

Livestock and Dairy

Facts About Care of Farmers' Feeders and Aids to Greater Milk Production.

In this number, Mr. Simpson, who is instructor in the department of dairy husbandry at Oregon Agricultural College, concludes his interesting discussion on the care of milk and cream.

BY O. G. SIMPSON.

THE MISTAKE of purchasing cheap utensils is too often made. The cheapest means of improving the output of the dairy is the purchase of good utensils. Cheap utensils are poorly tinned, and the seams and crevices not thoroughly flushed with solder.

Every article that comes in contact with milk or cream should be rinsed with cold or lukewarm water before being washed. The washing is to be done by brushing the surface of each article with hot water containing washing powder. Cloths are not as good as brushes for cleaning tinware or any utensil with square corners, because they will not reach into the corners and crevices. A good washing powder for milk utensils may be made by mixing sal soda and saleratus (sodium bicarbonate). It is not necessary that the washing compound form a suds. There are a number of compounds put on the market by dairy supply houses that are especially compounded for washing dairy utensils. Soap is likely to form a thin film over the surface of the utensil, and unless thoroughly rinsed off before scalding, may dry on. No utensil should be considered clean until it has been brushed. No amount of sloshing or whirling in the wash water will thoroughly remove the thin film of milk that adheres to the surface.

Scald Thoroughly.

In washing the separator, the bowl parts and tinware may be put in the supply can, covered with cold or lukewarm water, and allowed to drain off. The parts may then be taken out, washed in hot water, returned to the supply can, rinsed and then scalded. The separator should be washed and scalded after each run. If no hot water is available, it should be washed with cold water after one run, and after the second run thoroughly washed and scalded.

The most thorough scalding is done with live steam. Boiling water is satisfactory if the temperature can be maintained long enough to accomplish sterilization. The chief benefit derived from pouring scalding water on the utensils is that the utensil is heated and dries quickly. Bacteria do not thrive in dry surroundings, and care should be taken to keep the utensils dry when not in use. If the utensil becomes dusty before using, it should be rinsed with pure water.

Summary.

Brush the cow and sponge off flanks and udder before milking.
Use small top pail.

Do not feed strongly flavored feeds till after milking is completed.

Do not feed hay or other dusty feeds till after milking.

Remove milk from barn immediately after milking.

Cool milk to 50 degrees F., or below, as soon after milking as possible. Where cream is to be sold, separate as soon as possible after milking, and cool the cream to 50 degrees F., or below.

Cool down cream before mixing with cream already cooled.

If cans are set in tanks of cold water for cooling, stir frequently.

Keep cans in cold water till delivered.

Keep Cans Covered.

Separate cream, testing from 35 to 40 per cent. Such cream will keep better than thinner cream, besides leaving more skim milk at home for feeding, and lessening the expense charges on a given amount of fat.

Keep the cream cans covered after cream is cooled.

When cream is hauled any distance in the sup, keep covered with blanket or burlap saturated in water.

Deliver cream often, not less than three times a week in summer and twice a week in winter.

In washing utensils, first rinse them

in lukewarm water or cold water, then brush them thoroughly in hot water to which has been added some good washing powder, and, last of all, sterilize by pouring boiling water over them,

or better, by holding over live steam. Use utensils that are well tinned, and in which the seams and corners are flushed and smoothly rounded with solder.

Glandere Vaccine Is Not Effective

Department of Agriculture Experts Announce Results of Experiments on Seventeen Horses.

THAT GLANDERS vaccine is not effective in rendering horses immune from this dangerous disease is the conclusion reached by specialists of the Bureau of Animal Industry, U. S. Department of Agriculture, as a result of extensive experiments with horses and other animals. The experiments show that while mallein is highly effective as a means to discover the presence of glanders in a horse, neither mallein nor glanders vaccine has shown any positive value in curing animals sick with glanders.

In the experiments 17 horses were used. These were stabled under such conditions that vaccinated and unvaccinated horses could be brought into contact with a good discharging case of glanders. Mallein and eye tests were used carefully to determine the results.

Results Obtained Told.

The results obtained by these investigations appear to be sufficient to demonstrate the unsatisfactory results of this method of immunization.

Of the 13 immunized animals, 9 contracted the disease from natural exposure, which is a large proportion when it is considered that all animals were aged and kept most of the time during the exposure out of doors.

Of the four remaining immunized horses, one died of impaction after the second vaccination, while the other three animals were killed August 30, 1913, in order to ascertain by post mortem examination the possibility of glanders existing in these animals which had given positive serum reaction, but which had returned to normal.

In artificial infections of the vaccinated animals they showed no resistance whatsoever, as both vaccinated horses promptly developed an acute form of the disease from touching the Schneiderian membrane with a platinum loop which had been touched to a growth of glanders bacilli.

"Refrain," Is Advice.

For the present, therefore, it seems advisable to abstain from immunizing horses by this method, as a practice of this kind may do more harm than good.

Owners having horses which are supposedly immunized would naturally become careless, thinking their animals were resistant to the disease, and thus even a better opportunity would be offered for the propagation of the disease than if the horses were not vaccinated. Furthermore, the fact that the blood of vaccinated animals can not be utilized for serum tests for two or three months after the injections is also a great disadvantage in the eradication of the disease.

As a result of this preliminary work it appears that the control and eradication of glanders must still be dependent upon the concentration of our efforts in eliminating infected horses and the adoption of proper precautions against the introduction of infected animals into stables free from the disease. The results achieved in Germany, Austria and Canada by these methods have proved very encouraging, and no doubt if executed in the same spirit in this country a marked reduction in the cases of glanders would result.

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A two-year-old plantation of Douglas fir on the Oregon National Forest shows 94 per cent of the trees living. Extensive plantings of young trees in Washington and Oregon are costing only \$8 an acre. Direct seeding of lodgepole pine has been successful with the exception on the Arapaho National Forest, Colorado. Several of the areas sown two and three years ago show from 5,000 to 10,000 seedlings per acre.