

PAPERS AND PROCEEDINGS OF THE ANNUAL MEETING

OF THE AMERICAN MOSQUITO CONTROL ASSOCIATION HELD
JOINTLY WITH THE ANNUAL MEETING OF THE
FLORIDA ANTI-MOSQUITO ASSOCIATION
DAYTONA BEACH, APRIL 12-17, 1953

PART 2

FURTHER OBSERVATIONS ON THE USE OF GRANULAR DUSTS

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At our annual convention in Salt Lake City I had the pleasure of reporting on the application of 10% DDT granular dust as prepared by the Tobacco By-Products and Chemical Corporation of Richmond, Virginia, as a pre-hatch control for the fresh water flood mosquito, *Aedes vexans*.

Our thoughts in this direction date back to 1946. The 20,000 acres of flood-plain in the Upper Passaic River Valley have long presented a problem in mosquito control. Ground treatment of the floodwaters was found to be prohibitive due to the soft nature of the meadows and the barriers of brush and woods making the maneuvering of mechanical equipment difficult. The same situation held true for the aircraft application of standard mesh dusts or liquid insecticides as the umbrella of trees and prevailing winds made such applications costly and generally ineffective.

At the suggestion of Dr. Bailey B. Pepper, Head of the Department of Entomology of the N. J. Agricultural Experiment Station of Rutgers University, the coarse dusts were experimentally used in 1950 and 1951. The success of this work pointed to the standardization of the 30-50 mesh screen tobacco stem dust as a carrier for DDT.

In May of 1951, in cooperation with the

Essex County Mosquito Extermination Commission, some 900 acres were treated as a pre-hatch control while the meadow surfaces were dry. Subsequent rains and floods during the season hatched mosquito eggs; however, the larvae soon died.

The only important observation to be made on the 1951 work that was not reported last year is the carry-over of results into the 1952 season.

Due to budget restrictions no applications were made in 1952 so the carry-over effectiveness of the 1951 application was of real interest.

Observations made by qualified personnel indicate that the usual spring brood was held in some 75% control and it was not until mid July that no effects were observed.

In the discussion of coarse dusts it would seem wise first to determine whether the immediate release of the insecticide from the granules is desirable or whether a long, gradual release would be most effective. Our experience in dealing with flood-water mosquito problems would indicate the latter to be more effective and economical therefore resulting on our standardization of the tobacco stem carrier rather than the clay pellets.