Mastitis: prevention and control. 4. The mastitis control programme continued

F C. Wilkinson

Follow this and additional works at: https://researchlibrary.agric.wa.gov.au/journal_agriculture4

Part of the Dairy Science Commons, Veterinary Infectious Diseases Commons, and the Veterinary Preventive Medicine, Epidemiology, and Public Health Commons

Recommended Citation

This article is brought to you for free and open access by Research Library. It has been accepted for inclusion in Journal of the Department of Agriculture, Western Australia, Series 4 by an authorized administrator of Research Library. For more information, please contact jennifer.heathcote@agric.wa.gov.au, sandra.papenfus@agric.wa.gov.au, paul.orange@dpird.wa.gov.au.
PREVIOUS articles in this series have described mastitis and the principles of mastitis control, and suggested how a control programme may be established. This article outlines the routine measures which should be maintained for continuation of the programme.

The Rapid Mastitis Test results recorded during the settling-in period described last month should now be studied and action taken on the results.

**Immediate Action**

**Treated Quarters**

The recorded RMT results should be followed through in the weeks after treatment:
- Cows with one or more quarters still 2 or 3 +ve should be returned to the infected group.
- Cows with all quarters either negative or only 1 +ve remain in the clean group.
- Cows with any quarters which have become negative following treatment, then subsequently positive again, can be re-treated or returned without further treatment to the infected group; age and production capacity may influence this decision.

**Untreated Quarters**

Any untreated quarters in cows in the clear group which become 2 or 3 +ve and remain so should be treated. If the programme is running efficiently the number of these quarters should be small and the response to treatment should be such that the treated quarters become negative within a week.

**Future Routine**

Following the above action the herd should consist of—
- A CLEAN GROUP, in which all quarters are either negative or only slightly positive to the RMT.
- AN INFECTED GROUP, containing cows with one or more quarters which are strongly positive.

Continued regular testing of the clean group will be required if the disease is to be kept under control. The period between tests will depend on the degree of control obtained. If, with regular routine weekly testing, only one or two strongly positive quarters are found and no clinical mastitis is observed, testing may be extended to once a fortnight, or, in extremely satisfactory herds, to once a month.
Newly Positive Tests
Where cows are found to have newly strongly positive quarters (2 +ve or 3 +ve):
— If the milk is abnormal, the quarters should be treated immediately.
— If the milk is normal, the cows should be re-tested a week later and the quarters treated if still positive.
— If the quarters remain positive after treatment the cows should be placed in the infected group.

Any cows which develop positive quarters near the end of lactation should not be treated. These cows may show positive reactions in all four quarters but if they are dried off as soon as possible they will mostly calve down without needing treatment.

Newly Calved Cows
Newly calved cows must, of course, always be tested at calving even if they were negative in all four quarters when dried off.

The Infected Group
The regular testing of the infected group is a matter for the discretion of the individual farmer. Many cows in this group will be nearly dry and treatment can be attempted immediately after they next calve. Others which are badly affected should be noted for culling.

Planning for the Future
The ultimate aim of this programme is to have as many cows in the clean group as possible. The rate at which this will be achieved will depend on the number of:
— heifers calving into the clean group;
— cows in the clean group which subsequently become infected;
— cows which can be successfully treated at calving and added to the clean group;
— cows culled from the infected group.

The major additions to the clean group will be heifers calving. If the programme is to be successful, the majority of these should remain in the clean group.
If purchase of additional cattle to replace culled cows is contemplated, it is recommended that heifers be bought rather than older cows, which are likely to have infected quarters.

The initial aim of the programme is to reduce the number of cows in the infected group to a small percentage of the herd after 12 months, by which time the only cows in the infected group should be high-producing cows with one or two incurable quarters. Any of these cows with one quarter only infected and producing very little milk in that quarter, can be milked as three-quarter cows in the clean group, the infected quarter being dried off.

Complications
Complications which may occur during the programme include:

1. Development of Milking Machine Faults
SIGNS: An increase in the number of suspicious reactions (one positive) in quarters previously negative. An unusual number of strongly-positive quarters with no milk or udder changes.
ACTION: Check the milking machine and if a fault is found, rectify it and re-test the herd again a week later.

2. Breakdown in Hygiene
SIGNS: The appearance of strongly RMT positive quarters in the clean group with clinical mastitis indicates that infection is still spreading.
ACTION: Check the amount of water used in backflushing teat cups.
Check to see if any milk is left in the teat liners following back-flushing.
Consider introducing disinfectants for immersing teats before and after milking.
If the spread of mastitis continues, professional advice should be sought.

3. Apparent Failure of Treatment
SIGNS: Quarters which become suddenly strongly RMT positive do not respond to treatment, that is, do not become negative again.
ACTION: Consult your veterinarian, as this can indicate a resistance
to the drug used or an inflammation caused by an infection other than "strep" or "staph" bacteria.

