Borack, L.I.* and W.H. Sofer. The Johns Hopkins University, Baltimore, Maryland.
Pyrazole suppression of alcohol dehydrogenase activity after electrophoresis.

We have experienced difficulty in visualizing the weakly active enzymes beta hydroxybutyrate dehydrogenase (BDH) and beta hydroxypropionate dehydrogenase (PDH) after agar gel electrophoresis. Both of these enzymes (Borack, Water and Sofer, DIS, this issue) migrate close to alcohol dehydrogenase (ADH) (Ursprung and Leone, 1965) which masks their appearance because ADH exhibits formazan deposition even in the absence of added substrate. This "nothing dehydrogenase" activity (Fig. 1a) may be due to the presence of an alcohol contaminating one of the components of the reaction mix. Rather than attempt to remove the alcohol, which might be difficult under some circumstances, we found a means of selectively inhibiting ADH.

A typical staining pattern for ADH is shown in Figure 1c. Pyrazole is a potent inhibitor of horse liver ADH (Theorell and Yonetani, 1963) and also of Drosophila ADH

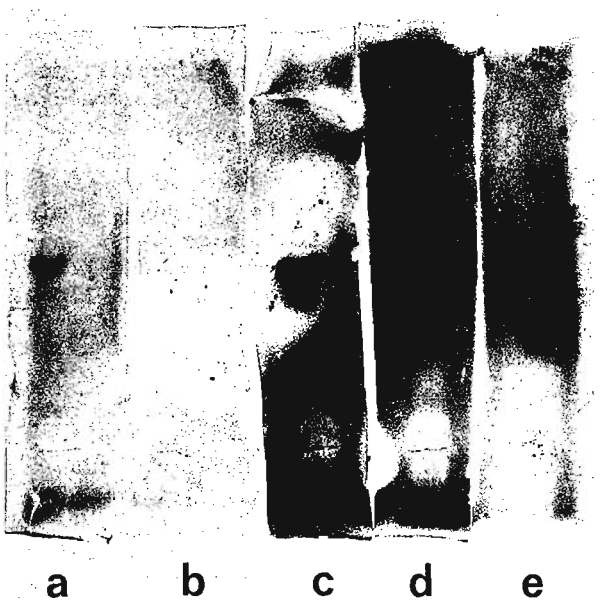

Figure:
a) No substrate
b) No substrate + pyrazole
c) 2-butanol
d) beta-hydroxy propionate + beta-hydroxy butyrate
e) same as d, but with pyrazole added

(Sofer, unpublished observation). The addition of pyrazole (final concentration, 0.05M) to the staining mix for PDH or BDH effectively suppresses the appearance of ADH bands (Figure 1b, e) but does not effect the intensity of staining for PDH or BDH (Figure 1d, e).

References: Ursprung and Leone, 1965 J. Exp. Zool. 160: 147; Theorell and Yonetani, 1963 Biochem. Z. 338: 537.

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Van Dyke, D.L. and J. Bennett. Northern Illinois University, DeKalb, Illinois.
Mite elimination from stock cultures.

In December 1969 many stocks were successfully treated for mite infestation by using strips of paper toweling (1 x 4 cm) that had been soaked with 10% Benzyl Benzoate in 95% Ethanol, then air dried, after the method of Barker (1967, Evolution 21: 606). One drop of distilled water was added to each strip to make it stick to the glass surface when it was slipped into the 25 x 95 mm shell vials. This was sufficient to hold the strip in place even when the vial was shaken. The method has proved entirely successful in eliminating mites from the cultures and is apparently not deleterious to the highly inbred stocks treated.

Moyer, S.E. Northeastern University, Boston, Massachusetts.
Disposable "vials".

Moyer and Yarbrough (1969) Am. Biol. Teach. 31: 593-596 described disposable containers for culturing Drosophila, including a container for small cultures, such as single pair matings. It is made of sturdy clear plastic with a pliable plastic cover (Van Brode Milling Co., Clinton, Mass.) Its cost is less than one cent. An improved method of providing air is to punch two or three holes in the cover with a hand paper punch and cover with porous tape (Johnson and Johnson Zonas Porous #5104). Carbon dioxide injected through the tape immobilizes the flies.