OPERATIONAL AND SCIENTIFIC NOTES

A USEFUL DEVICE FOR CLEANING MOSQUITO REARING PANS[1]

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In our laboratory a simple screening device has been useful for removing dead larvae and other detritus from rearing pans of *Culex tarsalis, Culex pipiens quinquefasciatus* and *Anopheles albimanus*. Previous to the construction of this device, the pans were cleaned by straining the water through nylon screen; however, larval mortalities were often noted after straining and complete change of the water. Furthermore, that technique did not remove the coarser materials or dead mosquitoes, which is desirable in order to avoid exposing healthy larvae to pathogens.

The device is similar to that described by Scarola and Giberson (1967) and basically consists of two fused sections of a plexiglass cylinder with a screen interposed (Fig. 1). The dimensions of the cylinder can be varied as to need. Screen mesh size is chosen according to the fineness of the materials to be removed. A 32x32 mesh Lumite plastic screen was found to be satisfactory. Rubber stoppers to be fitted into the ends of the cylinder are bored to accommodate pieces of glass tubing. One stopper is fitted with a single straight piece of tubing, and two pieces of tubing bent at 90° are inserted through the other stopper. Lengths of flexible rubber hose are fitted on the ends of the glass tubing. A tubular, glass wand is connected to the two-hole stopper via one length of hose; and a pinch clamp is placed on the hose connected to the one-hole stopper.

With the stoppers in place and the wand directed at the materials to be removed from the pan, light suction by mouth or vacuum is applied to the other hose. Improved control of vacuum suction can be gained by opening a bypass hole in the glass wand. Water drawn into the cylinder is filtered by the screen. When the cylinder is full, suction is halted or the wand is removed from the pan to avoid drawing water into the suction hose. The clamp on the lower hose is removed allowing the filtered water to be discarded or to drain back into the rearing pan. A clogged screen is cleared by removing the rubber stoppers and inverting the cylinder under a stream of running water.

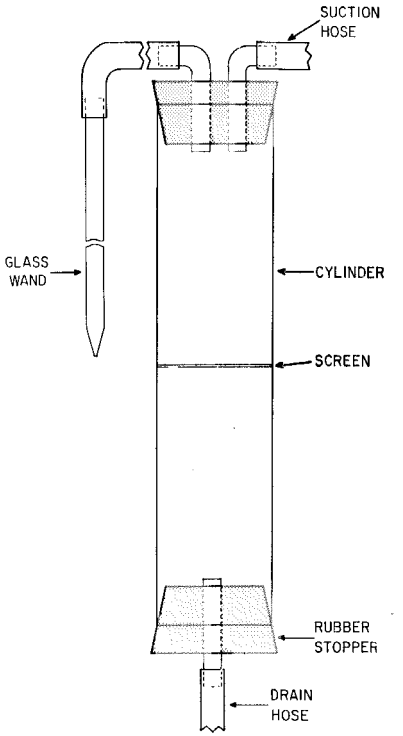

FIG. 1.—Diagram of device for cleaning mosquito rearing pans.

By the use of this device, the time required for cleaning rearing pans has been reduced by about one half. Of greater importance is the elimination of larval mortalities observed after straining and replacement of the pan water.

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Reference

Scarola, J. F. and Giberson, J. H. 1967. A device for sorting bottom organisms. Prog. Fish-Cult. 29(4):242.