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Melanocinclis lineigera Lined Melanocinclis

FAMILY: Cosmopterigidae SUBFAMILY: Cosmopteriginae TRIBE: [Cosmopterigini] TAXONOMIC_COMMENTS:

FIELD GUIDE DESCRIPTIONS: Leckie and Beadle (2018) ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Hodges (1962, 1978) TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: This small moth is somewhat distinctive, with a banded labial palp, an antenna with four dark bands on the apical half, and three bold, black streaks on the forewing. The detailed description that follows is based primarily on that of Hodges (1962). The labial palp is white with four black bands. The antenna scape is white with a black saddle on the posterior surface. The flagellum is buff with darker annulations for the first two-fifths. This is followed by four dark brown to blackish bands that become progressively shorter towards the apex. Each pair of adjoining bands is separated by a short buff section with a black spot in the middle. The face and vertex are white, and the lower half of the face is dark gray. The thorax is white medially and black laterally. The forewing ground color is white and overlaid with tawny flecks. A black, sub-dorsal streak extends from the base of the wing to one-fourth and sometimes reaches the inner margin. It typically joins the dark region on the side of the thorax to produce a conspicuous dark streak in the head and shoulder region. The most conspicuous mark is a broad, oblique black band that extends from the base of the wing at the costal margin to about one-half the wing length. It terminates near the center of the wing near a second black band that starts at about one-half to three-fifths on the costa, and runs to the apex of the wing below the costa. On some specimens the two bands may be weakly connected. The cilia have a black medial line and a fuscous terminal line that extends from the apex to a point parallel with the dorsal margin. The hindwing is shining gray, and the abdomen brown-black above with ochreous scales. The legs are shining white with black bands. The hind tibia has spurs that are dark gray.

DISTRIBUTION: <i>Melanocinclis lineigera</i> is associated with southern pine forests and occurs from the New Jersey pine barrens southward to southern Florida, then westward along the Gulf Coast states to central Texas and Arkansas. As of 2021, our records are mostly from the Coastal Plain and eastern Piedmont, with one isolated record from a lower elevation site in the mountains.

FLIGHT COMMENT: Adults have been documented from January through November in Florida, and from April through September elsewhere outside of North Carolina. There are probably two or more overlapping generations in the most southern populations, and perhaps two in other regions. As of 2021, our records extend from late April through late September.

HABITAT: The larvae feed on pine cones and their range correlates well with the combined ranges of the two known hosts.

FOOD: The only known hosts are Loblolly Pine (<i>Pinus taeda</i>) and Slash Pine (<i>P. elliottii</i>; Hodges, 1978).

OBSERVATION_METHODS: The adults are attracted to lights. More information is needed on the larval ecology, life history, and hosts, so we encourage naturalists to search for the larvae on southern pines.

NATURAL HERITAGE PROGRAM RANKS: [GNR] S3S5

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 within the state. More information is needed on its habitat use, hosts, distribution, and abundance before we can assess its conservation status.