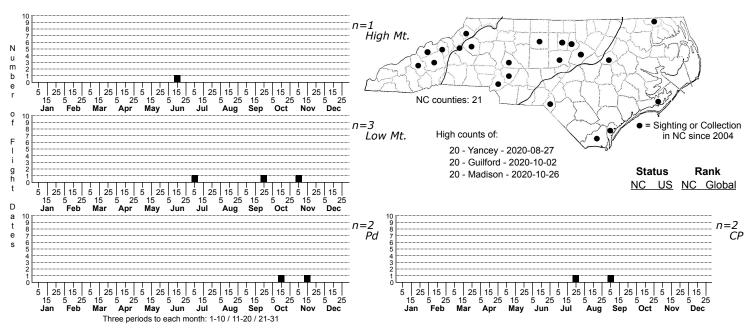
Porphyrosela minuta No common name



FAMILY: Gracillariidae SUBFAMILY: Lithocolletinae TRIBE:

TAXONOMIC_COMMENTS: <i>Porphyrosela</i> is a genus of small leaf-mining moths that feed on legumes. There are 12 described species that occur worldwide, including in North and South America, Africa, Asia, and Australia.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Bentancourt and Scatoni, 2007.

TECHNICAL DESCRIPTION, IMMATURE STAGES: Bentancourt and Scatoni, 2007; Eiseman et al., 2017.

ID COMMENTS: The following is based on the detailed description of adults by Bentancourt and Scatoni (2007). The head has erect brown hair-scales on the vertex, while the forehead is silvery white with flat scales. The antenna is slightly shorter than the forewing and is black, except for the last eight or nine segments that are white. The thorax is silvery white on the dorsal side. The ground color of the forewing is orange with brown metallic highlights, and is overlain with several silvery white streaks with black scales on both margins. The first streak is posteriorly oblique and occurs at about one-third the wing length. It extends from the costal margin to near the dorsal margin. In some specimens it may continue to the dorsal margin to form a complete fascia. A similar streak or fascia runs obliquely in the opposite direction near the middle of the wing. Near the apex there are two silvery white patches with black margins. One is a small, triangular-shaped mark on the dorsal margin at the beginning of the fringe. Just posterior and opposite to this, there is a short, anteriorly oblique streak that extends into the fringe. The fringe has a conspicuous black line that extends obliquely from the dorsal margin towards the apex. The hindwing is narrowly lanceolate and brown with a fringe of long hair around the edges. The legs have a mixture of dark coloration with silver or copper highlights. The abdomen has copper highlights, and the fourth, fifth and seventh ventral segments are silvery white.

This species closely resembles <i>P. desmodiella</i>. Eiseman et al. (2017) noted that when <i>P. desmodiella</i> is viewed laterally, the second fascia is approximately perpendicular with the wing margins, and bends somewhat so that it parallels the first fascia toward the costal margin. The space between the fascias along the costal margin is approximately 20–30% larger than on the dorsal margin. In <i>P. minuta</i>, the first and second fascias are angled equally but in opposite directions, such that the space between them on the costal margin is about twice that on the dorsal margin. The two are further distinguished by the absence of the black terminal line of the forewing of <i>P. desmodiella</i>.

DISTRIBUTION: <i>Porphyrosela minuta</i> is native to southern South America and only recent arrived in the United States around 2008 (Eiseman et al., 2017). It has since become widespread in the eastern United States and California. In the East, it occurs from New Jersey and eastern Pennsylvania to as far south as southern Florida, and as far west as central Oklahoma and eastern Texas. It occurs statewide in North Carolina.

FLIGHT COMMENT: Local populations are multivoltine and the adults are active throughout the growing season. The complete life cycle from the egg to the emerge of the adults take around 16 days, so there are likely as many as seven or more generations per year in southern localities (Bentancourt and Scatoni, 2007). As of 2022, our records for occupied leaf mines and adults extend from June through November.

HABITAT: Local populations are dependent on White Clover, which is commonly found in mowed lawns, pastures, along roadsides, and in other open, sunny habitats.

FOOD: The only known host is White Clover (<i>Trifolium repens</i>).

OBSERVATION METHODS: Most of our records are based on leaf mines, but the adults are also attarcted to UV-lights.

NATURAL HERITAGE PROGRAM RANKS: GNR SE

STATE PROTECTION:

COMMENTS: This species was recently introduced from South America. It apparently only feeds on White Clover in the US, which is an introduced species that is native of Eurasia. As such, the species does not merit protection.