

FAMILY: Tineidae SUBFAMILY: Tineinae TRIBE: [Tineini] TAXONOMIC_COMMENTS: The genus $\leq i$ >Niditinea $\leq i$ > has 14 described species that are thought to have originally had a Holarctic distribution (Robinson, 2009). Certain members of this genus (e.g., $\leq i$ >N. fuscella $\leq i$) have since been spread around the world by humans. We currently have three described species in the US. There appear to be at least three more undescribed species (Metz et al., 2018).

FIELD GUIDE DESCRIPTIONS: ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Chambers (1873); Metz et al. (2018) TECHNICAL DESCRIPTION, IMMATURE STAGES: Metz et al. (2018)

ID COMMENTS: The following description is based in part on the original description by Chambers (1873). The head and labial palp are sordid straw-colored, with the outer surface of the palp brown. The antenna is grayish yellow. The forewing ground color is pale yellowish and thickly dusted with fuscous scales, particularly on the apical third of the wing. A pair of dark spots is present at about one-half the wing length, with one spot above the costa and the other below the dorsal margin. A third spot that is slightly larger is present near the middle of the wing at about two-thirds the length. There is a checkered row of dark brown spots that extends posteriorly from about the apical fifth of the costa to the dorsal cilia, then continues along the wing tip and base of the adjoining fringe to the apex. From there it extends a short distance onto the dorsal margin before terminating.

Metz et al. (2018) noted that fresh specimens of our three $\langle i \rangle$ Niditinea $\langle i \rangle$ species usually can be identified by color alone. The scales of the head and dorsum of the thorax of $\langle i \rangle$ N. sabroskyi $\langle i \rangle$ tend towards reddish-orange, and the anal area of the forewing is less tinged with brown. The head and thoracic scales of $\langle i \rangle$ N. orleansella $\langle i \rangle$ tend to creamy-white with dark gray to black scales, and the anal area of the forewing is usually tinged with dark gray scales. The head and thoracic scales of $\langle i \rangle$ N. fuscella $\langle i \rangle$ are darker, and tend towards brown with dark brown scales. The anal area of the forewing is less differentiated, usually with a broad band or spot adjacent to the hind margin. Some specimens of $\langle i \rangle$ N. fuscella $\langle i \rangle$ closely resemble those of $\langle i \rangle$ N. orleansella $\langle i \rangle$, so definitive identifications require the examination of genitalia.

DISTRIBUTION: This species appears to be widespread in North America, but many of the older records that were not based on genitalia could be those of <i>N. fuscella</i> or even <i>N. sabroskyi</i>. Specimens that were identified by Metz et al. (2018) based on genitalia were from Missouri, Illinois, Maryland, but other sources (MPG) show a much broader distribution. As of 2020, we have only two site records; one from near the coast and a second from the mountains.

FLIGHT COMMENT: Most adult records from areas outside of North Carolina are from May through October. As of 2020, we have records from April on the coast and and July in the mountains.

HABITAT: Local populations appear to be dependent on paper wasp nests for successful reproduction. These are often found on homes, buildings, and barns, but also in natural settings such as rock overhangs.

FOOD: The larvae do not feed on living plant material, and are thought to specialize to a large extent on feeding within paper wasp nests (Sourakov, 2022). Being tineids, they probably feed on dead organic matter rather than attack the living larvae like <i>Chalcoela iphitalis</i>does.

OBSERVATION_METHODS: The adults are attracted to lights, and the adults have been successfully reared from paper wasp nests.

NATURAL HERITAGE PROGRAM RANKS: GNR SU

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

COMMENTS: As of 2020, we have only two site records, suggesting that this species is uncommon in North Carolina. Additional information is needed on its distribution, abundance, and food resources before its conservation status can be assessed.