

## Isogona tenuis Thin-lined Owlet Moth

FAMILY: Erebidae SUBFAMILY: Phytometrinae TRIBE: (incertae sedis) TAXONOMIC\_COMMENTS: A New World genus of uncertain affinity. There are some 15 species found mostly in the tropics with six occurring in the US and Canada. Only one species reaches in North Carolina, the others are mostly found from Texas to Arizona.

FIELD GUIDE DESCRIPTIONS: Covell (1984); Beadle and Leckie (2012) ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Forbes (1954) TECHNICAL DESCRIPTION, IMMATURE STAGES: Wagner et al. (2011)

ID COMMENTS: Adults are triangular with a black collar when resting. The veins and lines of the forewing are a pale yellow that contrasts with the tannish ground color; the postmedian is sharply bent near the costa where it is intersected by a line running diagonally from the apex. Sexes are similar.

DISTRIBUTION: Our records come primarily from the eastern Piedmont and from brownwater river floodplains in the Coastal Plain.

FLIGHT COMMENT: There appear to be two broods, with adults on the wing during most of the summer

HABITAT: All of our records come from rich, wet-to-mesic habitats where Sugarberry (<i>Celtis laevigata</i>) is common. These include several sites located within the floodplain or adjoining slopes of the lower Roanoke River, a particularly sediment-rich brownwater river. Other sites include similar floodplain habitats in the Tar and Cape Fear River systems. A more unusual site is an isolated example of rich, old-growth hardwood forest located on the rim of Lake Phelps in the Outer Coastal Plain.

FOOD: Larvae are stenophagous, feeding on on species of <i>Celtis</i> (hackberries and sugarberries), which support a fairly rich assemblage of Lepidopteran obligates. In North Carolina, larvae have been recorded on Sugarberry (<i>Celtis laevigata</i>).

OBSERVATION\_METHODS: Known to respond to light and probably to bait but unlikely to flowers.

NATURAL HERITAGE PROGRAM RANKS: G4 SNR [S3S4]

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

COMMENTS: Isogona tenuis is both a host plant and habitat specialist, but should occur at a wider range of sites and habitats than is indicated by our current records. More surveys need to be conducted within rich-soil habitats, including drier sites in the western Piedmont where Celtis tenuifolia occurs in upland sites. Currently, too little is known about its distribution and abundance to make an accurate assessment of its conservation needs.