UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
ANIMAL SCIENCE RESEARCH DIVISION
BELTSVILLE, MARYLAND 20705

June 19, 1972

Mr. W. P. Papageorge
Monsanto Industrial Chemical Company
800 North Lindberg Boulevard
St. Louis, Missouri 63166

Dear Mr. Papageorge:

I am enclosing a copy of the manuscript on feeding Aroclor 1254 to cows that we discussed during our recent phone conversation. This paper was presented at the Boston ACS meetings and has been submitted to the Journal of Agriculture and Food Chemistry.

At the time I think I told you there was nothing new to report. This is true with regard to the silo problem. However, as you may remember from your visit, we were planning to feed a number of Aroclors to chickens. We now have some preliminary results.

Aroclors 1232, 1242, and 1248 have severe effects on hatchability at 20 ppm in the diet--1242 is probably the most severe. Hatchability dropped from near 90% to less than 10% within three weeks after the start of feeding. We did not have adverse effects when 1242 and 1248 were fed at 2 ppm in the diet. Aroclor 1221, 1254, and 1268 did not have an effect on hatchability at 20 ppm in the diet.

My guess is that there are probably one or two common components in 1232, 1242, and 1248 that are causing the hatchability problems. These compounds are probably missing in the low and high chlorination Aroclors.

I'll try to keep you up to date on any new observations on either one of the problems.

Sincerely,

George

G. F. Fries
Research Animal Scientist
Dairy Cattle Research Branch

Enclosure

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