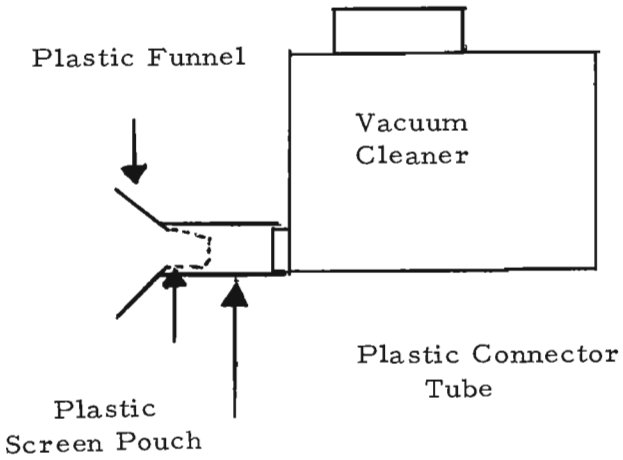
act as a directional stimulus for the movement of the flies through the cells of the maze.

References: Barton-Browne, L., and Evans, D. R., 1960, Locomotor activity of the blowfly as a function of feeding and starvation. J. Insect Physiol. 4:27-37; Ewing, A. W., 1963, Attempts to select for spontaneous activity in Drosophila melanogaster. Anim. Behav. 11:369-378.

MacMahon, J. A. and D. Taylor. University of Dayton, Dayton, Ohio. Another method for removing Drosophila from traps.

Differential flight characteristics of flies in traps may allow fast, agile species to escape, during the trap emptying process, easier than more sedentary species. Such activities may affect relative abundance estimates in studies of natural populations. It is, therefore, necessary to have a foolproof method of collecting all flies in a trap.



Traps similar to those described by Miller (DIS 37:141, 1963) have been emptied, without loss of flies, by utilizing a small, modified, battery powered vacuum cleaner (Fig. 1). The cleaner is equipped with a plastic funnel of a diameter which will completely cover the trap. The funnel is inserted into a plastic tube which fits the cleaner's hose connection. Affixed to the funnel is a plastic screen pouch which prevents the flies from being sucked into the cleaner. The procedure is to turn the cleaner on before the trap is disturbed. The funnel is placed over the trap, which is then tapped lightly. The flies are sucked into the collecting pouch. The funnel opening is stoppered and the funnel plus the attached pouch are removed. The pouch is inserted into an etherizer whose diameter is the same as the plastic tube. Flies may then be transferred to vials.

Shelton, E. E. Utah State University, Logan, Utah. A density method of collecting and cleaning eggs from D. mel.

A new density method for collecting D. melanogaster eggs has been used successfully in our laboratory with samples ranging from 100 to 2,000 eggs. Flies were allowed to lay eggs overnight on yeasted spoons. Eggs and yeast were washed onto a piece of black cloth cut to fit inside a Buchner funnel. Most of the yeast washed through the cloth. The eggs and the remaining debris were washed from the cloth into a 12 ml. conical centrifuge tube. Sedimentation was facilitated by spinning briefly in an International Clinical centrifuge. The water was sucked off with an aspirator and the pellet resuspended in approximately 4 ml. of 16% sucrose. Approximately 2 ml. of 20% sucrose solution then was layered under the suspension. This was accomplished by placing the tip of a 9-inch Pasteur pipette at the bottom of the tube and allowing the 20% solution to flow slowly into the tube. The tube with its layered contents was spun in the centrifuge for 3 min. at 1610 X g. Most of the debris and all of the first instar larvae formed a pellet at the bottom of the tube. Debris of relatively low density remained at the top of the solution while the eggs accumulated at the interface between the 16 and 20% sucrose solutions and were easily removed with a pipet.