

film of parlodion. Another coated grid is put on top of this, the grids placed between two slides and the glands crushed by thumb pressure. After the squashing, the two grids are separated with a needle and permitted to dry in air for a few minutes. The tissue is then ready for microscopy and remains in excellent condition for months. The grid-smear method is time-saving, permits microscopy of unstained tissues, and eliminates the necessity of subjecting the material to various chemical and physical agents, which might cause distortion in addition to the original fixation.

Herskowitz, Irwin H. and Burdette, Walter J. Preparation of permanent aceto-orcein smears.

Permanent aceto-orcein smears of *Drosophila* salivary-gland chromosomes may be prepared routinely by means of the following technique. Salivary glands are removed from larvae during the third instar after they have been placed in 60% acetic acid. After 10 minutes in this solution the glands are crushed in the usual manner between a slide and a coverslip previously covered lightly with albumen. The coverslip is floated off with the stain, consisting of 2% orcein in 60% acetic acid. Most of the tissue adheres to the coverslip, and contact with the stain is necessary for only a few seconds. The coverslip is then mounted on a clean slide bearing a small drop of light Karo corn syrup. Excess Karo is removed by pressure and the preparation permitted to harden. By covering the margins of the coverslip with Clarite or a similar mounting medium, such preparations are made waterproof.

There are several advantages of this method besides simplicity. The acetic acid induces sharp definition of the bands and, since it is used alone, permits excellent chromosome spreads. The Karo washes away excess stain and leaves the background of the chromosomes clean. Moreover, with simple modifications, this method permits one to retain ordinary preparations for an extended period. Salivary chromosomes are particularly well seen using a 1.25-mm dark M phase objective.

Mittler, Sidney Medium for rearing yeasts that do not require amino acids or vitamins.

In attempt to control the nutrition of *D. melanogaster*, yeasts were selected that could grow on a vitamin-amino acid-free medium. The following medium

was employed:

Agar	15 gm	NaCl.....	0.5 gm
C ₆ H ₁₂ O ₆	30 gm	MnSO ₄	0.5 gm
KH ₂ PO ₄	1 gm	MgSO ₄	0.5 gm
NaKC ₄ H ₄ O ₆	8 gm	FeSO ₄	0.5 gm
(NH ₄) ₂ SO ₄	2 gm	H ₂ O	1000 cc
CaCl ₂	0.5 gm		

When this medium is inoculated with a yeast that can live in the absence of vitamins or amino acids, practically all the nutrition obtained by the flies is from the yeast. If one uses a yeast like *Hansenula anomala* NRRL 365 with the above minimal medium at a temperature of 24°C, one has a set of conditions that can be reproduced. With the cornmeal-molasses medium there are probably as many variations possible as there are research workers. In the study of penetrance and expressivity it is of utmost importance to have nutrition as well as temperature under control.

Rosin, S. The position of the wings of killed drosophilae.

In flies that have been killed by over-etherizing the wings are maintained in a vertical position, so that some bristles cannot be easily seen. In order to study bristle pattern in fixed material,