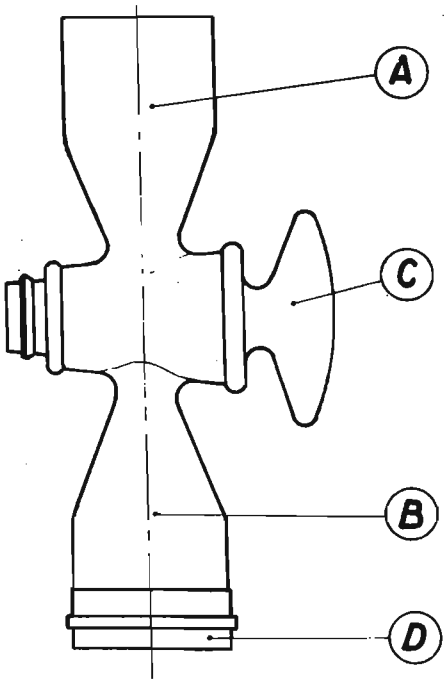
Kirschbaum, W. F. and Beatriz M. de Rey. Atomic Energy Commission, Buenos Aires, Argentina. Drosophila egg treatment chamber.

In order to reduce to a minimum the manipulation of immature eggs obtained with an egg-collecting device patterned after the "ovitron" of Yoon and Fox (Nature 206: 4987, 1965), we have designed a special chamber, which is proving very successful in avoiding egg loss and contamination in collecting embryos for tissue culture.



In the diagram, D is a metal filter that does not allow the passing of the eggs. A and B are open-ended identical chambers, and C is a simple stopcock.
To de-chorionate eggs, they are placed in A and the apparatus with stopcock open is immersed in hypochlorite solution, so that both chambers A and B are filled. An electromagnetic stirrer inside B is used for stirring. Dechorionated eggs remain floating in A while the chorions drop down to B. Stopcock C is then closed and the chamber is taken out of the solution. Filter D is removed and B emptied. A clean filter like D is placed on A. The chamber is turned upside down, placing A into position B of the figure. C is now opened to let air in and the hypochlorite solution out. Eggs are washed several times by immersing chamber A (now in position B) in different solutions. Finally, D is removed and turned upside down over an appropriate funnel. The eggs are washed into the homogenizer by pouring culture solution through the filter. All the elements are previously sterilized and the operations done in a sterile culture chamber.

Cooper, K. W. University of California, Riverside, California. Freeing Drosophila of Mold.

When using ordinary media (as those without propionic acid or special yeasts), there inevitably comes the day when valuable crosses become mold-ridden despite the presence of an inhibitor such as moldex. If flies from such cultures are transferred (preferably as soon as mold is detected) to fresh medium containing roughly 1%-2% of crystal violet (ca 1 gm per 100 cc), in most cases two passages of 12-18 hours each on this medium will effectively free the flies of mold. As yeast is killed or inhibited in the flies' digestive tracts as well, just as are most molds on the crystal violet medium, it is best to seed vials of fresh food just before final transfer of the flies from the crystal violet medium to them, although this is generally not necessary if the new medium contains as much as 3-4 gms of dried yeast per 100 cc.

Flies lay readily on the food containing crystal violet, and the eggs hatch normally. The larvae of course do not develop on the sterilizing medium. It is possible, therefore, to accumulate large numbers of sterile, viable first instar larvae none of which have been nourished. It is interesting, but not surprising, that an occasional vial of crystal violet medium, a week or ten days after removal of the now ordinarily mold-free flies, may itself develop slow growing mycelia which are resistant to the dye. For this reason it is inadvisable to reuse a vial of crystal violet medium after the passage of flies.