

SCIENTIFIC NOTES

A NEW METHOD FOR PRESERVING ADULT MOSQUITOES¹

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In teaching collections of adult mosquitoes, a specimen with all parts intact is uncommon. Pinned specimens dry up, become brittle, deteriorate with age, and lose their scales. Adults cannot be preserved in fluids or in plastic mounts because scale color patterns are obliterated. We have developed a new method which allows storage of adults on microscope slides.

Materials needed for this new method are glass slides, circular cover glasses 22 mm in diameter, DEK-ADHESE plastic laboratory cement (Donald Tulloch, Jr., Box 17, Chadds Ford, Pa.), and aluminum rings 22 mm in diameter. We found that inexpensive rings could be made from aluminum pipe cut into 2 mm thick sections by a machinist.

The live specimen to be preserved is anesthetized with ether and the legs are positioned with forceps. The specimen is then etherized heavily to kill and fix it. Ether is preferable to chloroform or carbon dioxide in that the specimen remains more pliable. DEK-ADHESE is brushed on a clean slide and the specimen is set down on the fresh adhesive. An aluminum ring is pressed around the specimen, the adhesive is applied to the rim of the ring and a cover glass is applied. After the adhesive has set for a few minutes the slide is ready for use.

Mosquitoes prepared by this method hold up well in use because the specimen is never touched. Scales remain in place and pleural scale patterns can be observed by tilting the slide. The eyes of the specimens dry out and some distortion of the

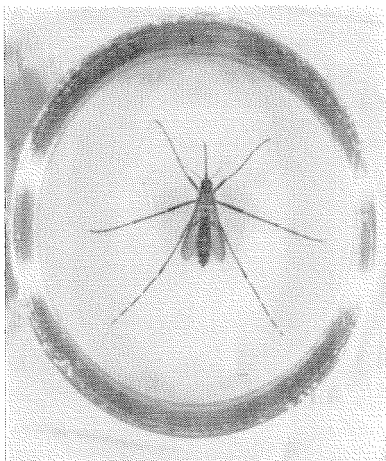


Fig. 2.—Close up. Note preservation of scaling pattern and positioning of legs.

abdomen is present but it is considerably less than that observed on pinned specimens. The legs remain in place and are not readily broken.

The expense in making these preparations is relatively slight and with a little practice several slides may be prepared in less than an hour.

A GYNANDROMORPH OF *Aedes (F) togoi* (THEOBALD)

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The occurrence of mosquito gynandromorphs has been recorded by a number of workers and a total of 35, belonging to 18 species, has been listed by Christophers (1960). Colless (1958) collected a gynandromorph of *Armigeres giveni* in Singapore, and three more instances have been recently reported by Pratt and Sudia (1964), Rigby and Blakeslee (1964) and Happold (1965).

The specimen described here came from a colony of *Aedes togoi* reared in the Department of Parasitology, University of Singapore. The colony was established from Japanese material and has been in the above Department for over 2 years. During an experiment in which the mosquitoes were allowed to feed on a cat, one specimen, apparently female, was observed to probe but failed to penetrate the skin and engorge. On closer examination, its peculiarities were observed.

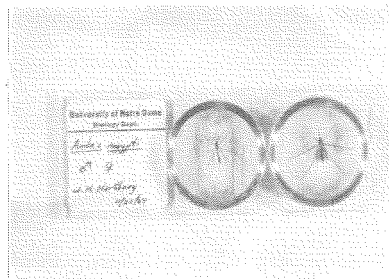


Fig. 1.—Male and female mounted on same slide.

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