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Coleotechnites florae Coleotechnites Flower Moth



FAMILY: Gelechiidae SUBFAMILY: Gelechiinae TRIBE:

TAXONOMIC_COMMENTS: The genus <i>Coleotechnites</i> includes 49 very small species that occur in North America. Most species are specialists on conifers and tend to use on a single genus of host plant. Many of the <i>Coleotechnites</i> species have almost identical genitalia that are not very useful in delineating closely related forms (Freeman, 1960; 1965). Freeman (1960) noted that host plants and the mining characteristics often provide the most reliable way to identify closely related species.

FIELD GUIDE DESCRIPTIONS: ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following is based in part on the description by Freeman (1960). The antenna is alternately marked with ocherous and black bands. The second joint of the labial palp has black-tipped scales below, white above, with a slight apical tuft. The terminal joint is white with two dark rings. Individuals vary in general body patterning, but most have a concolorous band of grayish white to dirty white coloration that extends from the vertex to the thorax, and then as a narrow, wavy light stripe that extends along the dorsal margin from the wing base to near the apex. The remainder of the wing is heavily dusted with dark brown or blackish scales. Very heavily dusted individuals may have most of the area beneath the dorsal light stripe almost entirely black. There are three equally-spaced blackish dots with raised scales along the inner margin at about one-fourth, one-half, and three-fourths that are centered on the indentions on the dorsal stripe. On some individuals these may be completely masked by the heavy black dusting. Lightly dusted individuals often show evidence of three blackish, diffuse, oblique bars that begin along the costa at about one-fourth, one-half, and three-fourths. These are sometimes separated by whitish regions with dark dusting, particularly near the costa where they may appear as whitish blotches. The last bar adjoins and is anterior to a whitish costal spot at about four-fifths. The hindwing is silvery gray, and the fringe on both wings is mostly light gray. The front and middle legs are black with white banding, while the hind leg is creamy-white with black bands. Darkly dusted specimens of <i>C. florae</i> often closely resemble <i>C. quercivorella</i>, but the latter lacks a well-developed whitish costal spot at about four-fifths that is just posterior to the third dark bar.

DISTRIBUTION: <i>Coleotechnites florae</i> was originally described from Canada and has since been found to be widespread in North America. Populations are known from most of southern Canada from British Columbia to Quebec. The range includes much of the eastern US from New Hampshire and Massachusetts southward to South Carolina and Alabama, and westward to central Texas, Oklahoma, Missouri, Illinois, and Wisconsin. As of 2021, we have records from all three physiographic provinces, with most from the Piedmont.

FLIGHT COMMENT: Adults have been documented from March through November is areas outside of North Carolina. Populations in North Carolina appear to have two or more broods per year. We have records from mid-February through early-November.

HABITAT: The larvae mine the needles of pines, and populations can be found in pine and mixed pine-hardwood forests.

FOOD: The known hosts (Robinson et al., 2010) are all western and northern species, and include Lodgepole Pine ($\langle i \rangle$ Pinus contorta $\langle i \rangle$), Apache Pine ($\langle i \rangle$ P. engelmannii $\langle i \rangle$), and Red Pine ($\langle i \rangle$ P. resinosa $\langle i \rangle$). The hosts that are used in the southeastern US are undocumented.

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: Additional information is needed on host use, distribution, and abundance before we can assess the conservation status of this species within the state.