

SCIENTIFIC NOTE

SYNONYMY OF SUBGENUS *SINOAEDES* OF GENUS *Aedes* WITH SUBGENUS *MATTINGLYIA* OF GENUS *HEIZMANNIA*

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ABSTRACT. The subgenus *Sinoaedes* is transferred from the genus *Aedes* and placed in synonymy with the subgenus *Mattinglyia* of the genus *Heizmannia*. The haplotype of *Sinoaedes*, *Aedes occidentayunnanus*, is transferred to the subgenus *Mattinglyia* of the genus *Heizmannia* and the spelling of the specific name is corrected to agree in gender with *Heizmannia*. Rationale for these actions is provided.

KEY WORDS *Sinoaedes*, *Heizmannia*, *Mattinglyia*, *Heizmannia occidentayunnana*, mosquito

The monotypic subgenus *Sinoaedes* was created by Gong and Lu (1991) in the genus *Aedes* Meigen for their new species *Aedes occidentayunnanus*. They described the female and male habitus, and described and illustrated the female and male genitalia and 4th-stage larva. The authors stated

The new subgenus, and its monotypic species are quite different from the other subgenera in the genus *Aedes*. Comparatively, it is close to the subgenus *Stegomyia* Theobald, particularly in larval characters. It also shares many characters with the subgenus *Mattinglyia* Lien in the genus *Heizmannia*. However, its narrow scutal scales readily separate it from the latter. The larvae of the new species are even closer to those of *Mattinglyia*. Although 6-C is not prominent before 4-C, it bears unequal branches characteristic of most larvae of *Heizmannia*. The discovery of the new subgenus may strengthen the further evidence of the close relationship between the genera *Aedes* and *Heizmannia* in the tribe Aecini [sic].

After having examined and evaluated all currently recognized subgenera of the genus *Aedes* and all currently valid genera of the tribe Aedini, I am convinced that *Ae. occidentayunnanus* Gong and Lu should be placed in the subgenus *Mattinglyia* of the genus *Heizmannia* Ludlow. Accordingly, the subgenus *Sinoaedes* should be placed in synonymy with the subgenus *Mattinglyia*.

In establishing *Sinoaedes*, Gong and Lu compared the taxon to the subgenus *Mattinglyia* and stated "its narrow scutal scales may readily separate it from the latter." In their comparison to the genus *Heizmannia*, the authors apparently thought all species of the genus possessed broad flat scales on the scutum and were unaware of the narrow-scaled scutum of *Hs. (Mat.) tripunctata* (Theobald)

or the curved moderately broad-scaled scutum of *Hs. (Mat.) discrepans* (Edwards) (see Reinert 1973). Also, the scutum of *Hs. (Mat.) achaetae* (Leicester) is covered with moderately broad scales (Mattingly 1970, Figure 44 shows these as narrow) and the scutum of *Hs. (Hez.) kana* Tanaka, Mizusawa, and Saugstad is moderately broad-scaled (see Tanaka et al. 1979). A similar situation is found within Oriental species of the subgenus *Diceromyia* Theobald in which the scutum of some species is covered with broad scales whereas other species have narrow scales.

Gong and Lu (1991:55) indicated that the male maxillary palpus was approximately equal to the length of the proboscis in *Sinoaedes*. This feature is unusual for both subgenera of *Heizmannia*; however, because of the close similarity of the other primary features of the haplotype with *Heizmannia* I believe, in this case, that the length of the male maxillary palpus should be considered an aberration. A similar situation is found within the Aedini in the subgenus *Geoskusea* Edwards and the genus *Haemagogus* Williston, in which the male maxillary palpus is short in many species but is moderately long to long in several species (see Mattingly 1959, Belkin 1962, Arnell 1973). Also, these authors indicated the presence of 1-3 postspiracular setae in *occidentayunnanus*; however, both *discrepans* (see Reinert 1973, Tewari et al. 1987) and *tripunctata* (see Reinert 1973) possess postspiracular setae.

All other features of the male and female genitalia and 4th-stage larva illustrated and described for the haplotype of *Sinoaedes* clearly fit the genus *Heizmannia* and compare very well with the other species included in the subgenus *Mattinglyia* (see Mattingly 1970 for a review of the genus *Heizmannia*), except that the male antenna is more like that of species included in the subgenus *Heizmannia*.

Sinoaedes Gong and Lu is herewith formally synonymized with *Mattinglyia* Lien and the hap-

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lotype named *Aedes occidentayunnanus* is transferred to that subgenus within *Heizmannia*. Because the specific name is an adjective, the spelling is corrected to *occidentayunnana* to agree in gender with *Heizmannia*.

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