Provision must be made for good ventilation.

The design minimizes the deleterious effects of crowding as well as the number of physical obstacles which tend to inhibit free movement. A 6" x 6" x 18" box will easily screen six thousand flies at a time. The apparatus has been successfully used for isolating a temperature-sensitive paralytic mutant.

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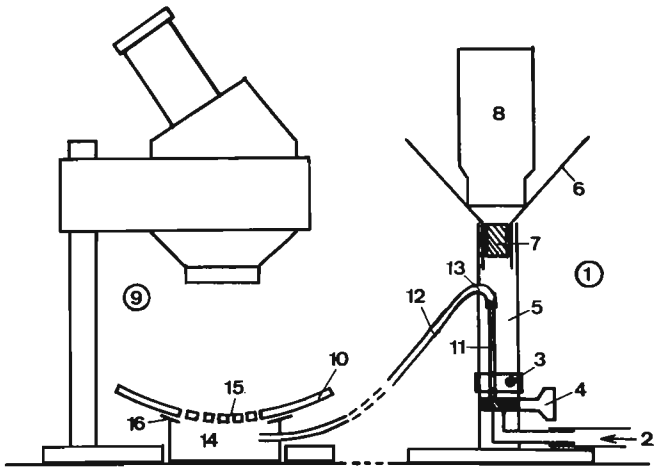
Würgler, F.E., M. Lezzi and U. Graf. Swiss Federal Institute of Technology, Zürich, Switzerland. A device for easily anaesthetising large numbers of flies.

The figure shows a scheme of the device. A bunsen burner equiped for a pilot flame (1) is connected by plastic tubing to a $CO_2$-cylinder (2). The air inlet (3) of the burner is sealed with Araldit. If the valve of the burner (4) is in position "flame", the carbon dioxide flows through the large tube of the burner (5) and enters a plastic funnel (6) fixed to the top of the burner. A foam rubber stopper (7), through which the gas can penetrate, is placed in the neck of the funnel. Bottles or vials (8) containing flies are put upside down into the funnel. Upon gentle shaking the flies fall into the funnel and are immediately immobilized by the $CO_2$ and accumulate on the foam rubber stopper. For inspection of the flies under a microscope (9) they are - by removing the funnel - transferred to a concave plastic dish (10). In order to keep the flies continuously in a $CO_2$-atmosphere, the valve (4) is switched to position "pilot". Now the gas stream passes through the thin tube (11) of the burner. On top of the shortened thin tube a plastic tubing (12) is fixed. This plastic tube passes through a hole (13) in the wall of the large tube (5) and is connected to a cylindrical box (14). From this box the gas stream reaches the flies through a large number of very small holes (15) in the plastic dish. This dish is made by cutting out a circular piece from a conventional plastic bowl. The edge of the box (14) is covered with a strip of rubber (16) to avoid electrostatic loading of the plastic dish resulting from its movements. The use of a heat shielded microscope lamp is recommended. With this device large numbers of flies can be inspected over a very long period without the interruption of work for reanaesthetising and without danger of killing the animals.

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Shorocks, B. University of Leeds, England. A culture medium for rearing Drosophila species.

The following medium is quickly prepared and members of the quinaria group of Drosophila often difficult to breed on standard laboratory media can be reared quite successfully on it.

The following ingredients are required: 100 cc water, 5 g Instant Breakfast Cereal, 5 g brown sugar, 12 g yeast (dried), 3 g agar, 0.3 g nipagin. The Instant Breakfast Cereal, brown sugar and dried yeast are added to about 2/3 of the cold water. After bringing the mixture to a boil and cooking for a few minutes, the agar and nipagin, dissolved in the remaining 1/3 cold water, are added. The whole mixture is cooked for about one minute before being poured into culture bottles.