Majumdar, S.K. and D.S. Novy. Lafayette College, Easton, Pennsylvania. A very simple device for the collection of large numbers of eggs of D. melanogaster.

The controversial reports on the toxicological, teratological and cytogenetical effects of 2,4, 5-trichlorophenoxyacetic acid on mice (Courtney et al., 1970), rats and rabbits (Emerson et al. 1971; Sterling, 1971), and on D. melanogaster (Dävring and Sunner, 1971) have prompted us to study the effects of this chemical on egg-laying capacity and egg-hatchability in some genetic strains of D. melanogaster.

In this laboratory we are using with success a simple egg collection apparatus which is much simpler than the one designed by Würgler et al. (1968). The apparatus is a small plastic container approximately seven inches in length, five inches wide and four inches deep with fitted cover. Two holes are cut in the bottom to fit open screw-caps (2 inches diameter) and their jars and two more holes are bored in the top which are plugged with foam

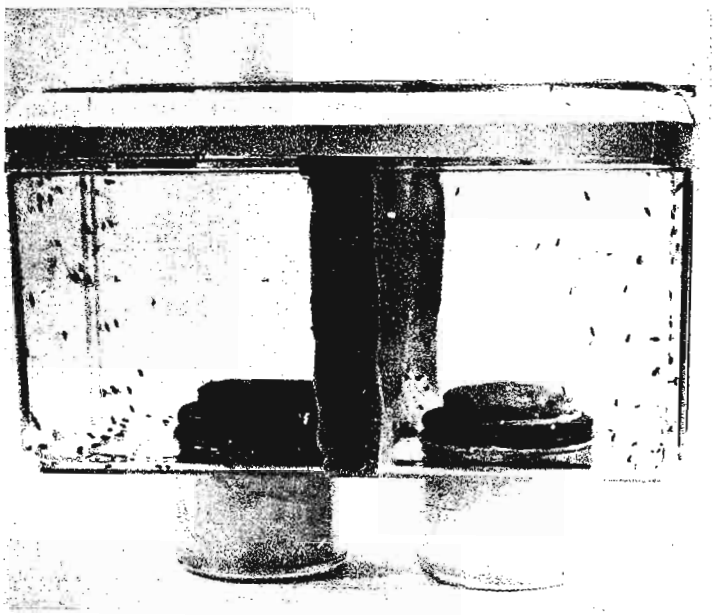

Fig. The egg collection cage with two jars screwed into the bottom.

stoppers (see Figure) for ventilation and introduction of flies. For our purpose, the container is partitioned between the holes; this allows us to study two strains of flies or two treated groups at one time in the same environmental conditions. Each jar was filled more than three-quarters with paraffin or modeling clay upon which was placed a small plastic petri dish (25 mm in diameter) containing moist instant Drosophila medium (Carolina Biological Supply Company). A round piece of blue or black paper (25 mm in diameter) is soaked in a specially prepared solution (2% acetic acid and 15% sucrose) and laid on the surface of the medium. Once the flies are placed in the container the females are found to lay eggs exclusively on the moist surface of the paper. The paper and food may be exchanged at will without loss of flies, by temporarily inserting an aluminum covered blank jar into the bottom hole. If the environment remains dark and the apparatus is kept at 24 ± 1°C, flies will deposit large numbers of eggs over a short period of time. The eggs may be brushed together on the paper to permit easy counting and chemical treatments.

This system proved to be a highly successful method for collecting eggs; for example, well fed 100 to 150 females often layed 30-40 eggs at 30 min intervals. In addition, accurate measurements as to the age of the eggs are readily available using this device.

References: Courtney, K.D., D.W. Gaylor, M.D. Hogen, H.L. Falk, R.R. Bates, and I. Mitchell, 1970 Science 168:864-866; Dävring, L. and M. Sunner, 1971 Hereditas 68:115-122; Emerson, J.L., D.J. Thompson, R.J. Sterbing, C.G. Gerbig, and V.B. Robinson, 1971 Fd Cosmet. Toxicol. 9:395-404; Sterbing, T.D. 1971 Science 174:1358-1359; Würgler, F.E., H. Ulrich, and H.W. Spring, 1968 Experientia 24:1082-1083.

## QUOTABILITY OF NOTES

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