Accurate Pouring of Concentrated Liquid Insecticide Without Spillage or Waste 1

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Concentrated insecticides offer one specific advantage over ready-to-use insecticides. They have a relatively small volume and are therefore highly desirable where there is a small amount of storage space or where cost of shipping this material is a significant factor. But, since these materials are highly concentrated their toxicity can be a rapid acting poison to the user and can cause excessive environmental contamination when accidentally splashed or spilled. Similarly, inaccurate measuring (adding more or less than the required amount) may lead not only to unnecessary

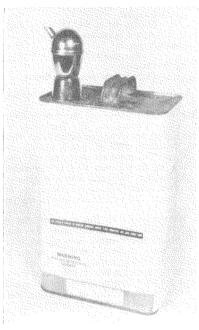


Fig. 1.—Accurate pouring of concentrated liquid insecticide without spillage or waste—McDonald.

¹ The opinions and assertions contained herein are the private ones of the author and are not to be construed as official or as reflecting the views of the Navy Department or the Naval Service at large.

Reprint requests to Publications Office, NAMRU-2, Box 14, APO San Francisco 96263. danger for non-target organisms but may also fail to control the target insect,

Typically, the concentrated insecticide is mixed with diluents such as water, diesel fuel, ctc. The challenge is not in measuring the diluent but in measuring the concentrate with accuracy and without spillage.

Pouring liquid insecticide concentrate into a graduated cylinder from a 1- or 5-gallon container is very difficult. An exact measure of one ounce, for example, is indeed difficult due to residue insecticide which clings to the walls of the measuring flask. Therefore, the more times we use a given measuring flask for a single "batch" of insecticide the more we have increased our opportunity for spillage, waste, contamination, and error.

Recent studies and tests have shown that all of these difficulties can be eliminated by inserting a 1-ounce liquor measure pouring device into the opening of the can of liquid concentrate as shown in Figure 1. Additional gaskets and adapters are not required. These pourers consistently deliver almost exactly one ounce every time. We have noted a volume range of 28 cc to 30.5 cc when using this pourer but without any residue since there is no measuring flask. A pourer for a smaller volume may be used if a fraction of an ounce of concentrate is required.

The use of a liquor pourer fitted to the mouth of a can of liquid concentrate has been found to be a clean, quick, and highly accurate means of measuring small quantities of liquid insecticide without waste, spillage, or contamination of the area.

LARVAL HABITATS OF MOSQUITOES IN JEFFERSON COUNTY, KENTUCKY 1

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An understanding of larval habitats is essential for successful control of mosquitoes. A variety of both temporary and permanent breeding habitats for mosquitoes exists in Jefferson County, Kentucky.

Collections of larvae from these habitats are shown in Table 1. These larvae were collected

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