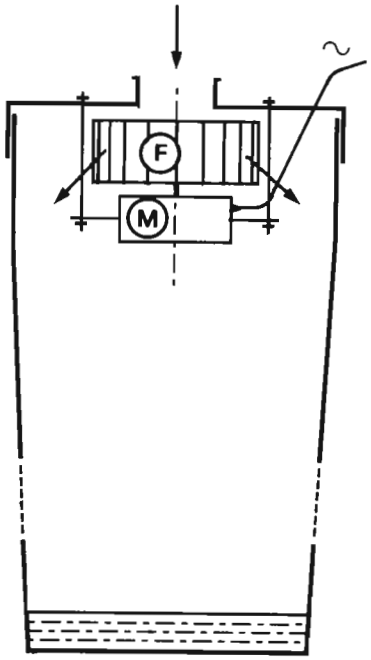
lead necessarily to a simultaneous variation of ethanol and water contents in the tested air flow. Since in these experiments flies had to choose between this air flow and a control saturated with water, the authors actually measured some interaction between the response of flies towards ethanol and their response towards humidity. High concentrations of ethanol probably act as air dessicators, which could explain the observed repulsion.

Choice experiments can also be carried out with this olfactometer: by adjusting pump inputs and fitting two traps to each box, flies can be given a choice either between two different concentrations, or between two odor mixtures.

References: Carton, Y. 1977, Coll. Int. CNRS Tours (Fr.) 285-303; Fuyama, Y. 1976, Behavioral Genetics 6:407-420.

Boulétreau, M. and O. Terrier. University of Lyon, Villeurbanne, France. A device for getting rid of excess adult flies.

Routine rearings or experimental plans often require the daily destruction of large numbers of flies. A simple device was developed to prevent flies from escaping in the lab and to avoid disadvantages of traditional devices.



A weak electric motor (M), fitted with a plastic fan (F), hangs on the cover of a cylindrical plastic spice jar (1.5 liter). A 30 mm hole is pierced through the wall of the jar, 10 cm above the bottom. 100 ml water, added with a few drops of household detergent, are poured into the device.

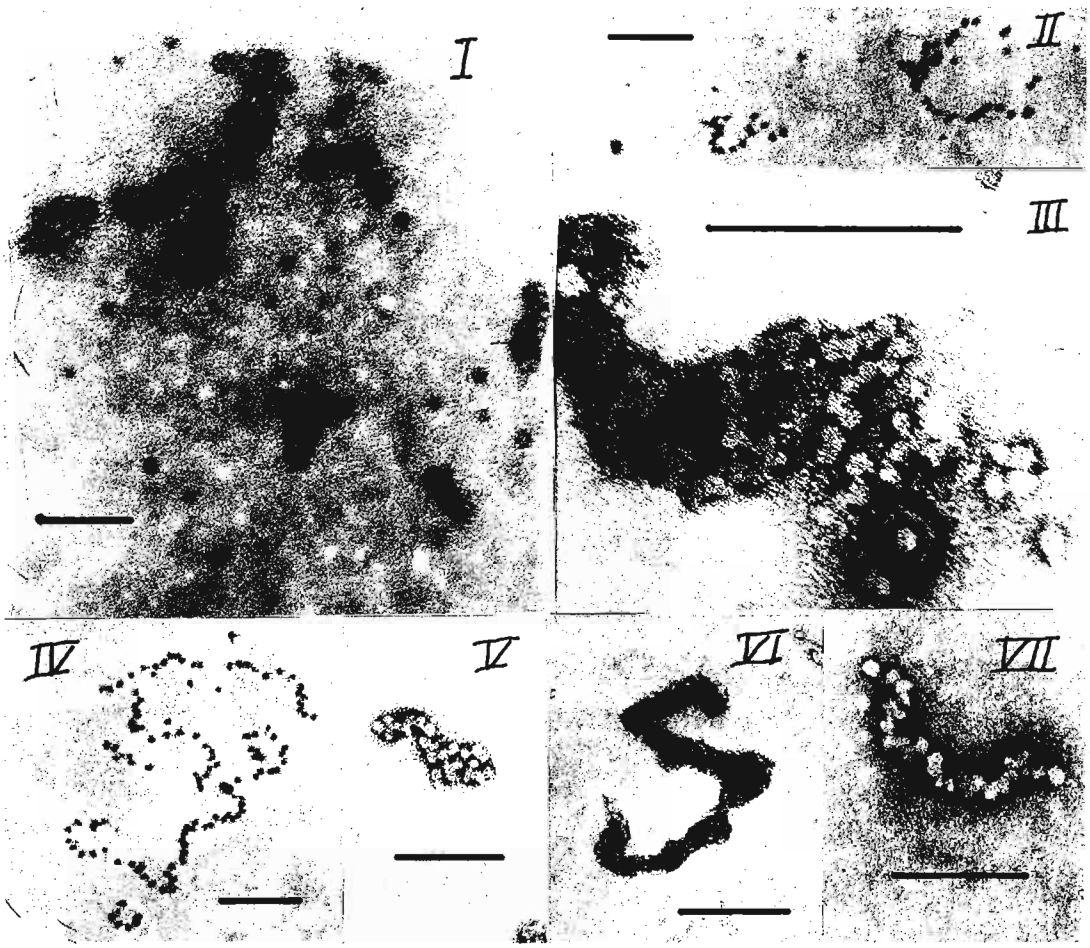
By gentling drumming inverted vials or tubes above the upper hole, flies are allowed to be sucked down by the air swirl. They immediately sink to the bottom. None escape or float on the surface, thus allowing the quick drowning of next victims and making the capacity unlimited.

