfascial spot or bar that extends obliquely from near the middle of the inner margin before terminating near the middle of the wing. The bar is margined basally with a thin whitish line that separates it from the dark-scaled, posterior region of the basal third of the wing. The dark-scaled regions lightens towards the wing base. Both the bar and the ocellus are heavily speckled with whitish and brownish coloration, and the two are often connected by similarly speckled blotches or lines along the costal half. When a resting individual is viewed from above, the speckled patterning appears to surround a prominent reddish-brown to brownish mark on the inner margin at around three-fourths the wing length.

The following detailed description is from Wright and Gilligan (2023) who examined specimens from Manitoba, Ontario, Illinois, Kentucky, Michigan, New York, and Ohio. The third segment of the labial palp is black with a few whitish scales at the tip, while the lateral surface of the second segment is whitish to grayish brown, with a scattering of black or brown scales that often coalesce into a dark bar or a pair of dark spots near the dorsal margin. The upper frons is brown, the vertex is pale brown to gray brown, and the antenna has black scaling on the pedicel and a gray patch on the ventral surface of the scape. The forewing color varies from brown to blackish brown, with white speckling or reticulations in the interfascial spot and ocellus. The sub-basal mark is prominent, with its distal margin edged with white and oriented somewhat obliquely with respect to the inner margin. The mid-costal bar is barely discernable, and the discal mark is moderately well defined and usually connected to the postmedian fascia (as in *S. paraplesiana*). The pretornal mark is separated from the discal mark by a white-edged grayish band that extends distally to the ocellus. The ocellus has a gray band along the proximal margin, a variably expressed white spot in the apical quadrant, a gray spot in the tornal quadrant, and sometimes a few centrally located black spots. The costal strigulae are white and moderately conspicuous.

Many specimens from the Coastal Plain and eastern Piedmont are generally similar, but tend to be less-speckled with the whitish line on the basal edge of the bar on the inner margin poorly expressed. These are of uncertain identify and are not considered to be *Sonia canadana* as described here.

DISTRIBUTION: *Sonia canadana* is restricted to eastern North America where it occurs in portions of southern Canada (Manitoba; Ontario; Quebec), and in the US from the New England states westward through the Great Lakes region to Minnesota, and southward to Oklahoma, Arkansas, Tennessee and North Carolina. Apparent geographic isolates also occur in Florida and Texas (BOLD). As of 2024, our very limited site records are from the Piedmont and Blue Ridge.

FLIGHT COMMENT: Specimens that Wright and Gilligan (2023) examined from the central and northern portions of the range were captured between 14 June and 10 September, with most from August. As of 2024, our records range from mid-May to mid-August.

HABITAT: This species is generally associated with old-fields, prairies, glades and other open areas that support members of the Asteraceae such as goldenrods and asters, which are thought to be the hosts.

FOOD: The hosts are poorly documented. Wright and Gilligan (2023) report one record of a reared specimen that used New England Aster (*Symphotrichum novae-angliae*), and another from a goldenrod (*Solidago*) species. For the latter, the specimens were not found or confirmed as being those of *Sonia canadana*.

OBSERVATION\_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS:

STATE PROTECTION:

COMMENTS: