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KEY TO THE SPECIES OF HADRONEMA UHLER WITH DESCRIPTIONS OF FIVE NEW SPECIES (HEMIPTERA, MIRIDAE).*

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In working up considerable material which the writer collected in the western United States certain new species of *Hadronema* have been recognized, with the result that a key is provided for the thirteen known species of which five are described as new. In 1918, Mr. E. H. Gibson published a key (Can. Ent., xl, pp. 81-84) to the species known to him, describing two new species. The writer examined these types in the U. S. National Museum during 1926 and found that *Hadronema confraterna* Gib. is in fact a good species of *Lopidea*, allied to *Lopidea lepidii* Kngt., but smaller and the left clasper somewhat differently shaped.

Since the appearance of Gibson's paper Mr. Van Duzee has described two species from California, *Hadronema albescens* and *H. infans*. Paratypes of these are at hand for the present study and one of them, *Hadronema infans*, I find belongs in the genus *Lopidea*, in fact I am unable to distinguish between this and *Lopidea minima* Kngt. In *Lopidea* the form of the left clasper is distinctive throughout the large number of known species and on this basis as well as color, *confraterna* Gib. and *infans* Van D. belong in *Lopidea*.

The male genital characters in Hadronema are on the whole distinctive of the genus and displaying only minor differences between the species. The genotype, Hadronema militaris Uhler, exhibits an unusual character in the cleft nature of the genital segment at base of left clasper, while the right clasper is in general form much like other species of the genus. In militaris and allied species the male is provided with a secondary sexual character in the form of a heavy tubercle, bearing one or two spines and situated at base of front femora on lower side; also the basal segment of front tarsi is bilobed and widely expanded. On the basis of these characters, as well as the type of pubescence, the genus may be separated into two groups. The typical subgenus includes militaris Uhler, picta Uhler, breviata n. sp., simplex n. sp., bispinosa n. sp., sinuata n. sp., and probably splendida Gibson. The remaining species, princeps Uhler, uhleri Van D., uniformis n. sp., festiva Van D., decorata Uhler, and albescens Van D., are without the secondary sexual characters and form a group of species for which a new subgeneric name is proposed:

Aoplonema, new subgenus. Genotype: Hadronema princeps Uhler.

In preparing the key all the known species are at hand except decorata Uhler and splendida Gibson. Types of decorata Uhler are preserved in the collection of the California Academy of Sciences where I saw them in 1917. However, for separating this species in the key it has been necessary to draw on the color characters given in the original description.

Hadronema breviata new species

Allied to picta Uhler, but distinguished by the short second antennal segment which is not equal to width of head across eyes; rostrum longer, pronotal disk dark except at basal angles.

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