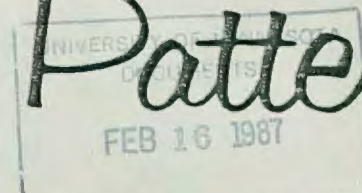




Poultry Patter



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PESTICIDE AND FEED ADDITIVE RESIDUES

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The problem of undesirable residues in our food supply is of concern to all of us. Many articles in books and in the popular press have pointed out that our foods and our environment are being contaminated by the continued use of agricultural chemicals. Many of the viewpoints expressed are controversial, and have led to increased emphasis on research to determine how we can reduce the hazards through more effective use of chemicals.



Pesticide Residues

The Federal Food and Drug Administration, guardian of the safety of our nation's food supply, points out that pesticide levels found in test samples of the total diet have been less than 1 percent of the established safe legal tolerances. FDA laboratories also continuously test individual samples of agricultural commodities for residues.

No pesticide may be legally moved in interstate commerce until it has been registered and given label approval by USDA. Pesticides moved within the State of Minnesota are controlled by state regulations that conform to the federal act and provide for registration with the Minnesota Department of Agriculture. Approximately 35,000 pesticide formulations have been registered with the U. S. Department of Agriculture for agricultural or closely related uses.

Of Concern to Egg Producers

The egg producer may well ask "What concern is this to me?" The plain fact is that poultry are just as vulnerable as any other plant or animal food product as far as residue problems are concerned. Precautions to prevent contamination must be taken in the management program. If the product is not marketable because of resi-

dues, not only does the producer suffer from loss of income, but the industry also suffers because its products are implicated as possible hazards to health.

A recent news release told of an egg producer in a neighboring state who was required to bury the eggs from his flock because they contained residues of a chlorinated hydrocarbon pesticide. This producer's troubles started when he ran out of the mite spray he had been using and decided to use some old spray material that he had left over from 3 years earlier. Some time later he was notified that his eggs could no longer be marketed commercially, consumed, or given away because they contained chlorinated hydrocarbon residues. A zero tolerance has been established for these pesticides in eggs and poultry meat. A poultryman cannot move contaminated eggs or hens to market, and there is no indemnification program to provide relief for losses because of condemnations due to residues.

All poultrymen can learn from this unfortunate experience. It is a wise precaution to destroy all old stocks of agricultural chemicals and check to be certain that materials used are currently recommended and are used properly.

Chlorinated hydrocarbons most hazardous

There have been other instances where poultry flock owners have had to destroy their eggs and birds because of pesticide residues. The most hazardous pesticides from a residue standpoint are those classed as the chlorinated hydrocarbon compounds. Included in this group are DDT, lindane, chlordane, benzene hexachloride (BHC), heptachlor, and others. These compounds and others not approved for use around poultry should never be used where there is any possibility of contaminating the birds themselves, their feed, water, or environment. For the latest recommendations on the appropriate pesticides to use, consult Entomology Fact Sheet No. 17, "Insect Pests of Poultry." A copy may be obtained from your county agent or from the Bulletin Room, University of Minnesota, St. Paul, Minnesota 55101.

Residues of chlorinated hydrocarbons as well as some other pesticides tend to accumulate in the body tissues of poultry, especially in the fat and egg yolk. Birds may ingest pesticides with contaminated feed or water supplies. Recent research has shown that just a small amount of pesticide in feed fed for only a short time is sufficient to incorporate residues into body tissues and egg yolk. The birds can also pick up residues by direct contact with the compounds or through contact with a range, house, or piece of equipment that was treated previously.

Once these residues are incorporated into the body tissues they are relatively long lasting. Research to more fully determine the removal rates of these residues and perhaps to develop methods for more rapid removal is underway. At present it is not economically feasible to maintain a flock of birds until residues have been depleted.

Feed Additives

Another potential source of residues in poultry meat and eggs is the improper use of feed additives. An estimated 90 percent of all poultry feeds contain an additive of some kind. These additives have been used to accelerate growth rates, increase production efficiencies, and to control and prevent poultry diseases.

Feed additives must be shown to be safe and effective for their intended use before they will be approved by regulatory agencies. The label on medicated feeds must state the purpose of the medication, the active ingredients and their amounts, and adequate directions for the use of the feed, as well as warning statements in cases where a withdrawal period or other special precautions are required.

In order to prevent contamination of poultry meat and eggs with nonpermissible residues, the egg producer must:

1. Follow feeding instructions exactly.
2. Use feeds only for the purpose and type of poultry as directed on the label. (Some feeds formulated for growing birds cannot be fed to layers without danger of residues in the eggs.)
3. Observe all warning statements on the feed label. Comply strictly with withdrawal requirements before marketing so that residues will not be detected in the product.
4. Do not give any other drugs to birds on medicated feeds without first checking to determine if harmful effects or excessive residues may result. This precaution also applies to drugs added to drinking water.
5. Never mix a chemical or a drug into a feed unless its use is approved under state and federal regulations.
6. Do not permit feeds to be contaminated with undesired drugs, chemicals, or pesticides. Mixers, bins, and storage areas can be sources of contamination.

REMEMBER---The ultimate responsibility for the proper use of chemicals must rest with the user. It is neither possible nor required to warn against all possible misuses of a product. Proper directions and safety precautions are required to be placed on the labels. They must be read carefully, properly understood, and followed precisely to keep our poultry products free from residues and to protect the producer from economic loss.

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