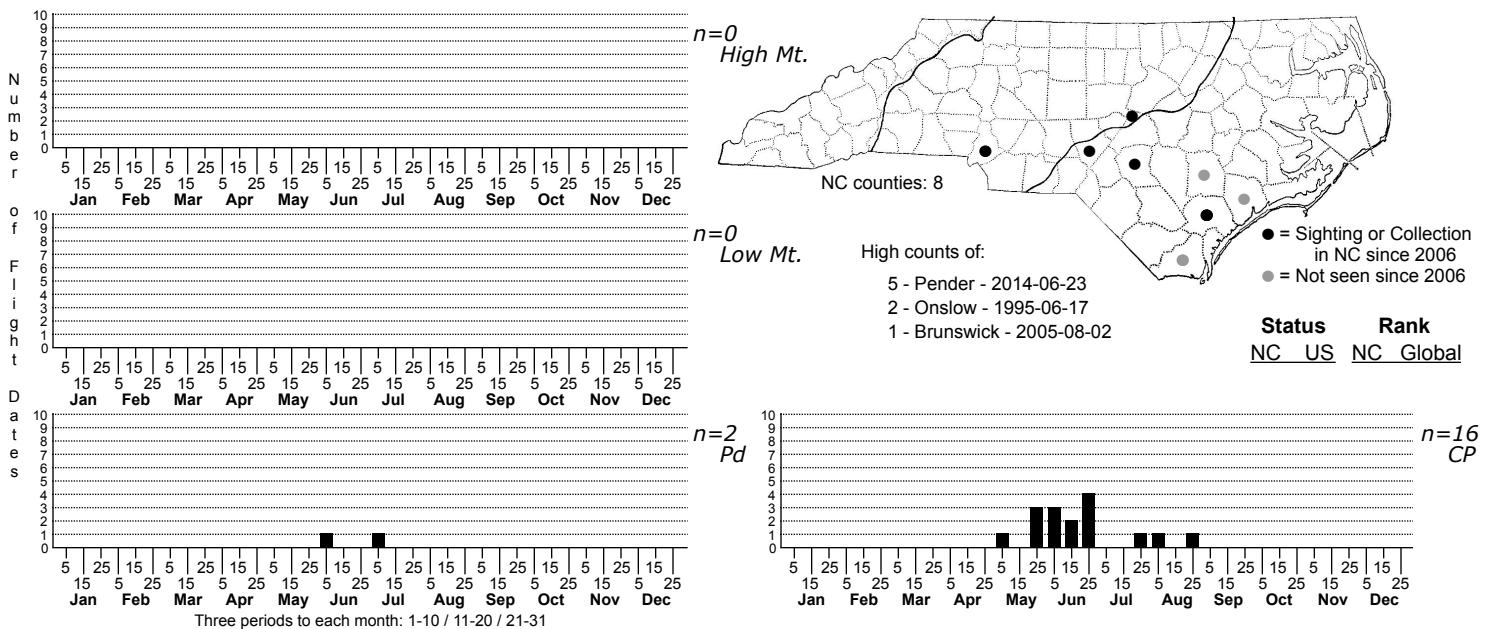


Diagrammia ordinata Ordered Angle



FAMILY: Geometridae SUBFAMILY: Ennominae TRIBE: Macariini

TAXONOMIC COMMENTS: One of 49 species in this genus recorded in North America (Ferguson, 2008), six of which occur in North Carolina. <i>Diagrammia ordinata</i>, <i>D. eremiata</i>, and <i>D. ocellinata</i> were placed in the legume-feeding <i>Eremiata</i> Species Group by Ferguson.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1948); Ferguson (2008)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Ferguson (2008)

ID COMMENTS:

DISTRIBUTION: Most of our records come from the Coastal Plain but records from Mecklenburg County indicate that it could also be present in at least scattered locations throughout the Piedmont.

FLIGHT COMMENT: Possibly bivoltine, with peaks in adult flights in the spring/early summer and late summer.

HABITAT: Almost all of our records come from Longleaf Pine habitats, including both sandhills and more mesic flatwoods and savannas; several species of *Amorpha* occur in those habitats. The one Piedmont location for this species is located along the Catawba River, where <i>Amorpha fruticosa</i> is the likely host plant.

FOOD: Larvae are stenophagous, feeding on <i>Amorpha</i> species (Ferguson, 2008). J.B. Sullivan has reared larvae collected from False Indigo-bush (<i>Amorpha fruticosa</i>) in the North Carolina Coastal Plain.

OBSERVATION METHODS: Comes at least in small numbers to blacklights. Individuals can also be flushed during the day.

NATURAL HERITAGE PROGRAM RANKS: GNR S2S3

STATE PROTECTION: Listed as Significantly Rare by the Natural Heritage Program. That designation, however, does not confer any legal protection, although permits are required to collect it on state parks and other public lands.

COMMENTS: Although this species can be locally common in areas where <i>Amorpha</i> is abundant, we have records from relatively few sites. Longleaf Pine habitats, with which this species is strongly associated, have severely declined since the Colonial era due to the combined effects of over harvest of Longleaf Pines, conversion to agriculture or silviculture, and suppression of wildfires. Apart from several large tracts on lands managed through use of prescribed burning, these habitats are likely to continue to decline into the future. Use of <i>Amorpha fruticosa</i> in non-Longleaf habitats indicates that it may be more widespread than previously thought, but only one such site has been recorded so far.