Mittler, S., K. Schroeder and D. Wilson. Northern Illinois University, DeKalb, Illinois. Aspergillus flavus producer of mutagen and carcinogen aflatoxin can contaminate laboratory cornmeal-molasses-agar media.

An Aspergillus mold was isolated from one of our vials that contained cornmeal-molasses-agar media. The Aspergillus was suspected to be A. flavus for it had colonies from close-textured to rather loose depending on stalk length and was light yellow that darkened to green but did not turn brown. Since we had been conducting a mutagenesis experiment, we worried whether the A. flavus would influence our results. The mold was identified by Northern Regional Laboratory of the U.S. Department of Agriculture at Peoria, Illinois as Aspergillus flavus, but was a strain that when tested did not produce aflatoxin, a potent mutagen and carcinogen.

The Drosophila media that we used was 1000 ml of H_2O, 17 g of agar, 40 g cornmeal, 40 g brewers yeast, 11 g rolled oats, 40 ml molasses, and 40 ml dark corn syrup and 5 ml of propionic acid. Was the 5 ml of propionic acid/liter insufficient to prevent the growth of A. flavus? We tested the growth of the mold on four small batches of food with different concentrations of propionic acid. One, the control, had no propionic acid and the A. flavus did grow on it. However, on the other three batches of food in which the propionic acid of 2.5 ml, 5 ml and 6 ml/liter was thoroughly mixed when added, there was no growth of the mold. Evidently the propionic acid was not thoroughly distributed when the media was prepared in which the mold A. flavus was identified. The Department of Agriculture maintains a monitoring service for the detection of aflatoxin in crops, for A. flavus is widely spread in the United States and grows on cereals and grains. A. flavus can also contaminate Drosophila media.

Nöthiger, R. and C. Labhart. University of Zurich, Switzerland. A self-amplifying system for mass collection of unfertilized eggs.

In order to study oogenesis with biochemical techniques it is necessary to have available large masses of unfertilized eggs. It is very tedious to collect vast numbers of virgins, and furthermore, such uninseminated females lay eggs only at a very low rate. The first obstacle can be circumvented by using "virginizer" stocks whereby temperature-sensitive lethals are especially useful (ref. 1). We have devised and successfully tested a system which greatly facilitates mass collection of unfertilized eggs. After a single collection of 10 to 20 virgin females, the system will produce, within two generations, some 10^5 females and an almost equal number of XO male sibs. The latter guarantee the excitement of copulation and the transfer of "sex peptide" (ref. 2) which greatly stimulates and enhances the production of unfertilized eggs. The system makes use of three stocks that can be maintained without special care. The crosses are as follows:

1. Select 10 to 20 virgin females from a pn stock, and mate them to a few males from a ca K-pn stock. Due to the lethal interaction between pn and K-pn (ref. 3), only females will survive whereby each of the pn mothers can easily produce some 100 daughters within a few days;

2. The virgin daughters from cross #1 are mated to attached-$\widehat{XY}$ males from any C(1)/$\widehat{XY}$/0 stock, whereby a C(1) chromosome with a temperature-sensitive lethal can eliminate the need for selecting by hand the $\widehat{XY}$ males. One male per 4-6 females is sufficient. This cross produces large numbers of females and XO males (25% fewer males than females due to the pn K-pn interaction). These are now transferred into population cages which contain a number of petri dishes with standard food. By exchanging these food dishes large masses of unfertilized eggs may be collected at short time intervals. The dishes may be frozen in toto until the desired number of eggs has been accumulated. The eggs are washed off the dishes, collected and rinsed in a narrow-meshed nylon cloth.

The frequency of non-disjunction leading to $\widehat{XY}$ males is negligible, and since the sexual activity of XO and $\widehat{XY}$ males is equal, the contamination by fertilized eggs remains far below 0.1%. Supported by the "Julius Klaus-Stiftung", Zurich.

References: 1) Polan, M.L. et al. 1973, J. Cell Biol. 56:580; 2) Chen, P.S. 1971, in: Biochemical Aspects of Insect Development, S. Karger, p. 124; 3) Sturtevant, A.H. 1956, Genetics 41:118.