MILWAUKEE SENTINEL
MILWAUKEE, WISC.
D. 169,011
MAY 3 1969

DDT Study Finds No Thin Eggshells

By QUINCY DADISMAN
Sentinel Staff Writer

Madison, Wis. – A University of Wisconsin poultry geneticist told a natural resources department hearing here Friday that he had not found any signs of thin eggssells being caused by DDT in coturnix (Japanese quail) used in DDT feeding experiments.

Frank Cherms, a professor in the department of poultry science, said that experiments with the birds, started several months ago, had included feeding about a third of them up to 200 parts per million of DDT.

Cherms said that the birds were fed the high DDT concentration until 50% of the birds died in about 30 days, although most of the deaths took place in the first two weeks of the experiment. DDT was cut off at that point.

From the survivors, breeding stock was selected and the process repeated with the chicks. In this way, four successive generations of quail have been raised in an attempt to learn whether resistance to DDT can be developed in a strain of birds.

Cherms said that no differences in reproductive rates and eggshell thickness had been discovered in the birds in the experiment.

Cherms was called by Willard S. Stafford, an attorney for the task force for DDT of the National Agricultural Chemicals association. The agrichemicals group is opposing a petition by conservation groups asking that the department declare DDT a water pollutant and thus ban its use in the state.

Biologists favoring the ban had testified earlier in the hearing that they believed DDT levels in the environment had upset wild bird reproduction to the point where some species, particularly predators, were in danger of extinction. DDT interferes with calcium matabolism in the wild birds, resulting in thin shelled eggs which are crushed before they

Cherms said that his experinence with poultry had convinced him that other factors influencing eggshell thickness include heredity, nutrition, environmental stress and disease.

He said fright and excessive heat and humidity could cause poultry to lay thin shelled eggs. Calcium transfer in the bird is tied in with high carbon dioxide levels in the blood, he said. When the bird is hot or frightened, it pants, reducing carbon dioxide levels and the ability of the blood to carry calcium for eggshell formation.

Among diseases that he said cause thin eggshells are newcastle disease, bronchitis and avian influenza. Newcastle disease can be contracted by 30 to 35 species of birds and about 20 kinds of mammals, including rodents, which form part of the diet of predators, he said.

Earlier Friday, R. Keith Chapman, a University of Wisconsin entomologist, testified on the uses made of DDT in the state.

Chapman said that the use of DDT in Wisconsin had dropped from 235,735 pounds in 1962 to an estimated 31,000 pounds last year and that state agencies had drastically reduced the number of recommendations for its use.

It still is "necessary" in growing carrots, cabbage and celery because of the depredations of the aster leafhoppers, he said.

He cited figures showing the difficulties in using alternative insecticides, including costs — up to three times as much — greater frequency of spraying needed and danger to useful insects, such as bees.

Wisconsin had 435,800 acres in crops for processing which bring a total income of $82,692,000 to the state, he said.

Wisconsin ranks first in the nation in the production of sweet corn, peas, carrots and beets; second in cabbage; third in cucumbers and snap beans and fourth in lima beans, all for canning, among the 50 states, he said.

An outright ban on the use of DDT, Chapman said, would hurt vegetable growers seriously.

DSW 201014

STLCOPCB4059078