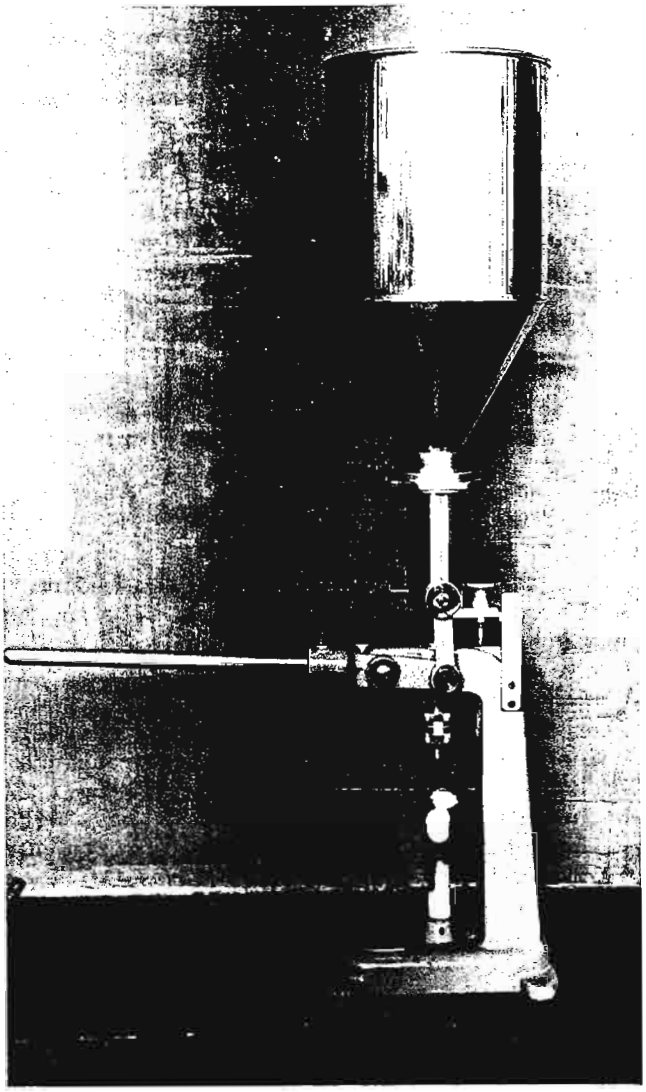
Beardmore, J. A. Genetical Institute, Haren, Netherlands. Medium dispensing machine.

Although several dispensers for Drosophila medium have been described, it may be of interest to some workers to know of the existence of a machine, which, without modification, can be used by relatively unskilled personnel. The reservoir holds 15 l of medium and this can be dispensed (lever operation, see accompanying photograph) very accurately and quickly in volumes varying from 1 - 80 ml; resetting of the volume control is very simple. The machine will take media varying widely in viscosity though it may be necessary to change the nose piece to avoid drips or clogging. Provided that it is scrupulously cleaned after use, the chance of appreciable wear or damage with normal use is very small as most moving parts are made of stainless steel.



'Perpetua' filling machine model Hl, Engler Maschinenfabrik, Brunner und Co., Rissaweggasse 12-14, Vienna X/75, Austria; cost in Europe c $230).

McCarron, S. M. J. and K. E. Fuscaldo. Hahnemann Medical College, Philadelphia. Double-diffusion technique for single flies.

The following method has been found satisfactory for double-diffusion tests utilizing a single fly against appropriate antisera. Groundedge cover glasses (2" x 2") are flamed, coated with 2 ml of 0.5% Oxoid Ionagar No. 2 in distilled water, and dried overnight to a film. These precoated slides are then covered with 2 ml of a 1.0% solution of agar in buffered saline (0.005 M. phosphate, pH 7.4, 0.85% Na Cl, 0.1% thimerosal), and allowed to gel in a petri dish provided with a strip of wet filter paper. A central antiserum well and 6 outer antigen wells are cut with the aid of a template and cutter, and the gel is removed from the wells with a small spatula; no sealing gel is necessary.

Single etherized flies are crushed with a glass rod in individual Durham tubes. After about 100 strokes, 0.04 ml of buffered saline is added and homogenization continued to at least 200 strokes. This provides a 0.03 ml antigen dose for one well. The small beaker supporting the Durham tubes is kept in an ice bath until all of the antigen has been delivered to the plate. A total of 0.03 ml of antiserum is added to the central well and the plate is allowed to develop for 4 to 6 days.