

Insect Notes

Entomology - 65-1

February 26, 1965

1. Pesticides in Milk

A. Certain chlorinated hydrocarbon insecticides are secreted in the butter fat when dairy cattle are exposed to small amounts. Because very minute quantities of these insecticides can be chemically detected and the present tolerance for pesticides in milk is zero, we recommend that North Carolina dairy farmers not use, except for seed treatment, the following insecticides: Aldrin, BHC, DDT, dieldrin, heptachlor, lindane, TDE, Strobane and toxaphene. Insecticides suggested for farm use are certain botanicals, carbamates and phosphates. These relatively short-lived compounds leave no objectionable residues on soil, crops and animals. Refer to our 1965 Pesticide Manual for specific uses.

B. A reminder! We urge agents and dealers to take all possible action to insure our North Carolina dairy farmers will not use heptachlor on alfalfa fields. Approval for this use was withdrawn in April, 1964.

C. Heptachlor contaminated crops. In response to numerous questions on this subject, we offer the following statement. Alfalfa fields treated with heptachlor in 1963 or before can be harvested for dairy forage in 1965, or plowed under and followed by any crop in the normal 1965 rotation without danger of contamination by heptachlor or heptachlor epoxide.

2. Alfalfa Weevil Control for 1965. The program is based on spring treatments of currently recommended materials, methoxychlor and malathion. The 1965 spring program to be followed in most alfalfa areas will include:

- (1) First treatment about March 10-20 using methoxychlor 25% EC at 3 qts. per acre.
- (2) Second treatment, April 1-10 using methoxychlor or if daytime temperatures are in the 70's and evening lows in the 50's, malathion 57% EC at 1 qt. per acre may be substituted.
- (3) Third treatment, April 20-25, using methoxychlor or malathion. The insecticide of choice here will usually be malathion because of cost and effectiveness against the pea aphid which is often a pest at this time.

Important features to remember are:

- The above dates of application are for the Piedmont.
- Apply sprays when most of the plant tips begin to show injury and the field takes on a lighter appearance.
- Only two applications are usually required in the mountains and these would be made approximately 3 weeks later than the Piedmont dates.

- Use 20 to 30 gallons of water per acre in a boom-type sprayer with fan nozzles delivering a coarse spray. High pressures cause excessive drift.
- Complete coverage of the field is essential.
- Adhere to established safe interval from last application to harvest. This interval is 7 days for methoxychlor and 0 days for malathion.
- Be sure that malathion is used only when temperatures are relatively high.

When a significant number of weevil larvae are present at hay cutting, it is advisable to apply a malathion stubble spray to prevent damage to the second crop. It may be worthwhile to inspect clover crops periodically for weevil infestations. Usually a single application of malathion or methoxychlor will give adequate control. Although there are other USDA-approved materials being sold for use against the alfalfa weevil, such as guthion, dimethoate and Alfatox, we are presently not recommending them. Research in North Carolina indicates that these materials are slightly less effective than methoxychlor and malathion.

3. Pesticide Education Committee. An extension committee has been organized to promote all aspects of the proper use of pesticides. This committee will coordinate and clear all information on pesticides released by or distributed through the Cooperative Agricultural Extension Service of North Carolina State. Information regarding this committee and work assignments will reach you soon.

4. Out-of-Date Publications. Pesticide recommendations change rapidly. Be sure your office distributes only information that is current and in line with the 1965 Pesticide Manual. Remove and destroy all old obsolete insect control publications today! If you use commodity bulletins in which pesticides are discussed, be sure the information is up-to-date or insert appropriate changes. Agricultural chemicals used last year may be illegal and dangerous to use today.

5. Work Assignments in Extension Entomology. With the return of Dr. H. Eldon Scott in December to our staff and to head up and coordinate "Proper Use of Pesticides" activities, we have set up work areas by commodity or subject matter responsibility. The following grouping will indicate the person responsible for programming and subject matter help:

1. George D. Jones, in addition to Project Leader activities, will have the responsibility for stored grain, household, sweet potato, Beekeeping* and forest insect** work.
2. H. Eldon Scott, pesticides, 4-H and vegetables.
3. John M. Falter, livestock, cereal and forage crops and fruits.
4. R. L. Robertson, tobacco, cotton, peanuts and ornamentals.

* Mr. Frank Meacham, who recently retired from the N. C. State Museum and who was formerly on the Entomology faculty at N. C. State will assist in a part-time capacity to help coordinate beekeeping work as requests come in. He will assist with county and State Fair work, the planning of meetings, preparation of bulletins and timely subject matter, answer correspondence and in general help service the industry. Bees are needed in certain areas for pollination work and honey is a valuable cash crop in many counties.

** Mr. Fred Whitfield in Extension Forest Management, will help Mr. Jones coordinate and give guidance to forest insect work.

6. Livestock Survey. A survey on the kinds of lice on livestock is being made, but it will not be possible for us to visit each county. We urge you to send in specimens as previously requested, particularly if we have not collected or made arrangements for a survey in your county.

Specimens may be collected with the fingers, but forceps or tweezers may be useful if an animal has only a light infestation. All specimens should be preserved in rubbing alcohol and host, date, and locality information included.

7. New Publications.

Insect Pests of Livestock in North Carolina, Ext. Circ. No. 456.
Keep Milk Free of Pesticides, Ext. Leaflet No. 107.
Vegetable Insect Control-1965, Ext. Leaflet No. 102.

8. The 1965 Pesticide Manual was mailed to you early in February. There are a few changes from 1964. Please check with your local dealers and urge them to secure copies if they, for some reason, do not have the latest copy. They are an important part of the "team" effort in getting all users of pesticides to use them safely and only according to directions.
9. Our office has the 1964 summary of the Duke Poison Control Center report as prepared by Dr. Jay Arena. It is quite similar to the 1963 report distributed last year. Should you be interested in a copy, please advise.

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