



## BACTERIAL DISEASES

BBD-078

### A STUDY ON THE TRANSMISSION OF *MYCOPLASMA HYORHINIS* IN SUCKLING PIGLETS IN TWO FARM IN NORTHERN ITALY

M. Ustulin<sup>1</sup>, S. Catania<sup>2</sup>, C. Targhetta<sup>1</sup>, A. Pierasco<sup>1</sup>, A. Fincato<sup>2</sup>, F. Tonellato<sup>2</sup>, D. Vio<sup>1</sup>.

<sup>1</sup> Istituto Zooprofilattico Sperimentale delle Venezie - SCT4 PN, Cordenons (PN), Italy; <sup>2</sup> Istituto Zooprofilattico Sperimentale delle Venezie - Avian Medicine Laboratory, Legnaro (PD), Italy.

#### Introduction

For a long time regarded as a commensal, *Mycoplasma hyorhinis* is now suspected to play an important role in PRDC, arthritis and polyserositis.

The aim of the present study was to evaluate the way of diffusion of *M. hyorhinis* among suckling piglets in two farrow-to-finish farms in Northern Italy.

#### Materials & Methods

From each farm three sows each month for three months were selected. Nasal swabs were collected from each sow two days before farrowing. Swabs were tested for *M. hyorhinis* and *M. hyopneumoniae* using a real time Taq man probe PCR with internal control.

After farrowing three piglets from each sow were selected and the same analysis were performed on sows and piglets on days 2, 8 and 18 after birth. An additional sampling was performed on piglets after weaning, at day 30.

#### Results

11/72 nasal swabs from 9/18 sows tested positive for *M. hyorhinis*. Only two sows tested positive more than once.

Among piglets 1/54 swabs tested positive at day 2 (1.85%; 95% confidence interval (95% CI): 0.05-9.89%), 11/53 at day 8 (20.75%; 95%CI: 10.84-34.11%), 35/51 at day 18 (68.63%; 95%CI: 54.11-80.89%), 37/41 at day 30 (37/41=90.24%; 95%CI: 76.87-97.28%).

Only three piglets tested negative after a positive sampling.

#### Discussion & Conclusion

The trend of positivity for *M. hyorhinis* suggest a discontinuous excretion by sows while piglets, once infected, tend to maintain *M. hyorhinis* positivity at the level of nasal cavity.

Although the presence of *M. hyorhinis* from nasal cavities of sows appeared discontinuous, the diffusion of the pathogen among the litter seems to be quick, reaching at a prevalence around 90% by day 30 of life. The first piglets infected may play a role in the diffusion of the bacteria; the possibility of another route of shedding from sows (vaginal discharge, milk) is under evaluation.