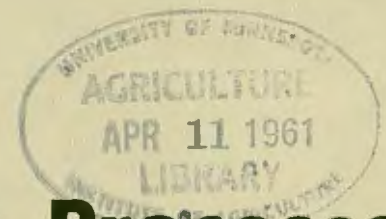


Minnesota Dairy Products Processor



AGRICULTURAL EXTENSION SERVICE • INSTITUTE OF AGRICULTURE
UNIVERSITY OF MINNESOTA • ST. PAUL 1, MINNESOTA

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CHEMICAL RESIDUES IN DAIRY PRODUCTS

Antibiotics.....It has been brought to our attention that it is still possible to purchase antibiotics having no label directions for the acceptable treatment of dairy cows. In some cases, instructions for nonlabeled antibiotic use can be obtained. Because this is not true for all antibiotics, it is suggested that dairy plants selling these drugs supply only properly labeled antibiotics or those for which directions are available.

Some unlabeled antibiotics still available may require a longer milk withholding period than the 96-hour limit imposed by Federal Food and Drug and many of them have a remaining shelf-life of 1 to 2 years.

If you are not actively engaged in distributing antibiotics, it would seem desirable to provide your patrons with the above information so that they can make a judicious selection.

Pesticides.....In the December 1 issue of the Federal Register, the following statements were noted: "Residue studies have indicated that the application of DDT in any manner to the feed of dairy cows results in residues of DDT in milk. No tolerance has been established to permit any residues of DDT in milk. Corn forage, corn fodder, corn silage, corn stover, or sweet corn cannery waste containing any amount of DDT is unsuitable as a feed for dairy cows and should not be represented, sold, or used for that purpose."

AGRICULTURAL CHEMICALS COMMITTEE

An "Agricultural Chemicals Committee" has been established at the University of Minnesota as a collecting and disseminating center for information concerning the use of insecticides and herbicides. It was originally set up at the request of the Washington office to provide a state outlet for information of this kind. All pertinent data collected at the federal level is funneled to this state branch. Therefore, if you have questions yourself or are asked questions by your patrons which require clarification, you can get help by contacting me, or John Lofgren, Extension Entomologist, Coffey Hall, University of Minnesota, St. Paul 1. John is chairman of the Agricultural Chemicals Committee.

At a recent meeting of this committee with members of the dairy industry and state department officials, it was decided that a barn chart (information sheet) should be drawn up by the Extension Service on this campus and made available to

all dairy farmers in the state. Similar charts have been prepared by other agencies and extension departments in other states, but it was thought that the material could be simplified to some extent and, with the backing of our dairy industry, could receive more wide-spread use.

Ordinarily it is necessary to charge a fee for quantity lots of printed material, but, because of the urgency of the problem and the need for widespread acceptance, a limited number will be made available free of charge. This would be an amount approximately equivalent to one copy for each dairy farm.

The County Agent in your area will be contacting you, if they have not already, to determine the number of charts needed to provide a copy for each patron. Should you inadvertently be missed in this canvas, we hope you will feel free to contact the local agent.

We will be asking for your support in this connection within the near future. As the problem now exists, the only solution seems to lie in complete understanding and cooperation of our state dairy farmers. The barn chart will provide the farm people with the information necessary to cope with insecticide and herbicide problems. Locating the chart in a conspicuous place should serve as a constant reminder of the need for caution in using these chemicals.

INTERVAL TIMERS ON BULK TANKS

An "Interval Timer" is a mechanical device which can be pre-set to turn on an agitator in a bulk tank at given intervals irrespective of the temperature of the milk. The University of Vermont recently surveyed the country for information concerning the relative merit of such equipment. It was originally theorized that bulk tank milk might stratify in the tank due to temperature changes in the milk within the range of the temperature-activated mechanism, thereby allowing more rapid growth of bacteria at levels in the tank where warmer milk would be expected to collect.

With the data obtained in this survey, the observation was made that interval timers do not appear to be necessary for bacteriological control of bulk cooled milk in the Northeast (an area with seasonal changes in temperature quite similar to Minnesota). They further stated, however, that such timers may have some value in assuming that bulk milk is properly agitated prior to sampling for the butterfat test. No data were presented to verify this latter point.

FLUORIDATED MILK

In a recent study by L. L. Rusoff of Louisiana State University, the use of fluoridated milk in the diet of children in the first through fourth grades, was found to yield an 80-percent reduction in dental caries (caries is a "decay") in the test children over a similar group of controls (no fluoride present).

The fluoridated milk was prepared by adding 1 milligram of fluoride in the form of sodium fluoride to a half pint of homogenized milk. This caused no change in color, taste, or odor of the milk.

Since many areas do not presently use fluoride in municipal water supplies, it was suggested that milk offers a very suitable vehicle for fluorine.

CONTROL OF MASTITIS

From Erwin Woll of Clarkfield, Minnesota, comes a helpful suggestion that the sediment test on bulk tank milk can serve as an indicator of a mastitis problem in a herd of cows. When milk is observed to pass through the sediment disc with difficulty, it should be considered "suspect." Observation of the sediment pad for "stringy" or "flaky" material will serve to verify the point.

Use of a rapid mastitis test on individual cows in the "suspect" herds have shown a high relationship between sediment test "indications" and actual disease cases. A strong control program will be essential if we are to effectively combat this most serious cow disease. Most farmers will appreciate your help and will become more conscious of the problem.

GAS BLOWING OF PACKAGED PROCESS CHEESE

A gassy or blown condition in sections of processed cheese wrapped in aluminum foil results not from the packaging material but from a combination of clostridia and propionic bacteria, a high PH, low salt and moisture contents, and poor refrigeration in retail outlets.

CHECK LIST FOR EVALUATING INSECTICIDE PROBLEM

A concerned dairy industry associate devised the following check list for fieldmen in routine evaluation of insecticide use. The information you need to effectively control the problem will be here if the following list is filled out:

1. Patron name, address _____
2. Number of cows _____. Milking machine? Yes _____ No _____
3. Kind of pasture _____
4. Kind of roughage _____
5. Kind of insecticide used on dairy cows. Brand _____
Manufacturer's name _____
6. Kind of insecticide used in barn. Brand _____
Manufacturer's name _____
7. Kind of insecticide used in milk house. Brand _____
Manufacturer's name _____
8. Is insecticide used to spray farm crops? _____ Pasture? _____
9. If yes, what crops are sprayed and when? _____

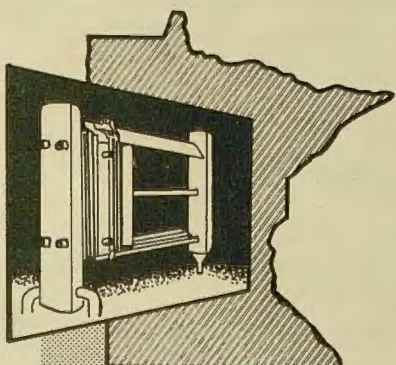
10. What insecticide is used for spraying crops and/or pasture?
Brand _____
11. Manufacturer's name _____ Powder _____
Liquid _____

- 12. How is spray applied? _____
- 13. Do you feed any home-grown feeds that have been treated with insecticides?

- 14. Are directions on labels clear and easy to understand? _____
- 15. Are directions on labels being followed? _____
- 16. Other comments _____
- 17. Fieldman's name _____ Date _____

It might be possible to obtain the active ingredient from the label on the insecticide container or this information could be collected from the feed dealer or other supplier after taking the brand name.

--V. S. Packard,
Extension Dairy Products Specialist



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