The annual period prevalence of EBL in the New Zealand dairy herd has now remained at zero for four consecutive years, with more than 50 percent of the national herd screened annually (Table 1). DairyNZ has continued to fund the ongoing monitoring program run by Livestock Improvement Corporation (LIC).

Once again no EBL cases were identified in the national dairy herd during 2010–2011. However, in the course of milk screening every year a few animals in a small proportion of the herds show suspicious results that require further confirmation testing using serum samples. In the majority of cases the negative results of the confirmatory ELISA tests have been clear-cut and confirmed by repeat screening of the whole herd, but in two herds suspect animals (based on milk ELISA) were identified on repeated whole-herd milk-screening events over the last two years. As no laboratory in New Zealand provided molecular diagnostics for EBL, a PCR testing facility was set up at LIC.

Prior to 2006 reference sera were collected from a range of EBL ELISA-positive animals from EBL-infected herds. This panel of samples was used to validate the PCR test at the end of 2010. Test sensitivity of the EBL PCR was shown to be at least 72 percent for the reference sera. In contrast, blood samples from animals with negative or suspicious ELISA results from herds without confirmed EBL or epidemiological evidence of EBL, gave negative PCR results.

All samples with suspicious screening results (but negative confirmatory ELISA) collected over the last two seasons showed no sign of EBL virus on PCR. This work clearly supports the conclusion that EBL has been eliminated from the New Zealand dairy industry, with no new incursions detected in four years despite intense annual herd screening. The EBL control scheme has thus achieved its goal of eradicating EBL from the national dairy herd.
During the 2011–12 dairy season, the EBL scheme monitoring activity will be reassessed and possibly scaled back.

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