eggs are allowed to hatch and the newly hatched larvae can then be removed from the food with a tiny dissecting knife.

By means of this technique it is possible to analyze more exactly the critical period when a certain gene operates during the larval period. It is now also possible to study the embryology of Drosophila more exactly under controlled conditions.

H. J. Muller Labelling of stock cultures.

In place of the usual practice of Drosophila laboratories of pasting a label on each stock culture and writing the name of the stock anew at each transfer, I have for many years found it much quicker and less subject to error, if the designation of the stock is written once for all in ink or India ink on both sides of a cardboard tag which is affixed thru its string to a rubber band that passes around the neck of the culture vessel. This tag is transferred to the new vessel when the flies are transferred, and it is best to have a separate tag for each culture vessel.

H. J. Muller Fly morgue.

In place of the usual method of having a jar of alcohol or other volatile fluid into which the flies to be discarded are dropped thru a narrow slit, it is much more convenient to have a broad dish containing a non-volatile oil. The used oil from automobiles affords a conveniently obtained medium. The opening may be protected by a wide-mesh wire grating. The flies do not have to be brushed off in any exact manner, but may be merely jarred off by knocking the porcelain plate against the screen with one motion of one hand. Renewal is seldom necessary and there are no disturbing odors. This method was used independently in Texas and in the USSR.

H. J. Muller Seeding with yeast.

In place of the usual method of allowing drops of yeast to fall into the bottle from a pipette of sprinkling crumbs of yeast, it saves time and ensures more even distribution if one makes up a very thin suspension of the yeast in water, and then sprays this through a simple atomizer, such as is used for spraying fixatives on charcoal drawings. In this way a great number of cultures may be seeded at once on masse.

H. J. Muller Supplying vials with paper.

When numerous small vials have to be handled it is time-consuming to prepare and insert paper for each one, although the presence of paper is helpful. For this purpose it is convenient to use white confetti, which can be purchased already prepared in considerable quantities. This is sifted between the fingers into the cultures on masse, as they stand still uncovered after having been seeded with yeast.


With the development of the Drosophila technique, not only a certain amount of sterilization of the culture medium during its preparation became necessary, but also an adaptation of it of different requirements. Productivity and duration of the media are the two main factors to be considered for our purpose, and they are to a certain degree...