

MOORE, C. G. 1963. Seasonal variation in autogeny in *Culex tarsalis* Coq. in Northern California. Mosq. News 23:238-241.

OWENS, W. B. 1937. The biology of *Theobaldia inornata* Williston, in captive colony. J. Econ. Entomol. 35:903-907.

THE TRANSITORY NATURE OF *Aedes Aegypti* LARVAL HABITATS IN AN URBAN SITUATION

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The populations of container-breeding domestic mosquitoes such as *Aedes aegypti* are highest, naturally, where there is an abundance of larval habitats (water-holding containers). The typical lower socio-

economic neighborhood in most areas has a plentiful supply of these habitats, so in a control or eradication program against *Aedes aegypti* a great deal of time is spent larviciding in these neighborhoods. Suc-

TABLE 1.—Accumulation and loss of potential *Aedes aegypti* larval habitats in a nine block urban area of Southern Florida during a 3-month period.

Block number	Treatment (Month 0)	Posttreatment (Month 3)			
	Total containers (found and marked)	Total containers (marked & unmarked)	No. of old (marked) containers	% Marked containers removed	% Total containers unmarked (new, i.e., untreated)
Treated area					
6	1,634	2,041	781	52.2	61.7
7	2,327	2,055	1,186	49.0	42.3
15	1,667	1,835	673	59.6	63.3
16	2,395	2,833	1,374	42.6	51.5
26	2,329	1,729	744	68.0	57.0
29	2,481	1,652	887	64.2	46.4
41	1,926	1,713	970	49.6	43.4
Total	14,759	13,858	6,615	55.2	52.3
Control area					
10	1,696	1,522	1,031	39.2	32.3
40	3,036	3,228	1,397	54.0	56.7
Total	4,732	4,750	2,428	48.7	48.9

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cessful scheduling of repeated larvicide applications to an area necessitates a knowledge of the rate at which new (untreated) containers accumulate.

The study was carried out in a nine-block urban residential area in South Florida. During the initial inspection and treatment of the area (month 0) each container was marked with a spot of paint for identification. Three months later

another inspection was made to determine how many new containers had accumulated and how many of the original (marked) containers remained on each block.

As indicated in Table 1, approximately the same number of containers were present in the area at month 3 as were originally present at month zero, but in all blocks approximately 50 percent of the treated (marked) containers had been replaced by new, untreated containers. This would mean that after 3 months approximately half of all containers in the area

were untreated and therefore would not hinder development of larvae from eggs deposited by remaining or introduced adult mosquitoes.

On the basis of the samples taken a higher level of removal of marked containers occurred in the treated areas compared to control areas. This may reflect stimulation to action by premises owners resulting from activities involved in the study. However, the total number of containers in a given block remained relatively constant during the study period.

BOOK REVIEW

FILARIASIS AND IMMUNOLOGY OF PARASITIC INFECTIONS. Proceedings of a seminar and laboratory meeting, Singapore, 1968. The Third Regional Meeting on Parasitology and Tropical Medicine. A. A. Sandosham and V. Zaman, Editors. Rajiv Printers, Kuala Lumpur, Malaysia, 1969. xvi+257 pp., illus. \$5. Copies available from "The Secretary-General, Central Coordinating Board for Tropical Medicine and Public Health of SEAMEC, 420/6 Rajvithi Road, Bangkok, Thailand."

The title of these proceedings is somewhat misleading since there are a number of papers and laboratory demonstrations included that deal with mosquitoes and/or malaria. For example, studies of the sporogonic cycle of *Plasmodium cynomolgi* in 4 species of mosquitoes, predators as a factor in control of *Anopheles hackeri*, notes on the gonotrophic cycle of anophelines, the effect of slow drying on *Anopheles balabacensis* eggs, and the effects of Abate and other insecticides on the feeding activity of the guppy. There is also

an interesting report on *Aedes* mosquitoes taking a blood meal from fish (mudskippers).

Subjects in the section on filariasis of particular value to entomologists include lists of the vectors of *Wuchereria bancrofti* and *Brugia malayi* from each of the countries of Southeast Asia and studies on the transmission of *W. bancrofti* to animals in the laboratory. Also of value are reviews of the epidemiological methods used in filariasis, control of filaria in Ceylon, and the status of research and study of filariasis.

In the section on immunity there is a useful review of immunization as a method of malaria control by Dr. R. Desowitz. Although results to date have not been overly promising, he cautiously concludes that there is some basis for believing that immunization against malaria "is far from being a hopeless prospect."

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