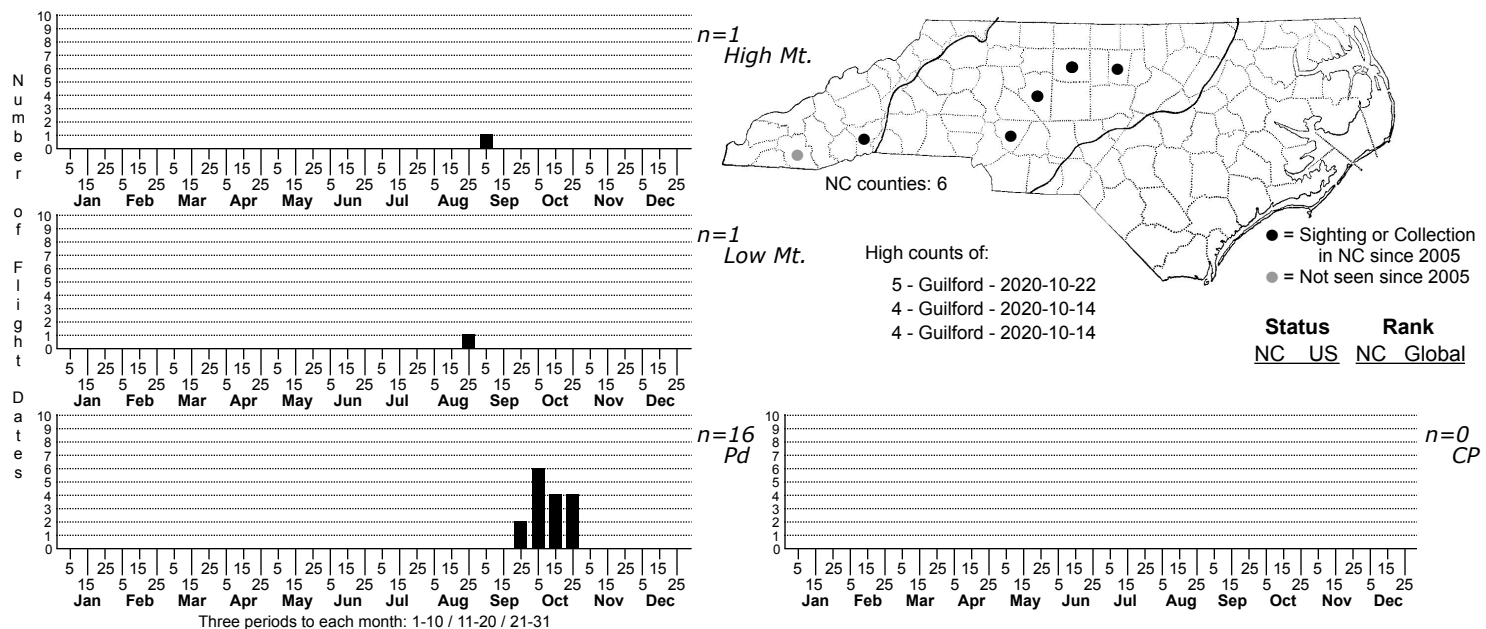


## *Decodes basiplagana* Gray-marked Tortricid



FAMILY: Tortricidae SUBFAMILY: Tortricinae TRIBE: Cnephasiini

TAXONOMIC COMMENTS: The genus *Decodes* has 18 described species whose center of distribution is in Mexico and the southwestern US (Powell and Opler, 2009). We have only one species in North Carolina.

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Powell and Opler (2009)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The forewing pattern of this wide-ranging species varies markedly, with some individuals having well-defined dark-gray and black fasciate markings, and others being unmarked (Gilligan and Epstein, TortAI). North Carolina specimens are consistent in having well-defined fasciate markings, and the following description applies to these. The head tuft, palps, antennae and thorax are brownish-gray. The forewing is brownish-gray overall with three conspicuous fasciae or bands. The first is a dark gray to blackish-gray, transverse, outwardly curved band at the basal fourth that extends from the costa and terminates before reaching the inner margin. It is followed by a pale gray median fascia that extends from the costa to the inner margin where it broadens and has two short arms or lobes, with one projecting basally, and the other apically along the inner margin. The median fascia is adjoined by a broad dark gray post-median fascia that extends from the costa obliquely to the subterminal region of the inner margin. The subapical region beyond the postmedian fascia is predominately light gray on the dorsal two thirds and often phases to darker gray on the costal third. The apical third of the wing and the median and post-median fasciae are marked with scattered, irregular, vertical dark gray or blackish striations. The fringe is dusted with dark gray and the hindwing is light brown or grayish brown with a paler fringe that has a thin, dark gray basal line.

DISTRIBUTION: *Decodes basiplagana* occurs over a broad swath of the US as well as in Ontario and Quebec. In the US this species has been documented in central and southern California, the central Rocky Mountains, and in the central and eastern US from Massachusetts and New York southward to southern Georgia. From there the range extends westward to western Texas, central Oklahoma, Missouri, eastern Nebraska, Minnesota, and eastern North Dakota. As of 2022, our records are restricted to the eastern Piedmont and one site in the Blue Ridge.

FLIGHT COMMENT: The adults fly from August through November in most areas of the country. As of 2022, we have records from late-August through late-October, with local populations presumably being univoltine.

HABITAT: As of 2022, all of our records come from semi-wooded residential areas in the Piedmont, except for one mid-elevational site in the Blue Ridge.

FOOD: The larvae feed on oaks, including Scarlet Oak (*Quercus coccinea*) and Northern Red Oak (*Q. rubra*) in the eastern US, and Valley Oak (*Q. lobata*) and Coast Live Oak (*Q. agrifolia*) in California (Powell, 1980; Robinson et al., 2010).

OBSERVATION\_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR S3S4

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 somewhat uncommon in the state, but more information is needed on its host use, distribution, and abundance before we can accurately assess its conservation status.