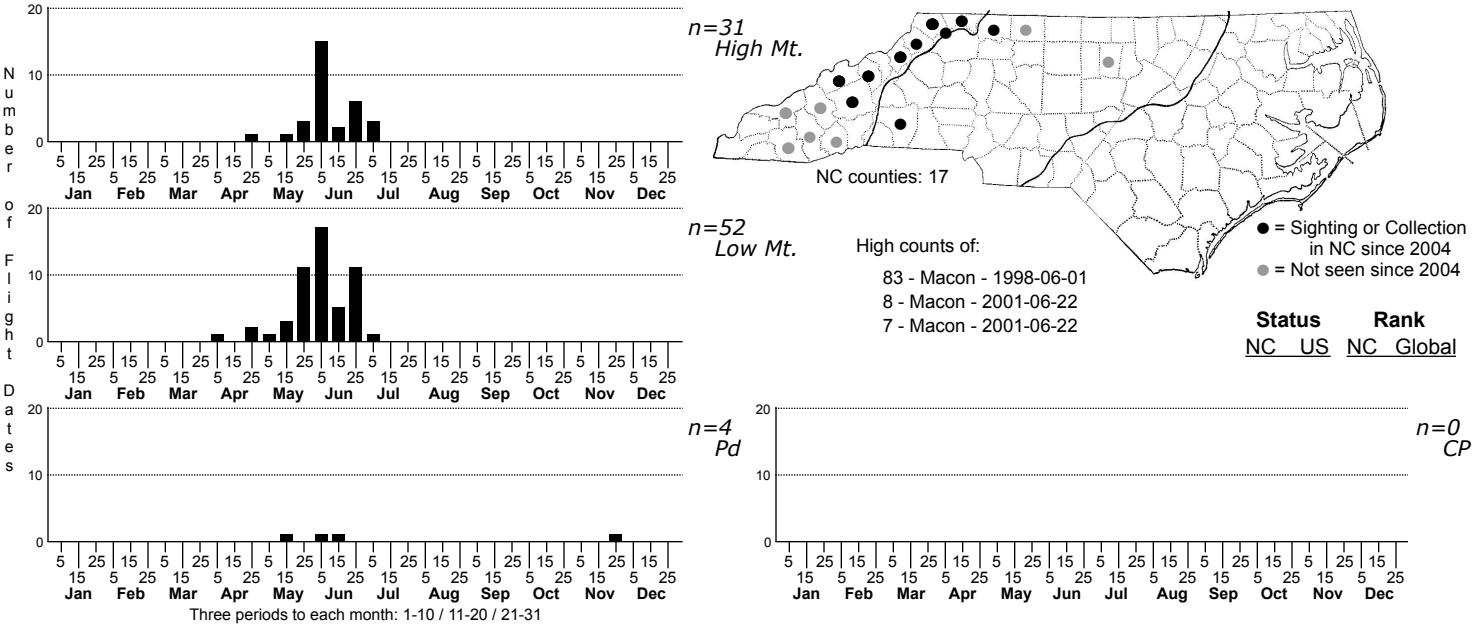
Besma endropiaria Straw Besma Moth



FAMILY: Geometridae SUBFAMILY: Ennominae TRIBE: Ourapterygini
TAXONOMIC_COMMENTS: This genus currently contains 7 species named from Central and North America, and additional neotropical species await description. Two species occur in North Carolina.

FIELD GUIDE DESCRIPTIONS: Covell (1984); Beadle and Leckie (2012)
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS: Rupert (1944); Forbes (1948)
TECHNICAL DESCRIPTION, IMMATURE STAGES: Forbes (1948); Wagner et al. (2001)

ID COMMENTS: Both males and females are a pale translucent straw yellow with slightly darker yellow-brown antemedian and postmedian lines and a partial subterminal line. The wings are angled at vein M3, resembling the similarly pale yellow Lambdina fiscellaria, but the postmedian lines is more evenly curved or relatively straight rather than sharply bent. Size, wing-angulation, and pattern of lines are similar to that of Besma quercivoraria, but the lines tend to be darker in that species, the wings more opaque, and a dark discal dot is usually present (Forbes, 1948). There is also more sexual dimorphism in quercivoraria, with males typically heavily shaded with yellowish-brown in the subterminal area (Forbes, 1948). While males of the two species are relatively easy to distinguish, some pale forms of female quercivoraria may be impossible to separate from endropiaria, although most female quercivoraria possess a light sprinkling of yellow-brown or reddish scales, sharper lines, and a dark discal spot.

DISTRIBUTION: Most of our records come from the Low Mountains, but there are at least a few populations located in the eastern Piedmont.

FLIGHT COMMENT: Reported to have a single flight in the Northeast (Wagner et al., 2001), which also appears to be true for our Mountains. Our few records from the Piedmont, however, are also consistent with a single mid-summer flight (one aberrant record comes from November, however).

HABITAT: The majority of our records come from rich, mesic stands of hardwoods. In the Mountains, habitats include northern hardwoods, cove forests, and stands of riparian hardwoods. Our few Piedmont records come from monadnocks with extensive north-facing slopes.

FOOD: Polyphagous, reported frequently on Maple but also on Alder, Birch, and Oak (Wagner et al., 2001). Covell (1984) lists Sugar Maple as the host, which fits with the greater frequency of B. endropiaria occurring in the Mountains in North Carolina. At the one anomalous site where this species has been found in the Piedmont, a related species -- Southern Sugar Maple -- occurs in abundance. In general, the actual host plants used in the wild need more documentation.

OBSERVATION_METHODS: Adults come frequently to lights in appropriate habitat. Their response to baits is unknown but probably negative.

NATURAL HERITAGE PROGRAM RANKS: G5 [S5]

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 fairly widespread in the Mountains, where it is associated with fairly common types of habitat. Too few Piedmont records exist to determine its status in that region, but within the state as a whole, it appears to be fairly secure.