

technique as they are apparently able to invade the bottle by way of the space left between the neck and the cap. The place where the bottles to be freed of mites are kept must, of course, be protected against contamination from cultures carrying mites.

Kyoto Laboratory      Control of mites

As a preventive method against the spread of mites, several larvae and pupae in the culture are put into a sieve with fine meshes, and washed with rapid running water. After the measure, they are transferred to a fresh culture bottle.

Shipman, E.E.      Ridding cultures  
of mites.

If not too many cultures are involved the following plan might be followed. Larvae are bathed

in 70% alcohol for about one minute, dipped in water, and then put on fresh food. Most of the larvae survive the treatment. The writer used this method of eliminating mites from personal stocks three years ago and has seen no mites in the stocks since that time. (University of Illinois).

Columbia University Laboratory  
Mites and molds

For keeping down mold, we have been using 0.1% Nipagin-M with both ba-

mana and cornmeal formulae and have completely eliminated mold with no effect whatever on viability. This was determined by careful experimental counts.

For cleaning stocks of mites a piece of paper on which larvae have pupated may be completely immersed in alcohol (70%) for two minutes, dried, and placed in a clean bottle to hatch. This is much simpler and more efficacious than immersing individual flies.

Crew, F.A.E.      Mites and mold

The addition of Nipagin M has proved a satis-

factory protection against mold.

Two attacks of mites in vial cultures (but none in stocks) have been experienced. On such occasion the parasites were eliminated by segregating affected cultures and avoiding contamination. The mites were observed to enter clean cultures through the crevices often formed by the muslin coverings then used over cotton wool stoppers. When the use of muslin was discontinued, the spread of mites was rapidly reduced. Instruments coming in contact with affected cultures were sterilized after use.

Glass, B.H.      Control of mold  
and mites.

In combatting a severe infection of mold in *Drosophila* cultures, it

has been found helpful to hold individuals for two or three days in vials of food containing 0.2% formaldehyde, added when the food is prepared. Flies can live for several weeks in such

vials, inoculated in the usual manner with yeast; but larvae do not develop after hatching; and mold growth is inhibited. These vials are also very useful for holding individuals to be mated at some future time. Before transferring to fresh food, the flies are given a bath in a watch-glass of 70% alcohol for 2 to 3 minutes; then dried on filter-paper. Flies will stand a considerable immersion in alcohol with no permanent ill effects. They may be handled readily with brush and forceps. The alcohol bath treatment is also effective in freeing flies from mites. Larvae are especially easily cleaned in this way, the mites coming off at once; whereupon the larvae may be touched on filter-paper, and transferred at once to the food, using a long-handled needle, to which they gently adhere.

Schott, R. Mites and molds.

When mites appeared in our cultures last summer all shelves and incubators were washed with phenol solution, pupae were isolated and brushed free of mites. Then rapid transfer of cultures followed for several generations. All old bottles were immediately soaked in phenol solution or boiled.

To prevent mold, cover surface of media with 10% alcohol, drain off and seed with yeast.

Parker, D.R. Moldex-A as a mold inhibitor.

Tests were run recently to find a substance to inhibit the growth of

mold. The compounds tried out were Moldex-A, Nipagin-M, and Nipagin-T. These were added to our regular banana food in the ratio of .15 grams of anti-mold substance to 100 c.c. of food. Twenty vials were made of each of the above compounds, as well as twenty vials of plain food.

One half of the vials were inoculated heavily with mold, and the other half left uninoculated. One pair of flies was placed in each vial. Moldex-A was the most efficient in the prevention of mold. However, in the uninoculated series, the Moldex vials gave a slightly lower yield of flies than did the plain food. Egg counts were then run to see the possible effect that Moldex might have on hatchability. Out of approximately 3000 eggs, 98.7% reached the adult stage. This is about 7% higher than the usual hatch on plain food at a cost of about \$1.50 per pound. (Copied from DIS-4: 65).

Shipman, E.E. Mold Preventatives (Preservatives).

Th. Goldschmidt Corporation, 147 Waverly Place, New York City, New York,

has several different preservatives which would probably serve to prevent mold. Nipagin M has been reported in the literature but it is chemically pure and therefore more expensive than Nipagin T, the technical grade. Nipagin M is listed at \$1.00 per ounce and \$8.00 per pound. Nipagin T is listed at 60 cents per ounce and \$4.70 per pound. They have both been reported as being used in food cultures for *Drosophila* in 0.15%. In a communication from the company it is recommended that Nipagin T