



Herd Sampling for EBL Screening

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Updated: May 2007

AG1176

ISSN 1329-8062

The tests for Enzootic Bovine Leucosis (EBL) are very accurate and are able to detect very small amounts of EBL antibody in milk. Unfortunately, the screening tests that are run on vat milk samples can be negative if the herd is large and/or there are very small numbers of infected animals in the herd. Consequently, other methods of herd screening have been devised.

Background

The Victorian EBL eradication program relies on testing the vat milk from every dairy herd in the State three times a year, as the major screening process for the disease.

It has been shown that the EBL test can detect antibody from one EBL infected cow even when her milk is mixed with the milk from 199 other, non-infected cows in the herd. This means that testing the milk in the vat is a good way of finding many EBL infected herds. However, additional testing is required if the herds are large. In herds with more than 200 milkers the vat milk tests can be negative if there are very small numbers of EBL infected animals.

Herds that are production recording

If a herd is undergoing herd production recording, EBL testing can be conducted using the milk samples collected for that purpose.

After the milks have been tested for butterfat, protein and cell count, the milks from between 30 and 45 cows are mixed together to form a pooled sample. The pooled sample is then tested for EBL. In this way even very large herds can be accurately tested for EBL.

Large herds that are not herd recording

If a herd is comprised of more than 200 milking cows and is not herd recording, the owners have several options including

- Organising for the vet to collect blood or milk samples from each individual cow for EBL testing.
- Undertaking a one-off “spot herd test” of the herd. This is simply herd production recording undertaken only once in the herd. Although there is some paperwork required to support this testing, spot testing can provide useful information on cell counts and an indication of the relative milk production of cows.
- Using specially designed milk samplers that can be fitted in any milking shed at the start of milking. The flasks stay in place for the whole milking, collecting a pooled sample comprising milk from every cow that uses a cluster set. The identification of individual cows does not need to be recorded because if follow-up testing is required, individual animals will be tested by an approved vet. Unfortunately, the samples collected in this way are only useful for EBL testing. They cannot be used for cell counting or any kind of cow production testing.

If a herd needs any testing beyond the regular vat tests or herd test centre testing, the three options listed above will be discussed with the herd owner and the most suitable method for the herd will be selected.

For more information contact your local DPI Animal Health staff, your veterinarian, your local herd production recording centre or your dairy factory field representative.

The previous version of this Information Note was published in December 2005.

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