in the controls. The larvae assayed for radioactivity in the liquid scintillation counter averaged 118 counts per minute per larva. Thus, the ^{32}P was carried from the female to the egg and subsequently to the larvae in measurable amounts.

Literature Cited

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A QUICK, ACCURATE AND ECONOMICAL METHOD FOR CALIBRATING LOW VOLUME SPRAYING SYSTEMS ON AIRPLANES

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At a point between the control (shut-off) valve and the boom, of a typical airplane spraying system, insert a flow meter with needle valve attached. On the inlet side of the flow meter provide a tee. One leg of the tee will have a closed nipple for attaching a knapsack sprayer.

Remove the spray-wand from the hose of a good quality knapsack hand sprayer. Attach an assembly of pressure gauge, shut-off valve and fitting to connect to the nipple in the tee.

To operate, half fill the knapsack with the spray solution in use. Pump knapsack up to about normal operating pressure. Hang buckets under each nozzle. Turn on knapsack sprayer for one minute. Observe position of ball in flow meter. Measure spray solution collected and adjust rate of flow by means of the needle valve in the flow meter as required.

The spraying system can be accurately calibrated without flying the plane. The pressure within the spraying system will have no bearing on the reading of the flow meter. The flow reading will remain constant for a given solution, unless there is a significant change in the viscosity of the liquid due to temperature.

The flow meter also furnishes a time saving bonus when several nozzles are in use. Normally, it is necessary to land and clean one that becomes plugged. The use of a flow meter allows the plane to continue as long as the pilot can keep the ball on the mark.

A SIMPLE, LIGHTWEIGHT LARVICIDING UNIT

CHARLES H. ANDERSON
Plaquemines Parish Mosquito Control District
Braithwaite, La. 70040

The use of FLIT® MLO larvicide at low application rates (0.5–2.0 gal./A) has made it possible to employ a compact larviciding apparatus which can be operated from the trunk of an automobile if necessary. The system is pumpless, using CO_2 or compressed air to propel the larvicide. This gives a uniform flow rate even at very low dosages. With no engine noise, larviciding operations can be carried on in crowded residential areas with little annoyance to residents. The unit is a modification of the type developed for aerial ULV spraying (Dearman, *et al*, 1965). It consists of a standard CO_2 bottle with regulator, a 10-gallon pressure tank, and a 100 ft. self-coiling hose with spray gun and nozzle. The self-coiling nylon hose weighs less than a pound and is easily operated by one man without a hose reel.

Components used besides the CO_2 bottle and regulator are:

Tank—Firestone 10-gallon beverage tank with Hanson quick-disconnect couplings. Couplings should be fitted with ¼" NPT hose connections. Available: Southwest Bottlers Supply Co., 405 N. Bowser, Richardson, Tex. This tank is rated at 200 psi and has a pressure relief valve built into the filler cap.

Hose—Synflex® Self-storing Hose, Type S-8 with ¼" NPT swivel fittings. Mfd. by Samuel Moore & Co., Mantua, O. 44255, who can furnish list of local distributors.

Gun & Nozzle—Trigger Teejet® with "D" series orifice disc only. Any of several ¼" models are suitable. Mfg. by Spraying Systems, Inc., Bellwood, Illinois 60104

FLIT® MLO will emulsify and diminish in larvicidal activity if sprayed forcefully into water, so it should be applied as a fine spray or as a low-pressure solid stream. The latter has been found most suitable since there is no drift of atomized particles.

With a D-2 orifice disc under 10 psi pressure a thin solid stream about 10 ft. long is produced which feathers out at the end and will not emulsify the material. The larvicide spreads well enough so that application of this small stream to the center of a 20 ft. wide ditch provides complete coverage. Also, an application around the edge of a house will spread over the entire surface of water standing under the house.