

DDT Resistant Flies Attacked By New Spray

One which has been in disrepute as a fly killer for the past few years, soon will make a dramatic comeback, according to a story from Madison, Wis.

The Wisconsin Alumni Research Foundation, developer of the successful rodenticide Warfarin has announced the development of a formula which makes DDT once more deadly to houseflies and vari-

ous other insects which have developed DDT resistance. The new formula—consisting of DDT plus a special additive—is called Antiresistant DDT.

David Ross, the foundation's managing director, described the additive as a harmless chemical which does not by itself affect insects. However, when DDT is combined with the additive, the combination becomes especially potent against certain species of insects, especially flies which had developed resistance to the insecticide. An Antiresistant DDT wettable powder formulation will be made available to the public this year.

When DDT was introduced as an insect killer in the mid-1940's, it was hailed as a chemical miracle. Health authorities credit DDT with having saved many thousands of lives during and after World War II by averting insect-borne diseases such as cholera, malaria, typhus fever and dysentery. Homes and farms literally were swept clean of flies.

Unfortunately, the flies weren't ready to be counted out. They fought back by developing resistance to DDT.

Before long it was impossible to find a housefly in the United States that wasn't at least partly resistant to the insecticide. To make matters worse, other insects such as mosquitoes soon imitated the flies by developing resistant strains of their own.

As DDT became less and less effective, more and more users abandoned it for use against resistant insects and began to use other insecticides. In the meantime, research laboratories have been hard at work to overcome the

problem of resistance. In one of these laboratories, located in Jerusalem, Israel, Dr. Moshe Neeman tackled the puzzle in an effort to solve the problem of Israel's resistant insects. In research extending over a period of four years he found that one of the chemicals with which he worked had the ability to block the fly's resistance mechanism.

One strain of flies was so resistant that in laboratory tests 90 percent were able to survive a measured amount of DDT spray. When Doctor Neeman's antiresistant was added to the DDT, however, there were few if any survivors.


Some time after his discovery Doctor Neeman came to the United States as a research associate in the University of Wisconsin's department of chemistry. While there he brought his invention to the foundation's notice.

The foundation's laboratories started a testing and development program determining toxicity, formulations, proper levels of application and performance. Samples were sent to workers in all parts of the country.

It was found that in field use in heavily infested beef and hog barns, single applications of Antiresistant DDT at recommended levels showed effectiveness of five to eight weeks. The flies in some of these barns demonstrated a resistance to ordinary DDT which was 250 times greater than that of nonresistant flies. DDT without the antiresistant had practically no effect on these flies.

With all findings gathered and correlated, the new formula is ready for release to the public. Antiresistant DDT will be used initially for control of flies in beef and hog barns, municipal incinerators and garbage dumps. Wider use in the future will be based on the results of additional tests.

Water is important to the growing chick and Carl Dossin, extension poultry specialist, suggests poultrymen provide at least one gallon fountain for each 100 chicks, or four feet of trough length for each 250 chicks when automatic fountains are used.



Lancaster Co. Distributors for Manzate

MILLER CHEMICAL and FERTILIZER CORP.

P. O. Box 25, EPHRATA Phone RE 3-6525



Tough on disease but mild on plants, "Manzate" gives your potatoes sure protection against early blight and late blight.

Powerful disease protection begins with Du Pont **MANZATE**[®]...ends with more #1 potatoes. Whenever you use Du Pont "Manzate" maneb fungicide, you get powerful disease protection. Years of field applications—in every important potato area—prove "Manzate" is tops for disease control. This year, for healthier, heavier harvests—and extra profits, too—spray your potatoes with "Manzate". You'll see why it's still the first—and the last—word in fungicides.



On all chemicals follow labeling instructions and warnings carefully.

Start With The BEST FOR

EGGS

MEAT

DAY-OLD and STARTED CHICKS

CAREY and DENLER Leg-horns for high-quality White Eggs. Carey again won "Highest Egg Quality" award (87 Haugh Units) competing with best American breeders in official Random Sample Tests.

MERRYKNOLL Black Sex-Links and Anderson Golden Sex-Links for Big Brown eggs. Also Cobbs White Rocks.

FOR MEAT Cornish-Cobb White Rock Cross and Vanntess-Cobb Cross.

Burling personally supervises every step from breeding-flock management to hatching and delivery of YOUR chicks. NEW Folder.

CALL OR WRITE "BILL" BURLING

OXFORD, PA. Dial 932-8286

MANZATE AND OTHER DUPONT PRODUCTS

distributed by

J. C. EHRlich CHEMICAL CO., INC.

736 East Chestnut Street Lancaster, Pennsylvania Phone EX 7-3721