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A SIMPLE, PRACTICAL METHOD OF COLLECTING SAMPLES OF *Anopheles sergenti* MOSQUITOES IN A CAVE WITH THE AID OF A STANDARD MOSQUITO CAGE

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At Neot Kikar, a new settlement in the southernmost part of the Dead Sea area in Israel, large numbers of *A. sergenti* tended to penetrate during daytime into caves, crevices and fissures of limestone rocks, concentrating there on and between stones and pebbles. It is very hard to collect them from these places by means of the usual aspirator. Sucking by mouth is inconvenient and involves loss of time as well as the danger in inhalation of dust and small particles of the limestone walls.

These difficulties can be overcome by mechanical sucking (see *Mosquito News*, 23:4, 351) and by following the simplified method described below.

A mosquito cage with nylon or muslin netting and a wooden frame of 20 x 20 x 18 cms, was introduced in the afternoon, inside or close to the opening of a crevice of the cave, where many mosquitoes used to congregate, in a dim corner which was free of draft. The sleeve of the cage was left wide open. Mosquitoes entered the cage to hide, and then settled in it.

Early the following morning the sleeve was closed quickly, thus catching the mosquitoes inside. By this simple method we frequently succeeded in collecting more than 100 adults in one operation without any effort.

On November 10, 1962, when the temperature had dropped to 11° C. and a few drops of rain—so rare in this area—had fallen, we were able to catch 21 females, all with blood, inside the cage, while only a few mosquitoes were seen outside the cage.

Our observations showed that *A. sergenti* are very sensitive to meteorological conditions and change their resting places several times, even during daytime, under the influence of changes in temperature, humidity, lighting and draft conditions.

On May 28, 1964, between 2 and 5 p.m., we were able to collect with much difficulty 39 adults with the aid of an aspirator. Finally we put a cage of 30 x 30 x 30 cms. in a spot near the opening of the main crevice. After two hours only, at about 7 p.m., we closed the sleeve and

found that we had caught an additional 30 adults in this cage.

The method has proved to be simple and useful.

Aedes MOSQUITOES FEEDING ON TURTLES IN NATURE

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Considerable attention has been given in recent years to reptiles as possible overwintering hosts of arboviruses in nature. Gebhardt *et al.* (1964) demonstrated the maintenance of western equine encephalitis virus in wild snakes during the winter months. In New Jersey Goldfield and Sussman (1964) found turtles naturally infected with both eastern and western equine encephalitis viruses. They reported the isolation of EEE virus from the brain of a snapping turtle and the isolation of WEE virus from the blood of both northern diamond-back terrapin and box turtle. Hemagglutination-inhibition (HAI) antibodies to EEE virus (but not to WEE virus) were found in the blood of a box turtle in southern Maryland in 1964 (Yuill, 1965).

Since mosquitoes play a significant role in the dissemination of disease agents, observations on their feeding on reptiles or other hosts appear important. Investigations on mosquito-borne viruses are in progress in Pocomoke Cypress Swamp near Pocomoke City in Worcester County, Maryland. This brief note describes two observations made in early 1964 near Pocomoke Cypress Swamp on *Aedes canadensis* (Theobald) and *Aedes triseriatus* (Say) biting turtles.

On June 12 we saw a painted turtle, *Chrysemys picta* (Schneider), moving across the paved road from the fresh water swamp toward a cultivated field. At a distance the body of the turtle appeared to be entirely covered with mosquitoes, while others were flying about either in pursuit or departing towards the woods. As we approached the turtle, it stopped momentarily but soon continued on its course. When closely observed, mosquitoes were seen resting on the dorsum of the carapace, the head, neck and legs, undisturbed by the turtle's movement. Some mosquitoes were found probing through the skin, while two had their abdomens distended with apparently freshly ingested blood.

With a hand aspirator we followed the turtle in attempts to collect some if not all mosquitoes present. We collected 38 females, of which 37 were *Aedes canadensis* and one *Aedes triseriatus*. Four days later, a similar incident occurred in the general vicinity involving a box turtle, *Terrapene carolina* (Linnaeus). In this case six mosquitoes were collected from the turtle. These were identified as *Aedes canadensis*. It is interesting that