free for experimental purposes by the companies mentioned above, the exact costs are not available.

TYPE TWO: A long narrow strip of the abandoned Schuylkill Canal approximately 100 feet wide, including banks of the canal, and 35 miles long, owned by the Commonwealth of Pennsylvania, between a point west of Norristown and extending through Phoenixville, Pottstown, Reading and as far as Hamburg, Pennsylvania, was dusted four times with the same materials as mentioned above and with the same general results.

## IMPROVING AERIAL APPLICATIONS 1

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The use of pelletized or granular insecticides offers possibilities of improving aerial applications for the control of mosquito larvae from the standpoint of both effectiveness and economy.

A. Effectiveness: 1. Wherever mosquito producing waters have vegetative cover above them much better penetration and consequently better control may be obtained with pellet-borne insecticides.

Economy: 1. The small amount of drift makes possible the application of such insecticides from much greater heights and hence with greater safety than when applied as dusts or sprays. Such qualities make practical the use of light planes costing but a small fraction of the price of large planes. Their operating expenses are also much lower. In Arkansas the total operating expenses have been but one-fifth to onequarter the cost of the larger planes.

When two pounds per acre are applied and where scattered fields are to be treated, a light plane in 4 to 5 hours will cover approximately twice as much territory as the larger planes in one hour, thus reducing by one-half the cost of application.

2. If there is any movement of the

water, strips of the insecticide in granular bentonite will do as well as complete coverage. Twenty-foot to 30-foot strips applied 67 feet apart in rice fields that were in the process of being flooded gave excellent control.

There is also some evidence that stripping is effective in stagnant water.

- 3. Work now under way at the Arkansas Experiment Station indicates that less expensive and perhaps better methods of preparing such insecticides will soon be
- 4. Let's get away from the idea that any thing under 10 acres should be treated with ground equipment. If the area to be treated can be found from the air, a light plane can go there, do the treating, and return in approximately the time required to get the equipment there in a light truck.
- 5. Because of their non-drifting qualities granular insecticides may be successfully applied during periods of greater air movement than dusts or sprays. As a result, the application of such insecticides can be continued more hours per day. This enables operators to be less likely to get behind with their work and makes more efficient use of the time of the pilot and air plane.

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