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TITLE

A COMPARISON OF TRACHEO-BRONCHIAL SWABS (TBS) AND ORAL FLUIDS (OF) IN A LONGITUDAL FIELDSTUDY ON A FARM WITH PRDC HISTORY SUPPORTED BY CONTINUOUS COUGH MONITORING WITH SOUND MONITOR (SOMO)

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CONTENT

Background and Objectives
Timely detection of respiratory problems in fattening pigs remains difficult, in most cases coughing is not detected until the clinical signs are already moderate to severe. In current management systems, observation of fattening pigs during an extended period is no option due to lack of time. Sound Monitor (SOMO; SoundTalks, Leuven, Belgium) can perform a continuous monitoring of fattening pigs with respect to coughing. The objective of the present study was to compare the use of OF and TBS sampling for different respiratory pathogens in combination with automated cough detection and serology in determining the cause of clinical disease.

Materials & Methods
Two compartments of a fattening unit in Germany were equipped with the SOMO. Two subsequent batches of fattening pigs were enrolled in the study and were sampled using serology, OF and TBS sampling every month from, irrespective of clinical signs observed. Blood was analyzed by Elisa for M. hyopneumoniae, SIV, PRRSV and APP for PRRS also PCR was performed on blood samples. OF and TBS samples were analyzed using a multiplex PCR for the same pathogens and PCV2. Clinical signs were registered using SOMO; and lungs were scored in the slaughterhouse.

Results
In the first batch with no clinical signs TBS performed better in detecting PRRS and M. hyopneumoniae, OF performed better in detecting APP. In the second batch with clinical signs TBS also had higher detection rates for PRRS and Mycoplasma whereas OF had higher detection rates for APP. Serology showed PRRS infection, SIV infection and very little APP infection.

Discussion & Conclusion
The introduction of SOMO into the fattening unit provided additional insights in respiratory diseases. The different respiratory pathogens require different diagnostic technics for best detection. Results in PRRS detection do not correlate with previous studies.