bator, set at 45° C., for 24 hours to allow them to die and dry completely. After the 24 hours had passed, the dead and dried plants were introduced into aquariums along with 10 fresh plants that had just been taken from the pond. One hundred *M. uniformis* fourth instar larvae were then introduced into the water with the plants. The aquariums were undisturbed for 48 hours to permit selection and attachment by the larvae. At the end of that period the roots of each plant were submerged in a 5 percent sodium hydroxide solution to determine numbers of larvae attached to the respective plants.

An average of 87 percent of the immatures attached to the live plants whereas only 9 percent attached to the dead and dried plants. Four percent were missing due to either natural mortality or failure to attach. Since the mosquito immatures preferred the live plants to the dead plants we then attempted to see if certain live plants were preferred over others. Since hyacinth produces a flower, we investigated to determine whether the presence or absence of flowers on the plants had any influence on preference by the immatures.

Ten flowering and 10 nonflowering plants were placed side by side in the aquariums. Again 100 *M. uniformis* fourth instar larvae were introduced into the aquariums and they were treated as in the previous test.

An average of 67 percent of the larvae attached to the flowering plants, whereas only 28 percent attached to the nonflowering plants and 5 percent were missing due to either natural mortality or failure to attach.

SUMMARY. *M. uniformis* 4th instar larvae demonstrate a preference for attaching to live water hyacinth rather than dead ones and flowering rather than nonflowering plants. It is not clear whether the specific plants attract the mosquito immatures or the mosquito immatures move randomly though the water and preferentially attach to one type of plant rather than another. This is not to say that all the various species of plants which are hosts to *M. uniformis* would have a similar relationship. These answers can be obtained only when different species of *Mansonia* and their reaction to various host plants can be observed. However, due to the abundance of *M. uniformis* and water hyacinth in Southeast Asia, the information presented may aid in simplifying our search for *M. uniformis* breeding sites.

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AUTOGENY IN *ANOPHELES AMICTUS HILLI*

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During January 1971, attempts were made to establish a laboratory colony of the mosquito *Anopheles amictus hilli* Woodhill & Lee 1944 from larvae collected at Gove, Northern Territory, Australia. Larvae collected in the field were sent by air to Sydney and reared in the laboratory in 6" x 4" x 2" plastic trays containing 200 ml of river water and were fed on powdered fish food. Pupae were placed in 50 ml beakers of water inside gauze-covered 24 oz paper cups, and cotton wool pads soaked in sugar solution were provided for the emerging adults. Two to four days after emergence it was noticed that the females had laid eggs in the pupal beakers without first receiving a blood meal. This phenomenon of autogeny has been recorded widely in many mosquito genera but is rare in *Anopheles*, being first observed in *A. claviger* (Markovitch, 1941) and later in *A. crucians* (Chapman, 1962). This is the first recorded instance of autogeny in an Australasian *Anopheles*.

The ability to mate in small paper cups and lay eggs without a blood meal was a great ad-

vantage for colonization purposes and the colony was established in the laboratory without difficulty. The level of autogeny of the F1 generation was not determined but for later generations was found to be 100 percent. On a later field trip to Gove and Darwin, Northern Territory, during May 1972 it was found that the ovaries of all females of *A. amictus hilli* dissected on the second day after emergence from pupae collected in the field contained mature eggs. Because of this, it seems probable that this mosquito is invariably autogenous in nature. An interesting feature of the behaviour of this mosquito is that although the females do not need a blood meal to mature the first egg batch, they are avid for blood and feed voraciously on human or animal bait (mice, rats, or rabbits) if given the opportunity even during the period in which autogenous egg maturation is proceeding.

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