

THE PRESENT STATUS OF THE *CULEX TARSALIS* COLONY AT THE ROCKY MOUNTAIN LABORATORY¹

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The successful colonization of *Culex tarsalis* by Brennan and Harwood (1953) was published as a preliminary report. Since then, our techniques for maintaining the colony and subcolonies have been somewhat modified and will be reported along with additional notes and observations in a subsequent paper.

The interest expressed in, and the demands made on, the Rocky Mountain Laboratory colony have been greater than anticipated. In addition to our own use of the colony in virus research and related programs, which require prodigious numbers of adult females, we have supplied eggs and/or gravid females to several other laboratories.

A brief note on the current status of the colony is given here to benefit those who may require initial or additional material in their varied research programs, and to encourage the more extensive utilization of *Culex tarsalis* as a new and useful laboratory tool.

The colony, established in the late summer of 1952, is flourishing and at this writing is in its estimated twentieth generation. Both larvae and adults continue to be large, hardy, and vigorous. There has been no suggestion of a diapause. Any physiologic or genetic changes which may have occurred through inbreeding have

certainly not affected the well-being of the colony. There has been no interference with or apparent influence on the efficiency of the mosquito as a vector of the virus of western equine encephalitis or as a host for the avian malarial parasite, *Plasmodium relictum*.

Following exposure of a number of generations to the conditioning process described by Brennan and Harwood (*op. cit.*) it has been found that breeding can be continued satisfactorily in small cages in the absence of controlled light, with consideration only for humidity and temperature, and that animals other than chickens are suitable sources of blood meals for maintenance of a colony.

Because of present demands our insectary routine is now geared to a daily minimal egg production of 20 rafts from the main stock colony. Physical facilities are such that this figure may be increased greatly should the need arise.

Elementary as it may seem, still, in view of two unfortunate experiences which we have encountered elsewhere, we have been prompted to inspect our colony frequently and to take samples for precise identification as a safeguard against possible contamination by other mosquito species, thus insuring a pure culture of *Culex tarsalis*.

Literature Cited

¹ From the U. S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, National Microbiological Institute, Rocky Mountain Laboratory, Hamilton, Montana.

BRENNAN, JAMES M. AND HARWOOD, ROBERT F. 1953. A preliminary report on the laboratory colonization of the mosquito, *Culex tarsalis* Coquillett. Mosquito News, 13(2):153-157.