BACTOSCAN for Bacteria Testing

Effective Monday, May 4 the BCMMB converted its bacteria testing from the PLC method, which detects colonies of bacteria, to Bactoscan, which detects ALL bacteria in milk.

Some producers may have noticed an increase in their bacteria level. This is normal for two reasons. The first relates to the fact that Bactoscan detects ALL bacteria and PLC only detects bacteria that grow at 32 degrees Celsius. The other reason is that the PLC method grows bacteria in colonies, whereas the Bactoscan will separate the colonies into individual bacteria through centrifugal force prior to counting. Some strains such as Staph or Strep can be made up of a large number of bacteria, in the past this would have been reported as 1 colony or 1,000 cfu whereas now, that 1,000 cfu would be reported as many thousand IBC.

As was reported to producers during the recent Spring Producer meetings, as a result of the differences between the PLC and Bactoscan, the BCMMB has increased the Quality Bonus threshold to 30,000 IBC/ml up from 10,000 CFU/ml prior to May 4, 2009. The Somatic cell count threshold remains the same at 250,000 cells/ml.

Contrary to what producers may have heard, there is no correlation between the PLC and Bactoscan tests. There is no formula to compare the two methods. While some producers may notice that their Bactoscan result is 3 or 4 times their PLC result most will not. The reporting range for Bactoscan results will be: 1,000 IBC/ml – 999,000 IBC/ml. A reading of 999,000 may be 999,000 or higher.

The BCMMB is now also testing “load samples” for bacteria. If there is a concern about a bacteria result the Board will be able to compare that result to the weighted average of the load.

The Bactoscan test takes 10 minutes. This will allow producers to test their milk for bacteria as often as they like. Pacific Milk Analysis Lab will test sterile milk samples for bacteria Monday through Friday, 8:30 to 4:30 for a fee of $10.00 payable by cash or cheque.

The BCMMB can make arrangements to have a follow-up sample tested quite easily, provided that you give Kelly Harris in the Board office enough notice to arrange it. If you would like a third or fourth test done in the same week, each producer would be responsible for arranging this on their own.

Currently, those producers that receive their test results via e-mail are receiving their test results as they become available. This is more difficult for those producers that require weighted averages but the Board will endeavor to provide all results to all producers in the same week that the sample was tested. Within the next week or two, the BCMMB will no longer send e-mails with lab results (except those that require weighted averages) but will instead be updating the BCMMB website regularly with the test results. The website will now show weekly results as well as a producer’s bi-weekly average results that have always been on the website. If producers do not have access to a computer and would like more information, please contact Kelly Harris in the Transportation Department at (604) 854-4479. Also, if a producer’s bacteria result is at a level that is causing concern or a producer has any other questions regarding bacteria testing and reporting, please do not hesitate to contact Kelly.

If a producer is having trouble determining the cause of a high bacteria count there is a test that can be done to determine the type of bacteria present. From this, one would be able to determine the source of the bacteria. For example, bacteria comes from 3 main sources: mastitic organisms from the udder, environmental contamination and/or a dirty milking system. Knowing the type of bacteria would enable a producer to target which of those 3 areas they should concentrate on to locate the problem. The test takes 72 hours to complete and can be done in Abbotsford at the BC Ministry of Agriculture Bacteriology Lab during regular working hours for a fee of $25.00. Their phone number is: (604) 556-3003.