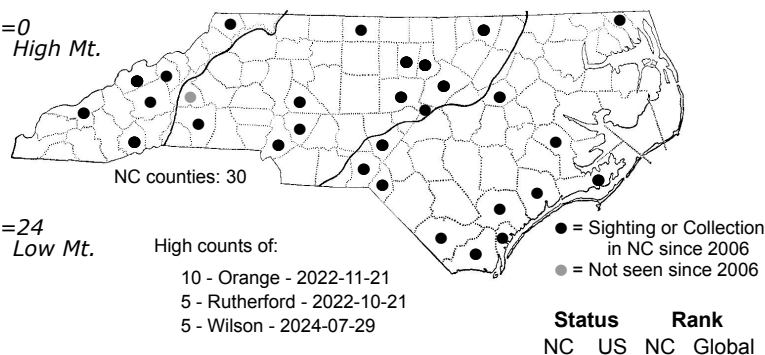
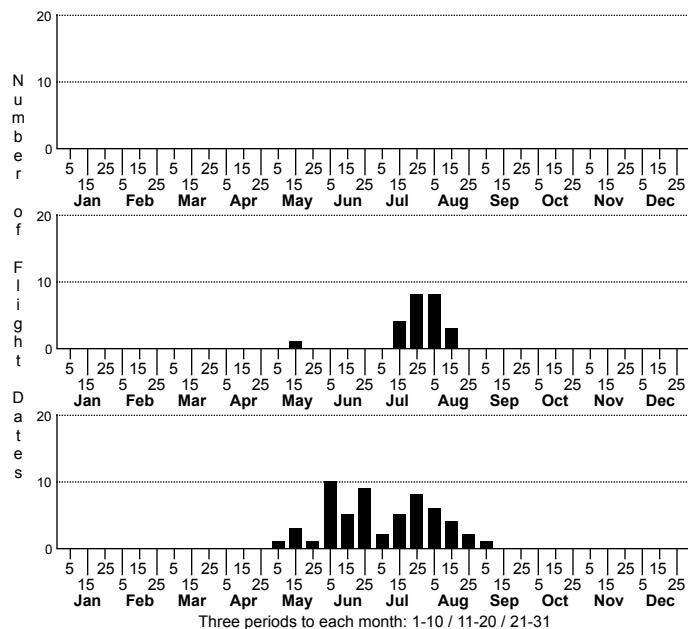


# *Pococera robustella* Pine Webworm Moth



FAMILY: Pyralidae SUBFAMILY: Epipaschiinae TRIBE: [Epipaschiini]

TAXONOMIC COMMENTS: The genus *Pococera* contains a taxonomically challenging group of species with many forms that are difficult to distinguish based on external morphology, coloration, and patterning. Rearing and knowledge of the host species can be helpful in a few instances, and some species can be identified based on external characteristics. However, we find many specimens from North Carolina that are challenging to assign to species with high confidence.

The genitalia of species that have been examined from North Carolina are virtually identical and offer little help in sorting out species. DNA barcoding also offers little help since many of the established names show up in multiple BINs that likely reflect large numbers of misidentified specimens. Unfortunately, no one has any idea which of these specimens are accurately identified. A comprehensive study of North American members of the genus is clearly needed that will hopefully better delineate species boundaries and resolve some of the problems that hamper the accurate identification of specimens from within the state and elsewhere. At present, our assignment of specimens to certain species is best treated as provisional.

FIELD GUIDE DESCRIPTIONS: Leckie and Beadle (2018)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1923)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Allyson (1977); Mayfield (2007); Wallesz and Benjamin (1960)

ID COMMENTS: The Pine Webworm Moth is a small grayish to brownish moth with broad wings and broad bands on the forewing. The following description is based in part on that of Forbes (1923) and Mayfield (2007). The upper head and thorax vary from light grayish brown to brown and are more or less concolorous with the basal portion of the forewing. The antenna is brownish and is about two-thirds the forewing length. The basal third of the forewing varies from dark gray to dark brown and typically becomes paler towards the base. The remainder of the forewing is pale gray to light brown, except for the apical one-fifth to one-fourth that is dark gray to dark brown and forms a wide, terminal band. The terminal band is separated from the lighter central region by a jagged, dark brown post-median line with a slightly lighter posterior border. Some individuals also have a fine whitish line that separated the light central region from the darker basal third of the wing. A marginal row of dark bars is present along the termen at the juncture with the cilia. The hindwing is brown with lighter cilia that are separated by a darker marginal line.

DISTRIBUTION: *Pococera robustella* is found in eastern North America, including southern Canada (Saskatchewan; Manitoba; Ontario; Quebec) and much of the eastern US. In the US the range extends from the New England states southward to southern Florida and westward to eastern Texas, eastern Oklahoma, western Kentucky, Wisconsin and Minnesota. This species occurs statewide in North Carolina, but appears to be less common in the Coastal Plain compared with other regions of the state.

FLIGHT COMMENT: The adults are active year-round in Florida, and from April through October in other areas outside of North Carolina. A seasonal peak in activity occurs from June through August. As of 2021, our records extend from mid-May through early September. North Carolina populations appear to produce either one or two broods per year.

HABITAT: Our records come mainly from wet to somewhat dry forests, including riparian habitats, lakeshores, mesic slopes, and mixed pine-hardwood forests. Virginia Pine appears to be the most important host in the mountains, while Loblolly Pine is the only documented natural host in the Piedmont and Coastal Plain as of 2021.

FOOD: The larvae feed primarily on yellow pines, but on rare occasions may use White Pine (Craighead et al., 1950; Schaffner, 1959; Prentice, 1966; Maier et al., 2004; Heppner, 2007; Mayfield, 2007; Robinson et al., 2010; Eiseman, 2022). The reported hosts are Jack Pine (*P. banksiana*), Sand Pine (*P. clausa*), Shortleaf Pine (*P. echinata*), Slash Pine (*P. elliotii*), Longleaf Pine (*P. palustris*), Red Pine (*P. resinosa*), Pitch Pine (*P. rigida*), White Pine (*P. strobus*), Scotch Pine (*P. sylvestris*), Loblolly Pine (*P. taeda*), and Virginia Pine (*P. virginiana*). Heppner (2007) also reported this species to use Deodar Cedar (*Cedrus deodara*) in Florida. In North Carolina, we have records of this species using Virginia Pine (*Pinus virginiana*), and Loblolly Pine (*Pinus taeda*). Dean Furbish also observed the frass nests on dwarf cultivars of Virginia Pine, Swiss Mountain Pine (*P. uncinata*), Scotch Pine, and Japanese Red Pine (*P. densiflora*) at the J. C. Raulston Arboretum at NC State University.

OBSERVATION\_METHODS: The adults are attracted to lights and the conspicuous frass nests are easy to spot on pine shoots.

NATURAL HERITAGE PROGRAM RANKS: GNR S4

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

COMMENTS: This species appears to be relatively secure within the state due to the fact that it is found statewide and depends on yellow pines as hosts.