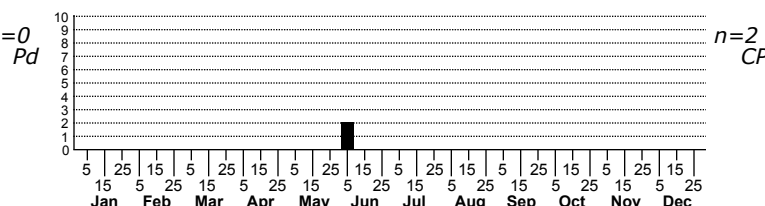
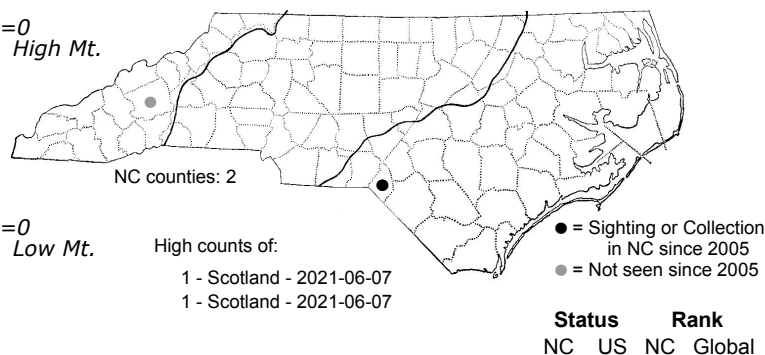


# *Cydia rana* None



FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Graphtoliti

TAXONOMIC COMMENTS: *Cydia* is a large genus with over 200 described species that occur worldwide, and with around 50 species in North America. Several species are important economic pests that often feed on fruits and seeds. This is one of several *Cydia* species in North America that need additional phylogenetic and taxonomic study.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1923); Heinrich (1926)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following description is based in part on those by Forbes (1923) and Heinrich (1926). The head, thorax, and antennae are brownish and the palps yellowish-brown. The forewing ground is deep brown, and the costa has a series of paired or single white dashes that begin just before the middle and terminate just before the apex. The ocellus has a vertical dark-silvery bar on both the anterior and posterior margins, and a brown to orangish-brown ground with four horizontal black bars. The forewing is overlain with several silvery gray striae. The most conspicuous is a pair of striae that are strongly waved and extend from the costa from just before the middle of the wing to the middle of the dorsal margin. The striae originate from two whitish costal dashes, may remain separate or fuse along portions of their length, and are sometimes interrupted near the middle of the wing. Beyond these is a single postmedian stria that starts from a pair of white costal streaks and extends towards the ocellus where it often joins the vertical bar on the anterior margin of the ocellus. A final short silvery stria begins in the subapical region and bends towards the termen where it appears to cut through the terminal black line as a white dash in the subapical region. The fringe is grayish to brown with a black basal line at the termen, while the hindwing is brown with a somewhat paler fringe and dark basal line.

DISTRIBUTION: *Cydia rana* appears to consist of two geographically isolated groups, with one in British Columbia, Alberta, and Montana and the other in eastern North America. In the East, specimens have been documented in Canada from Ontario, Quebec, and Nova Scotia, and in the US from Maine southward to Florida and westward to Alabama, Indiana, and Iowa. As of 2022 we have only two site records, one from the Black Mountains in the Blue Ridge and the other from the Sandhills.

FLIGHT COMMENT: The adults have been documented from March through August in different areas of the range. As of 2022, our two site records are from May and June.

HABITAT: Populations in western North America are associated with spruce forests, while those in the east occupy a variety of forests that range from spruce-fir forests to southern pine forests.

FOOD: The larvae feed on spruces (Heinrich, 1924; Miller, 1990; Brown, 2022), including Engelmann Spruce (*Picea engelmannii*) and White Spruce (*P. glauca*). Records for this species also come from areas far outside the range of spruce (see Moth Photographers Group), suggesting that additional conifer hosts are used in the eastern US. We have one historical record from the Black Mountains in Buncombe County where Red Spruce occurs, and a second from the Sandhills where Longleaf Pine or other pines are the likely hosts.

OBSERVATION METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR S2S4

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

COMMENTS: