



FAMILY: Elachistidae SUBFAMILY: TRIBE:

TAXONOMIC_COMMENTS: <i>Elachista</i> is a large genus of small moths that occur worldwide. Around 135 Nearctic species are currently recognized. They specialize on monocots and most feed on either grasses (Poaceae) and sedges (Cyperaceae).

FIELD GUIDE DESCRIPTIONS: ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Braun (1948) TECHNICAL DESCRIPTION, IMMATURE STAGES: Braun (1948)

ID COMMENTS: This is the only known American species that has a median fascia and no other marks on the forewing. The following detailed description is based on Braun's (1948) description of $\langle i \rangle E$. hiberna $\langle i \rangle$. The face is yellowish white, while the head varies from yellowish white to pale gray and becomes darker posteriorly. The palps are white above and inwardly, and the second segment is dark fuscous outwardly except for the tip. The third segment has a little fuscous shading outwardly near the tip. The antenna is blackish fuscous in the basal half and paler in the outer half. The annulations are narrow and scarcely paler in the basal half, but more contrasting in the outer half. The antennal pecten has 10 or 11 long and short hairs. The thorax and forewing is dark blackish brown and slightly irrorate. There is a single median white fascia that usually is a little wider on the dorsum, and a row of black scales that projects into the cilia at the apex and along the termen. The tips of the cilia are often white opposite the apex, but grayish towards the tornus. In the female, the whitish area extends half-way along the termen. The hindwing is brownish gray and darker in the male. The legs are dark blackish brown with the extreme tips of the segments whitish, while the posterior tibia is white inwardly. The abdomen is dark fuscous above and paler beneath. In addition to the form described above, populations in Eurasia have a second color morph which has uniform yellowish-ocherous forewings and no fascia. We have also collected a light-colored form in North Carolina that we are provisionally assigning to this species based on specimens having a single median fascia with no other marks.

DISTRIBUTION: <i>Elachista subalbidella</i> is a Holarctic species that is found in Europe, Asia, and North America. In North America, this species is broadly distributed across southern Canada from British Columbia to Nova Scotia. In the US, populations are known from Pennsylvania Ohio, Kentucky, West Virginia, and North Carolina, and farther west in California and South Dakota. As of 2024, we have records from the Piedmont and a lower elevation site in the Blue Ridge.

FLIGHT COMMENT: Populations are univoltine and the adults have been observed from March through August in different areas of the range. Most records are from June and July. As of 2024, our three records are from late April and October.

HABITAT: The habitats that this species uses in the US are poorly documented.

FOOD: The larvae feed on grasses and sedges. Braun (1948) found larvae on Eastern Beakgrain (<i>Diarrhena americana</i>) in Ohio. Wikipedia lists several other taxa that are used by this wide-ranging, Holarctic species. These include Purple Moor-grass (<i>Molinia caerulea</i>), Oatgrass (<i>Arrhenatherum</i> species), Tor-grass (<i>Brachypodium pinnatum</i>), False-brome (<i>Brachypodium sylvaticum</i>), Bunch Grass (<i>Calamagrostis arundinacea</i>), Melic Grass (<i>Melica</i> spp.), Meadow-grass (<i>Poa</i> spp.), and sedges (<i>Carex</i> spp.).

OBSERVATION_METHODS: The adults appear to only rarely visit lights, and have been successfully reared from the host plants.

NATURAL HERITAGE PROGRAM RANKS: GNR SU

STATE PROTECTION:

COMMENTS: We currently do not have sufficient information on the distribution and abundance of this species to assess its conservation status.