

gonostatumen all have diagnostic characters at the species level. It is surprising that previous use has not been made of them. In his revision of the Callicorini (as Catagrammini), Dillon (1948) characterized the male genitalia in his definition of the tribe, but did not use them to diagnose species. The gonostatumen is an interesting structure that is found only in the Callicorini, including *Callithea* Feisthamel. It was named by Dillon (1948) who believed it to be a modification of the eighth sternite and to function as a prop for the usual genital organs.

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MULTIPLE CAPTURE OF *CARIA INO MELICERTA* (RIODINIDAE) AT LIGHT

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A rather extensive bibliography has accumulated concerning butterflies that have been attracted to light. Most recent records have been of captures at ultraviolet light, such as reported by Throne (1961) and Welling (1963). Most of these records involve single specimens, but there have been a few instances of multiple captures of butterflies (Donahue, 1962; Phillips, 1962; Welling, 1963; and Hessel, 1965), for example. Some of the collections have been at ultraviolet light, some at fluorescent and a few at incandescent light.

There seem to be two explanations for the attraction of butterflies to light: (1) the butterflies were at rest, were disturbed and these flew to the light source, and (2) the butterflies are crepuscular species and were attracted to the light as are many crepuscular Spingidae and other moths. Most of the records fall into the first category, and they almost always are based on one or two specimens; the majority of the captures I have made at light are in this class, both in the United States and in the Neotropics. Several of the multiple captures, especially those of *Opsiphanes* (Welling, 1963) and *Melanitis* (Donahue, 1962), are of

crepuscular species, and the captures of *Hypaurotis* reported by Hessel (1965) involve a species that is definitely not heliophilic during midday hours and continues activity into evening (*e.g.*, Chambers, 1963).

During July and August, 1966, I taught a travelling field biology course, and the students and I often trapped moths at ultraviolet light as part of the activities without taking any butterflies. The evening of August 2nd we set up the light at Bentsen-Rio Grande State Park, Hidalgo County, Texas, on a hot (*ca.* 85° F.), muggy night, and collecting was excellent for moths and other insects. The effectiveness of the ultraviolet lamp was attested to by the fact that very few insects were attracted to the Coleman lantern we used as a camp light about a hundred feet from the moth sheet. I was surprised, therefore, to see a specimen of *Caria ino melicerta* Schaus, a riodinid, flop down on the table next to the lantern and begin walking slowly over the surface of the tabletop gently opening and half closing its wings until I bottled it. A short time later one of the students took a second specimen at the Coleman lantern, and still later I captured two more specimens that were behaving in the same manner as the first. Another of the students also collected a specimen at an incandescent light in one of the park bath houses. All five *melicerta* were taken between 9:00 and 11:00 P.M., C.D.T. A check of the insects collected at the ultraviolet light revealed no butterflies, even though hundreds of moths had been taken.

I collected only a single female of *C. i. melicerta* in two days of collecting in the same area in which the five specimens were collected at light. This specimen was netted in deep woods resting under a leaf, and it looked as though this species was crepuscular, or at least heliophobic. Two hours' collecting at Bentsen park in September, 1967, yielded about fifty specimens at flowers in the brightest sunlight, so *C. i. melicerta* is not consistently crepuscular or heliophobic.

These records of this butterfly, I believe, are the first to demonstrate any butterfly making a "choice" between visible and ultraviolet light, and it is intriguing that these insects selected the visible light source. I have been unable to obtain spectroscopic analyses of the light from a Coleman lantern, but I suspect that the ultraviolet component is minor, as is that of an incandescent light. This demonstrates a phenomenon that is well known, but seldom stated: some insects that will come to visible light are not attracted to ultraviolet light. The advent of ultraviolet light as a collecting aid has greatly increased the numbers of both individuals and species that may be taken during a night's collecting, but many species of Lepidoptera cannot be obtained by this method.

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BIONOMIC NOTES ON HAETERINI AND BIINI IN
VENEZUELA (SATYRIDAE)

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HAETERINI

Four genera, *Pierella* Westwood, *Haetera* Fabricius, *Dulcedo* d'Almeida and *Cithearias* Hübner (= *Callitaera* Butler), comprise the Haeterini, the most primitive tribe of Satyridae. All of the Haeterini have distinctive wing shapes with short, narrow forewings and seemingly enlarged hindwings. *Haetera*, *Cithearias* and *Dulcedo* are the only clear-winged Satyridae (see Figure 1, *Cithearias andromeda* Fabricius). All of the known species are Neotropical and are found on the forest floors of dense tropical and subtropical forests.

Virtually nothing has been published concerning the habitat and habits of these butterflies. I have found only brief notes by Weymer (*in*: Seitz, 1909) and Brown (1942). Both mention that these satyrids inhabit forested areas, fly near the ground and are difficult to see or follow in flight. Weymer mentions that members of the genus *Cithearias* (given as *Callitaera*) prefer the early morning hours for flight.

After having the opportunity to observe several of these species in Venezuela (1965 and 1966 in Bolivar and 1968 in Barinas), I can add somewhat to these statements. Determinations of my specimens were made by Michael Clifton of the British Museum (Natural History) who is currently preparing a taxonomic revision of the tribe.

The species that I observed seemed to be strictly limited to denser

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