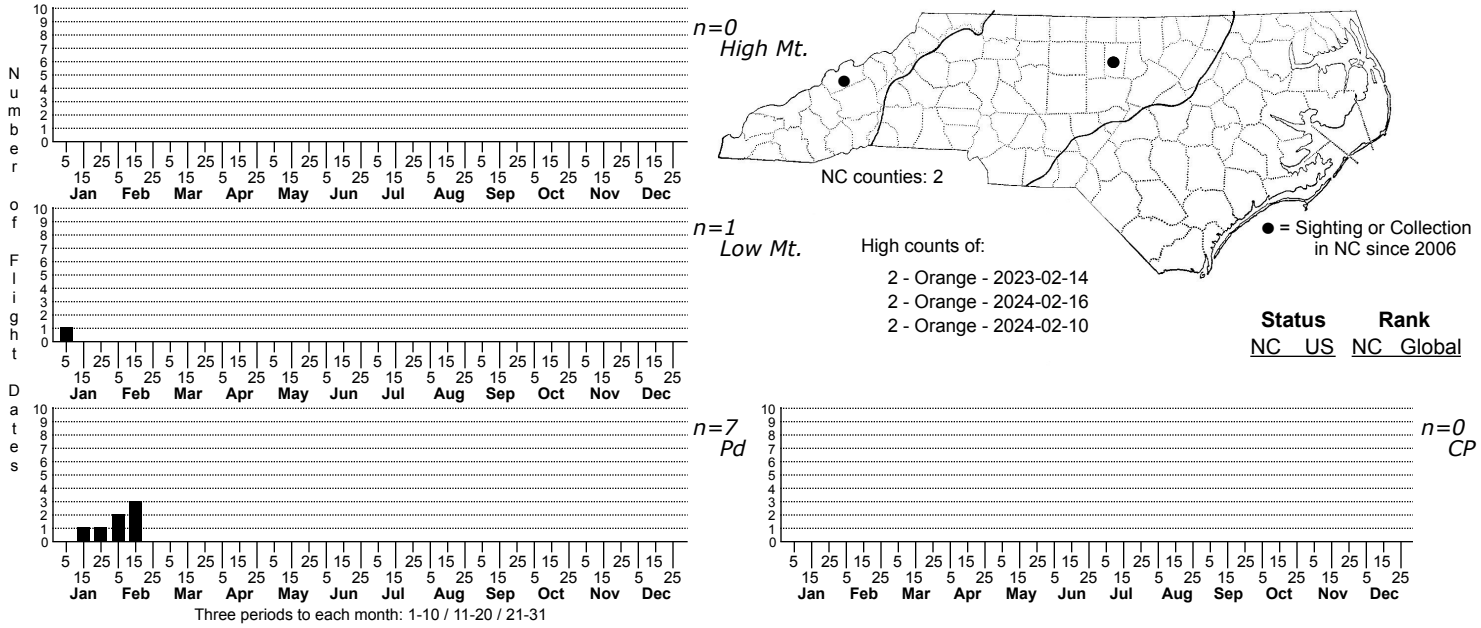
Rhyacionia adana Adana Pine Tip Moth



FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Eucosmini
TAXONOMIC_COMMENTS:

FIELD GUIDE DESCRIPTIONS:
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS: Powell and Miller (1978).
TECHNICAL DESCRIPTION, IMMATURE STAGES: Martin (1960)

ID COMMENTS: Rhyacionia adana has grayish palps and antennae. The lateral hairs on the basal third of the antennae of both sexes are very short, with the antennae appearing almost smooth. The head tuft is reddish, and the tegula has a reddish tinge. The basal half of the dorsal half of the forewing is striated with irregular light gray and dark-gray to grayish-brown crossbands, while the costal half is similar, but with the crossbanding extending to about two-thirds the length of the forewing. The remainder of the wing is washed with diffuse, reddish-yellow and reddish blotching, except for a red terminal band that commonly has an inward projection near the middle of the outer margin. The fringe is predominantly gray with a darker basal band, while the hindwing is light gray with a fringe that is similar to that of the forewing.

Rhyacionia adana is most easily confused with R. granti, but in the latter the length of the lateral hairs on the basal third of the antenna of males greatly exceeds the length of the antennal segments (versus being very short in R. adana). Rhyacionia adana might also be confused with R. busckana, but the latter has relatively long lateral hairs that project from the antennal shafts of males and a gray head tuft. The grayish crossbands also extends about the same distance rearward on both the costal and dorsal halves of the forewing of R. busckana, versus extending farther out into the wing on the costal half than on dorsal half of the forewing on R. adana.

DISTRIBUTION: Rhyacionia adana is mostly found in the northeastern and midwestern U.S. and adjoining areas in Ontario. In the U. S. the range extends from Massachusetts westward across the Great Lakes region to Michigan and Wisconsin, and southward to northern Virginia (Powell and Miller, 1978). Apparent disjuncts are present in central Mississippi and northwestern Louisiana (iNaturalist). Scattered records are also known from southeastern Kentucky and northwestern Louisiana, As of 2025, we have only two known populations, with one from Orange County in the eastern Piedmont and a second from Madison County in the Blue Ridge.

FLIGHT COMMENT: The adults have been documented from mid-January through May in different areas of the range, with northern populations not becoming active until after the spring thaw. As of 2025, our limited records range from early-January to mid-February. Most local populations throughout the range appear to be univoltine.

HABITAT: The larvae in northern populations appear to prefer pine seedlings and samplings that are found either in nursery settings or even-age stands. Our two site records as of 2025 are from residential neighborhoods with a mixture of hardwoods and pines.

FOOD: Martin (1960) reported that the larvae in Ontario feed on Jack Pine (Pinus banksiana), Red Pine (P. resinosa), and Scots Pine (P. sylvestris), and typically on plants that are less one meter in height in nurseries, plantations, and natural stands. At our two known sites where the species occurs in North Carolina (as of 2025), the only species that could serve as hosts are Pitch Pine (P. rigida), Loblolly Pine (P. taeda), Virginia Pine (P. virginiana).

OBSERVATION_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR [S2]

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

COMMENTS: As of 2025 this species is currently only known from two sites in North Carolina, where it appears to be part of a southern disjunct population from the main range farther north.