Once the daily holocaust is completed, the cover is removed, the jar is water rinsed and provided again with water + detergent. Years of daily use proved the device to be very efficient and suitable.

Crespí, S. and O. Cabré. Autonomous University of Barcelona, Bellaterra, Barcelona, Spain. A simple method for electron-microscope visualization of D. melanogaster embryo polysomes.

The common techniques of polysome and ribosome preparation are based on relatively complex methods in which tissue homogenates, gradient centrifugations, etc., are used. These preparative methodologies are characterized in subjecting the samples to drastic treatments which can alter the native stage of the traduction complex. Here, we propose a very simple analytic method, with mild conditions, and material proceeding from only one egg. It allows the study by electron microscopy of processes related to translation, with minimum interference between the experimental treatment and its visualization.

The method consists of dechorionizing one egg in the embryonic stage that is to be studied. The egg is disrupted in 50 µl of Na borate buffer µM pH 8.5, and left 10 min. at room temperature. 20 µl of the sample is placed on a carbon-coated grid (300 mesh), and



Note the length of some polysomes and the apparent ribosome disposition in doublets, or the polysome in helix.

allowed to adsorb for a few minutes. The excess is removed with a lens tissue. Immediately, the grid is dipped in absolute ethanol, then in 0.5% Photo-flo and air dried. Finally the preparation is dyed with an ethanolic solution (70%) of uranile acetate 2%, for 30 seconds.

The micrographies shown were obtained with a transmission electron microscope Hitachi at 70 KV at different magnifications. Pictures II and IV present positive staining and the others, negative. (Bar = 250 nm).

Done, J.N. and D.B. McGregor. Inveresk Research International, Ltd., Musselburgh, Scotland. A simple device for Drosophila containment during exposure to gases or vapors.

The apparatus is simply a modified Dreschel bottle. Inlet tubes on Dreschel bottles now have scintered glass discs fused into them to facilitate dispersion of the incoming gas to the washing medium. This disc must be cut off. The only other modifications necessary are those which prevent the flies from escaping. Containment could be done by plugging inlet and outlet tubes with cotton wool or, if preferred, glass fiber. Plugging in this way does impede the flow of gases or vapors through the apparatus. With certain atmospheric analytical techniques such impediment may cause problems (e.g., infrared absorption analysis). We have, therefore, elected to prevent fly escape by closing the inlet and outlet apertures with stainless steel mesh.

A disc of the mesh is cut so as to fit the outlet aperture. Into the middle of this disc is punched a hole which is the same diameter as the external diameter of the inlet tube. The smaller mesh disc punched from the large disc is used to cover the inlet tube aperture. These mesh discs are held in their correct positions by teflon sleeves (Fig. 1).

This simple device allows the flies to be observed during exposure to dynamic test atmospheres passing through the bottle at 3-5 l/min. Following exposure, the bottle may be flushed with air then the flies lightly anesthetized with carbon dioxide before they are re-