The Identity of <u>Aedes</u> Species Unknown of Knight and Hull 1953

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Under the general heading of "<u>Aedes</u> of Unknown Subgenera", Knight and Hull (1953) presented the distribution and a discussion of <u>Aedes(?) platylepidus</u> Knight and Hull, and a complete description of the larva of "<u>Aedes</u> species unknown". The description of the unknown species was based on three whole larvae from Palawan and Balabac, Philippine Islands. They suggested the larvae might possibly be either <u>Aedes platylepidus</u> or Heizmannia scintillans Ludlow.

Mattingly (1957) suggested that the larva was more likely an <u>Aedes</u> than a <u>Heizmannia</u>, and in (1959) he included <u>platylepidus</u> in the subgenus <u>Diceromyia</u> of <u>Aedes</u>, but expressed doubt that the larvae belonged to this species. Reinert (1970) pointed out that the larvae did not compare favorably with other species of <u>Diceromyia</u> of Southeast Asia. Furthermore, he noted that the larval collection sites (a metal container and a palm frond on the ground) were more like those of Stegomyia than Diceromyia.

All of the above assumptions were based on the description of the larvae in Knight and Hull. Knight and Hull indicated that one of the Palawan larvae was deposited in the USNM as <u>Aedes</u> species #46 and the other two were retained in the Knight collection. Reinert (1970) was unable to locate these specimens when he reviewed the <u>Diceromyia</u>. To date, the identity of <u>Aedes</u> species unknown of Knight and Hull (1953) has remained a mystery.

Recently, I found a larval slide in the SEAMP collection with data conforming to that given in Knight and Hull for the Palawan specimens, and labeled <u>Aedes</u> species unknown #46, 854E. The penmanship also conforms to other Knight, Rozeboom, Laffoon WWII Philippine material in the USNM. There is little doubt that this is the specimen referred to in Knight and Hull. This specimen is not an <u>Aedes</u> or <u>Heizmannia</u>, but a specimen of <u>Uranotaenia</u> (<u>Pseudoficalbia</u>) <u>obscura</u> Edwards. The specimen is not a fully developed 4th stage larva, for the plate of the 8th abdominal segment is quite faint. There is a complete absence of a maxillary suture, which automatically excludes it from <u>Aedes</u> or <u>Heizmannia</u>. This character was not well known until recently. There is, however, a slight discrepancy between specimen #46 and its description. Knight and Hull list the pecten

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teeth as 7-12, but the USNM specimen has 6 on one side and 7 on the other. I have examined many specimens of U. <u>obscura</u> from Southeast Asia and I have never seen one with more than 9 pecten teeth. This suggests that although specimen #46 and the description is of <u>obscura</u>, one of the three specimens could possibly have represented a second species. I accept the theory that Knight and Hull selected the specimen described for deposit in the USNM. Misidentification of U. <u>obscura</u> larvae is not unusual, because they look very much like an <u>Aedes</u>, both in the natural habitat and on close examination. Reinert was unable to locate the specimen because I had earlier (1967-68) removed it from the unidentified material of the USNM and placed it with other material of U. <u>obscura</u> but failed to associate it, until recently, with the publication of Knight and Hull.

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## LITERATURE CITED

- Knight, K. L. and W. B. Hull. 1953. The <u>Aedes</u> mosquitoes of the Philippine Islands. III. Subgenera <u>Aedimorphus</u>, <u>Banksinella</u>, <u>Aedes</u>, and Cancraedes (Diptera, Culicidae). Pacif. Sci. 8:453-481.
- Mattingly, P. F. 1957. The culicine mosquitoes of the Indomalayan area. II. Genus <u>Heizmannia</u> Ludlow. British Museum (Natural History), London. 57 pp.
- Mattingly, P. F. 1959. The Culicine mosquitoes of Indomalayan area. IV. Genus <u>Aedes</u> Meigen, Subgenera <u>Skusea</u> Theobald, <u>Diceromyia</u> Theobald, <u>Geoskusea</u> Edwards and <u>Christophersiomyia</u> Barraud. British Museum (Natural History), London. 62 pp.
- Reinert, J. F. 1970. Contributions to the mosquito fauna of Southeast Asia. V. Genus <u>Aedes</u>, subgenus <u>Diceromyia</u> Theobald in Southeast Asia. Contr. Amer. Ent. Inst. 5(4):1-43.