Milk Sampling in Summer Temperatures

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Now that the heat of the summer months is upon us, we need to take special care and attention with the milk samples taken on test day to ensure the quality of the samples arriving to the lab are in good condition for analysis.



The probablility of coagualtion (souring) increases significantly during warmer months. This is due to warm temperatures in the barns, parlours, robot rooms, milk rooms and in vechicles during transportation if we do not take precautions to reduce the risk.

Producers utilize milk sample results to make important day-to-day management decisions on areas such as feeding, reproduction and udder health. The data from the milk sample such as components, SCC, MUN, BHB (Ketolab) and Gestalab plays a critical role in herd management.

Important protocols to follow in regards to ensuring good milk sample quality for any milking system (tie stall/parlour/robot):

- Ensure the milk meters/samplers are drained of water and are clean for use at the beginning of milking

- Check each sample vial to ensure a preservative (pill) is present and looks normal. If pill is missing, or If it appears crumbled (from age) or wet (from moisture), discard the vial

- Make sure the preservative is dissolved throughout the entire sample (see picture below)



- Store milk samples in a cool dry location away from direct sunlight, direct heat source (i.e. compressors in milk rooms) and any place where warm temperatures could affect their condition

For Robot herds, the robot sampling devices are set up to run until all the cows have sampled and this can take 10-12 hours or even longer from start to end. This means the samples can sit in a sampling device for a long period with the preservative not dissolved thoroughly unless there is intervention by someone at the farm or Lactanet staff.

Important protocols that can help in maintaining good quality milk sample condition for ROBOT HERDS:

- It is very important to have someone (producer/farm staff/ Lactanet staff) cap the vials and give the milk sample a shake to mix the preservative throughout the sample while the sampling is taking

place. When doing this, the sample must be identified if not going back into the sampling device or place the vial in the exact numbered spot it came from. This will ensure the correct result will be associated to the appropriate cow

- If possible, having a fan in the robot room will help circulate the air to make the room cooler and reduce fly presence, as this can also be a problem later in the summer

- Remove the samples from the sampling device as soon as possible after sampling is completed

- Try to schedule tests for robot herds on Monday to Wednesday of the week, so the samples can be analyzed before the end of the week to avoid them sitting over the weekend in warm environments

- Make sure the milk lines/ reservoirs used during sampling are thoroughly cleaned after use to prevent bacteria buildup that could carry over to another herd

- Keep the cover of the sampling device closed as much as possible to prevent flies and other debris from getting into the vials

As Lactanet employees, we take great pride in providing valuable herd management information and services to our clients. By following the steps above we can reduce the potential of poor quality milk samples arriving to the lab due to warmer temperatures during the summer months.

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