**AB1275 Evaluation of alternative environmental sample collection method to detect dairy herds infected with MAP**

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Background: MAP is the bacterium responsible for Johne’s Disease which can result in production and reproduction losses. Accurate detection of MAP is essential for the control program, as only a small number of cows actively shed MAP which can lead to a false-negative for a farm and miscalculation of the prevalence of JD.

Objective:

1. To compare the accuracy of a new method of sample collection against the standard method

Method: Two projects are currently collecting MAP samples from both ADJI participating farms and non-participating farms. 122 farms were sampled using the standard method as well as the sock method – a plastic boot cover with an absorptive material that will be worn while walking the length of the lactating cow pen. Both methods will be compared for proportion of herds with MAP detected.

Outcome: Of the results available 36 farms had negative environmental and sock samples, 27 farms had positive environmental and sock samples, 26 farms had positive environ. and negative sock, and 1 farm had negative environ. and positive sock. The sock method had lower accuracy than the conventional environmental samples.

Recommendations: Although the sock was less accurate there is room for improvement by changing the absorptive material used as well as the laboratory procedures.

Benefits to Industry: If the sock method can be improved there are a number of benefits. Only 2 sock samples are required vs. 6 environmental samples (~$70 each) and the sock samples save 30 minutes of sampling time. This method is also easier to standardize to use for certification programs and training and may allow DHI personnel to take samples as opposed to vets, saving money.

KTT:

* Results were communicated to participating farms
* Results presented to AJDI committee
* Results presented at the annual MAP researchers meeting
* Article in the milking times
* Presentation at the International Colloquium on Paratuberculosis
* Manuscript submitted to scientific journal