



Recipients: Veterinarians from bovine sector
Sender: Diagnostic Service
Date: 2018-06-18
Objet: **New test for the detection of *Ureaplasma diversum***

Dear customers,

We are pleased to announce that the Molecular Diagnostic laboratory is now offering the *Ureaplasma diversum* real-time PCR assay. *U. diversum* infections are mainly found in the reproductive tract of dairy cows, with or without granular vulvitis, and in aborted bovine fetuses. MAPAQ also reports and increase in the number of cattle abortions caused by this pathogen in 2015 and 2016¹.

A panel composed of 141 different types of samples and different species was used to validate, according to the AAVLD criteria, this new test. All positive samples detected in this panel were confirmed in an external laboratory or by sequencing. Analytical sensibility was also verified with different pathogens. The detection limit of the test, which was established with a reference plasmid, is 649 genome copies, equivalent to 2×10^{-15} g (2 fg).

As part of the validation process of this test, the laboratory detected the bacteria in swine lungs. Sequencing analyses confirm that it is *U. diversum* and not non-specific reactions. This bacteria was also detected in the respiratory tract of swine in 2014 in Cuba², but to our knowledge, these are the first reported cases in Canada. The pathogenesis and virulence of *U. diversum* in swine are not known. Additional studies are in progress and will be published shortly.

Samples to be submitted include bovine tissues, uterine fluids and swabs.

If you have any questions, do not hesitate to join us.

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1. https://www.mapaq.gouv.qc.ca/SiteCollectionDocuments/Santeanimale/ReseauBovins/BilanBovin_2016.pdf

2. Burgher Y, Miranda L, Rodriguez-Roche R, et al. *Ureaplasma diversum* in pneumonic lungs of swine. *Infect Genet Evol* 2014;21: 486-488.