**Prevalence of *Mycoplasma bovis* in beef and dairy herds in Belgium.**

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***Background and Methods***

Prevalence of *Mycoplasma**bovis* in Belgium was investigated in 2009 by repeated culture on bulk tank milk (BTM) and was found to be 1.5% at this time1. In recent years, field observations and *M. bovis* outbreaks seemed to indicate an increased prevalence. In two studies, *M. bovis* prevalence in the two main cattle sectors was established by use of PCR (Pathoproof) and antibody (Ab) ELISA (BioX K302) on BTM, in 100 randomly selected dairy herds, and Ab ELISA (BioX K302) on five serological samples of 100 randomly selected beef herds.

***Results***

In dairy herds, an estimated true *M. bovis* prevalence (ETP) of 7.1% was found by use of PCR (95% CI: 2.06-11.49). By use of ELISA, an ETP of 24.8% was found on the same herds (95% CI: 16.42-33.15%). There was no overlap between PCR or ELISA positive herds. In beef herds, an ETP of 31.72% (95% CI: 19.9-47.3%) was found, with a within herd prevalence of 20-60%.

***Conclusion***

A large amount of farms in both beef and dairy were, or had recently been, in contact with *M. bovis* at the time of this study. When comparing the obtained dairy data with those of close by countries (eg: The Netherlands2: 1% in 2017 on PCR and Denmark3: 1.6% in 2015 on PCR, 7.2% in 2015 on AbELISA), *M. bovis’* presence seems to be more widespread in Belgium.

1: Passchyn, P., S. Piepers, L. De Meulemeester, F. Boyen, F. Haesebrouck, and S. De Vliegher. 2012. Between-herd prevalence of *Mycoplasma bovis* in bulk milk in Flanders, Belgium. Research in Veterinary Science 92:219-220.

2:Hogenkamp. 2017. *Mycoplasma* in 1% tankmelk aangetoond. In Boerderij. 2018. www.boerderij.nl/Rundveehouderij/Nieuws/2017/7/Mycoplasma-in-1-tankmelk-aangetoond-154694E/. Accessed 4/01/2018

3:Nielsen, P. K., M. B. Petersen, L. R. Nielsen, T. Halasa, and N. Toft. 2015. Latent class analysis of bulk tank milk PCR and ELISA testing for herd level diagnosis of *Mycoplasma bovis*. Preventive Veterinary Medicine 121(3-4):338-342.