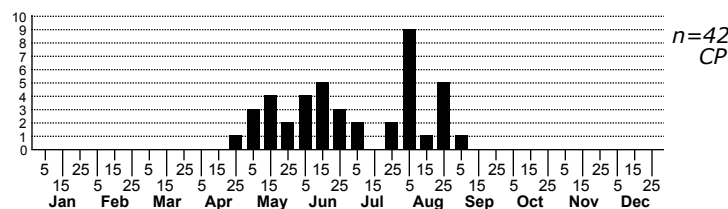
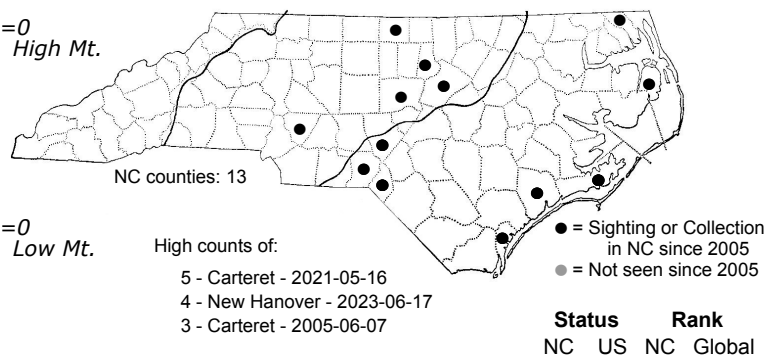
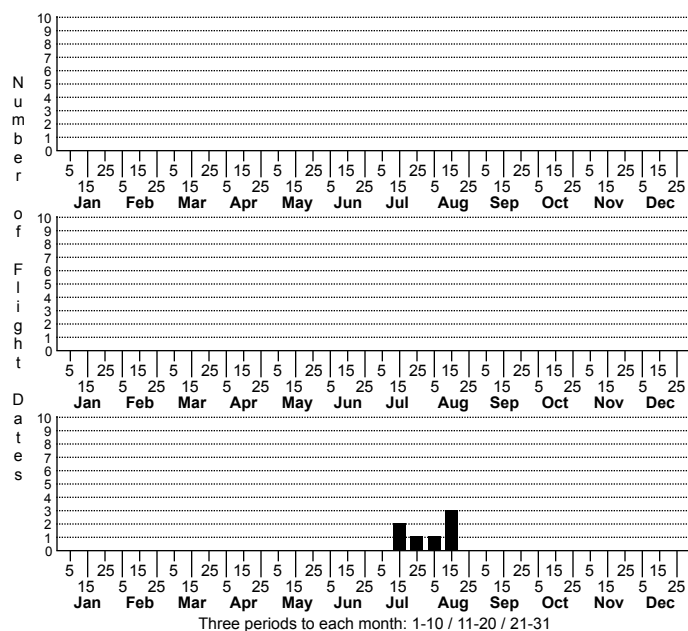


## *Euclementia bassettella* Kermes Scale Moth



FAMILY: Cosmopterigidae SUBFAMILY: Antequerinae TRIBE: [Antequerini]

TAXONOMIC COMMENTS: *Euclementia* is a small genus with five described species, including three from North America. The larvae are unusual in being parasitoids of scale insects.

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

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Hodges (1978)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Hollinger and Parks (1919)

ID COMMENTS: This is a small and very distinctive moth with boldly contrasting black and reddish patterning. The following description is based primarily on those of Forbes (1923) and Hodges (1978). The head, thorax, and ground color of the wings is bronzy-black. The antenna is blackish with a white band on the apical third. The labial palp is recurved, yellowish, and reaches the vertex. The forewing has an extensive area of bold, orangish-red scales that begin on the inner margin at the basal fifth. From there, it extends as a broad, convoluted band to the costa, then posteriorly as a longitudinal subcostal streak to the apex. The hindwing and cilia on both wings are smoky gray. The legs are mostly bronzy-black with whitish spines. Hodges (1978) noted that individuals vary substantially in size, which is positively correlated with the size of the host that is used.

DISTRIBUTION: *Euclementia bassettella* is found in eastern North America from the New England states and adjoining areas of Canada, southward to southern Florida, and westward to central Texas, Oklahoma, Kansas, and eastern Nebraska. It appears to be less prevalent in the Appalachians Mountains than elsewhere. As of 2021, our records are all from the Coastal Plain and eastern Piedmont.

FLIGHT COMMENT: Adults have been observed from April through October in areas outside of North Carolina, with a seasonal peak from June through August. As of 2021, our records extend from May through September.

HABITAT: The larvae feed on scale insects that use oaks as hosts, including species that range from moist habitats such as bottomland forests to dry habitats such as dry ridges and sandy coastal sites.

FOOD: Local populations depend on scale insects in the genus *Kermes* and *Allokermes* that feed on oaks. Scales with infected larvae have been found on several oak species, including Shingle Oak (*Quercus imbricaria*), Blackjack Oak (*Q. marilandica*), Water Oak (*Q. nigra*), Post Oak (*Q. stellata*), and Live Oak (*Q. virginiana*).

OBSERVATION\_METHODS: The adults are attracted to lights, and can be easily raised from infected scale insect galls on oaks.

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: This species seems to be somewhat uncommon in the state, perhaps due to its reliance on scale insects for successful reproduction.