Conclusions

The programme outlined is a control programme and complete eradication of mastitis is not envisaged. Advantages of successfully introducing the programme outlined will be:

(1) A constant measure of the amount of acute and chronic mastitis in the herd, allowing a continuing appreciation of the problem.

(2) A standard dairy routine which is simple for the owner or his herdsman and does not involve any great expense.

(3) A routine that can be continually employed with an aim to keep mastitis at a low level.

(4) Better use of treatment to prevent incurable udder damage occurring.

(5) Resultant reduction of the loss of milk caused by mastitis.

(6) Improvement in milk quality.

(7) Reduced culling due to mastitis.
Carbyne* Controls
Wild Oats in Cereals

Outstandingly successful for 3 years in Australia. Yield increases can be 20% or more. Ideal for boom and aerial spraying. Gives long-term reduction in wild oat infestation.

Carbyne is endorsed by farmers!

TO WHOM IT MAY CONCERN

Last season we had nearly 300 acres of Gampuyu wheat sprayed with Carbyne. This area had not yielded more than about 12 bushels per acre for a number of years owing to Wild Oat infestation.

We have no hesitation in saying that because of the proper use of Carbyne our crop yielded at least three to four bags of wheat to the acre more. Therefore we intend to spray a further 400 acres with Carbyne this year.

Yours sincerely,

ELLIOTT PATTERSON
WOODANTILLING
23rd April, 1965

WHEN MAJORITY OF WILD OATS LOOK LIKE THIS... SPRAY!

JUST RIGHT

Available at your local stockist or direct from

36 Railway Crescent, Welshpool. 68 2575

(W.A.) PTY. LTD.

Carbyne is the registered trademark of Fisons Pest Control Ltd., England

Please mention the "Journal of Agriculture of W.A." when writing to advertisers.
ATTENTION FARMERS

FOR YOUR DISCOUNTS: WRITE TO P.O. BOX 43, WEST PERTH

TERMS available on any purchase. TRADE-INS reduce discounts further.

UP TO 50% OFF ELECTRICAL

CAR ACCESSORIES:
- Radio portable (including aerial and cradle)... £4 0 0
- Radio fixed... £40 19 0
- Lap and Sash Belts... £3 19 6
- Sun Visor, mesh... £6 19 6

APPLIANCES:
- Heater, kerosene... £16 19 6
- Heater, 2 bar infra... £4 19 6
- Hair Drier... £12 0 0
- Shaver, single blade... £6 10 0
- Shaver, ladies'... £9 15 0
- Carpet Sweeper... £3 0 0
- Ironing Board... £7 19 6
- Ironing Board and Stool... £17 19 6
- Lawn Mower 4 stroke (including rear-catcher)... £75 10 0
- Lawn Mower 14 in. reel-type... £91 7 0
- Radio, 6 transistor... £10 19 6
- Radio, 7 transistor... £16 19 6
- Radio, 8 transistor... £17 10 0
- Radio, 9 trans. dual wave... £39 10 0
- Floor Polisher, 2 brush... £14 19 6
- Vacuum Cleaner... £14 19 6
- Camera, 35mm... £32 0 0
- Camera, 35mm auto. 1.8 lens and case... £40 19 0
- Camera, 8mm movie... £19 19 0
- Projector, 35mm... £19 19 0
- Projector, 35 automatic... £39 10 0

HOT WATER SYSTEMS: All types, oil, etc., e.g.-
- 30 gal. solid fuel... £60 0 0
- 40 gal. solid fuel... £70 0 0

REFRIGERATORS: 3 cubic ft.
- 13 cubic ft. automatic... £256 0 0
- 11 cubic ft... £179 10 0
- 14 c.f. auto-deep freeze, 2-door... £294 0 0

TELEVISION: Hire any size from 14 in. Monthly rental includes licence, antenna and service.
- 25 inch newest Lowboy... £208 19 0
- Three-in-One Combination... £210 0 0
- Newest Model 23 in. Lowboy... £95 0 0
- Automatic Wideboy, best brand... £142 10 0

STOVES: All types available on Members' Discount.
- Electric on stand... £49 19 6
- Split-level with automatic oven (hot-plate section included)... £165 0 0

FURNITURE: Lounge Rocky 17 19 6
- Swedish convertible Lounge Suite... £120 0 0
- Scand. Dining Suite, ext. table... £72 10 0
- 5 piece Kitchen Suite... £26 10 0
- 9 ft. Spacemaster Bedroom Suite... £92 10 0
- Single Bed with bookcase head-unit... £23 19 6

Please mention the "Journal of Agriculture of W.A." when writing to advertisers