

# OPERATIONAL AND SCIENTIFIC NOTES

## XEROX TRANSPARENCIES AS A TRAINING AID

VAUGHN E. WAGNER

Dutchess Co. (New York) Health Department

In order to promote better understanding of the expanding mosquito control program in Dutchess County, New York, an educational method was needed to present mosquito illustrations to laymen in such a manner as to attract and retain audience interest.

We have found that Xerox copies produced on transparencies manufactured by and available from Sepsco, Inc., 1940 Will Ross Court, Chamblee, Georgia 30005, do an excellent job of reproducing illustrations such as line drawings of adult and larval mosquitoes. These can easily be projected on a screen from an overhead projector. Comparisons of egg types and developmental forms can be emphasized by juxtaposition of separate transparencies as needed.

The 8½" by 11" transparencies are available at \$9.95 per 25 sheets in four colors, yellow (Zelar Y, Stock No. 4765-417A), green (Zelar G, Stock No. 4774-417A), blue (Zelar B, Stock No. 4785-417A), and red (Zelar R, Stock No. 4795-417A). A clear transparency (Zelar, Stock No. 4755-417A) is also available and not only is less expensive at \$8.95 per 25 sheets but produces the most distinct image. Yellow produces the second most satisfactory projection. The method of reproduction is merely to substitute the sheets of transparencies for the paper usually used in the Xerox copying process. The transparencies may be cleaned with a soft cloth and water. Although the print appears to be very durable, the plastic will not resist abrasion well and care must be used to avoid scratches which would tend to degrade the projected image.

## A NOTE ON FOG APPLICATION

G. A. THOMPSON

Director, Jefferson County Mosquito Control  
District  
Nederland, Texas

For the past several years this office has suggested the use of diesel fuel oil No. 2 for foggers in back yards. The recommendation has apparently proved successful as there have been no return calls for further information. When making the recommendation, it has been the practice of this office to advise the questioner that if he is not satisfied with the performance of the diesel oil fog to call back and we will recommend another treatment, which however will be more expensive.

About a month ago a cattleman in the Sabine Pass area wanted information on anything that he could do to relieve the pressure of the mosquitoes on his herd. A fogging device was suggested using the exhaust system of a tractor which was available on the farm. Diesel fuel oil No. 2 was recommended as an economical possibility for control and as a substitute for the traditional smudge. Several days after the conference, I received a phone call from the gentleman advising me that the fog from the exhaust generator had provided protection for the herd and not only had it given relief from the mosquitoes but apparently had controlled the horn fly as well.

A similar series of events has taken place with a resident of Beaumont who owns some cattle in Vidor. Subsequent contacts from this gentleman indicate satisfaction with the diesel oil. In tests last summer the District achieved control for moderate distances with the straight diesel fog. The results were not satisfactory at distances that the District needs in treating residential areas. It is hoped that more cattlemen will try the diesel fog as a method of providing relief for cattle during heavy mosquito flights. Equipment is inexpensive, usually at hand, and the cost of the diesel oil is far less than the loss of even one calf.

## SEX IDENTIFICATION OF LIVE MOSQUITO PUPAE IN THE LABORATORY<sup>1</sup>

PEDRO BARBOSA<sup>2</sup>

Department of Entomology  
University of Massachusetts  
Amherst, Mass.

Techniques and methods for the accurate sexing of mosquito pupae have, at one time or another, been the concern of most researchers using mosquitoes as experimental animals. Two major bases upon which sexing techniques depend are size differential between sexes and morphological difference in the genital segments of male and female pupae.

In 1939, Cantrell found no mention in the literature, of the obvious difference in size between the sexes. In experiments on the effects of overcrowding in *Aedes aegypti* (L.) he found not only a size reduction in both sexes but the reduction in the females was greater than in the males. Mosquitoes produced under crowded conditions

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<sup>2</sup> Graduate Teaching Assistant.