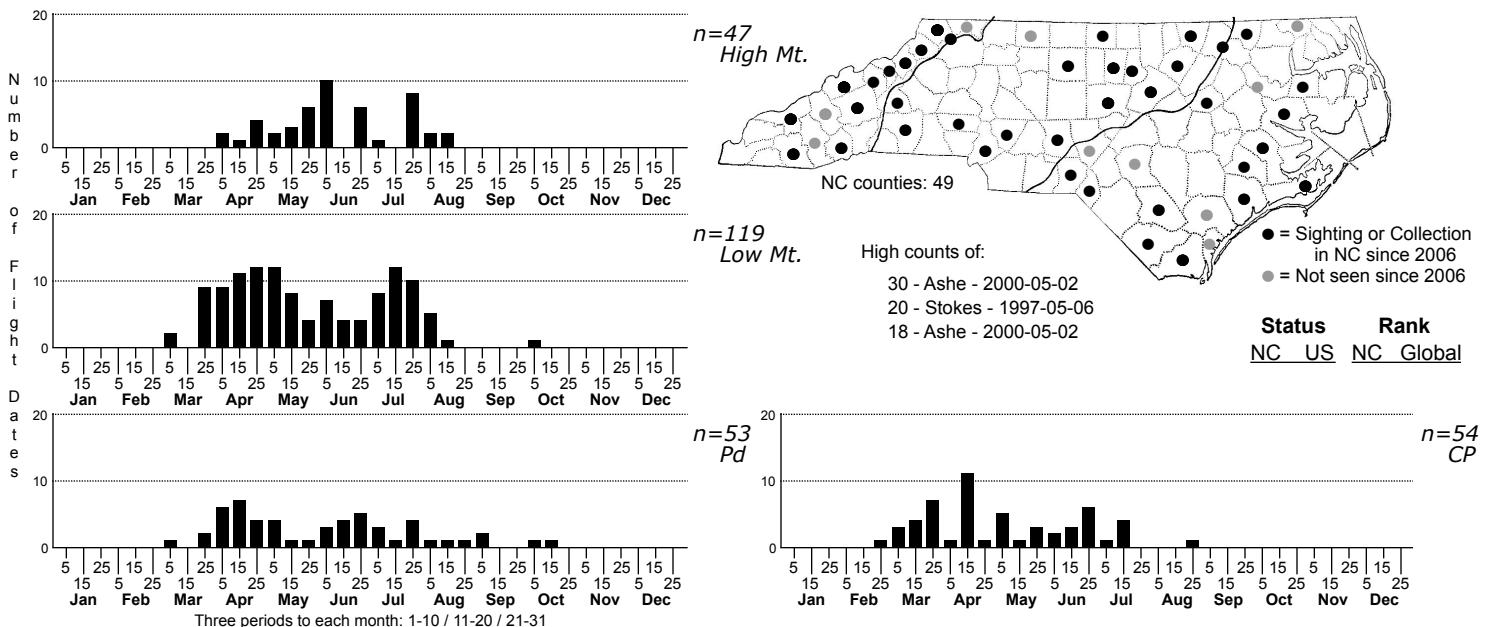


Zale minerea Colorful Zale



FAMILY: Erebidae SUBFAMILY: Erebinae TRIBE: Ophiusini

TAXONOMIC COMMENTS: One of 39 species in this genus that occur north of Mexico, 23 of which have been recorded in North Carolina

FIELD GUIDE DESCRIPTIONS: Covell (1984); Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1954)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Forbes (1954), Wagner (2005); Wagner et al. (2011)

ID COMMENTS: One of our largest Zales but slightly smaller than *Zale lunata*. Like *lunata*, it shows a range of coloration and patterning, most of which overlap those of *lunata*. The degree of waviness of the postmedian line on the forewing -- usually visible in a good photograph -- is the key character used by Forbes (1953) to distinguish these two species: in *minerea* (as well as *galbanata* and *phaeocapna*) the postmedian shows only a couple of broad waves from the end of the cell to the costa, with a large concave bend located at the end of the cell (roughly paralleling the concavity of the reniform spot). In *lunata*, the postmedian is much more undulating along this portion of the wing, showing a series of smaller bends but no major concavity at the end of the cell. Compared to *galbanata* and *phaeocapna*, which possess similar postmedian lines, *minerea* usually possess a strongly contrasting sub-apical blotch that is typically triangular or trapezoidal in shape. Like *galbanata*, but not *phaeocapna*, there is also usually a medial dash that runs from the subterminal line to the outer margin.

DISTRIBUTION: We have records from most parts of the state (although at least some sight records probably represent confusion with *lunata*); records are missing, however, from the Outer Banks and other barrier islands

FLIGHT COMMENT: Probably flies more-or-less continuously throughout the growing season

HABITAT: Occurs primarily in bottomlands in the Coastal Plain with almost no records from peatland or Longleaf Pine habitats; it also appears to be missing from maritime forests. Occurs in both upland and bottomland habitats across the Piedmont and Mountains, although with most records coming from wet-to-mesic stands.

FOOD: Larvae are polyphagous, feeding on a wide range of woody plants, including at least some conifers in addition to broad-leaved species. Wagner et al. (2011) specifically list maple (<i>Acer</i>), alder (<i>Alnus</i>), birch (<i>Betula</i>), American Hornbeam (<i>Carpinus caroliniana</i>), hickory (<i>Carya</i>), hazelnut (<i>Corylus</i>), American Hop-hornbeam (<i>Ostrya virginiana</i>), spruce (<i>Picea</i>), poplar (<i>Populus</i>), oak (<i>Quercus</i>), willow (<i>Salix</i>), American Basswood (<i>Tilia americana</i>), and elm (<i>Ulmus</i>). In North Carolina, J.B. Sullivan reared a larva from Turkey Oak (<i>Q. laevis</i>).

OBSERVATION METHODS: Comes to blacklights but usually in small numbers, with up to 5 collected in a single trap. Baiting is a much more productive sampling method, as is true for most <i>Zale</i> species.

NATURAL HERITAGE PROGRAM RANKS: G5 SNR [S5]

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

COMMENTS: Given its wide range of larval host plants, broad habitat associations, and extensive occurrence across the state, this species appears to be secure.