

## **BBD-PP-38**

### **TITLE**

CLOSTRIDIA, AN OVERLOOKED HEALTH HAZARD FOR PIGLETS?

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### **CONTENT**

Piglets are under immense disease pressure from birth. Long farrowing intervals of large litters combined with low birth weights leave them susceptible to diseases. Antibiotic used to be widely applied in pre-weaning diets. With the increased pressure of de-medicalisation this will no longer be possible in most European countries. The present study highlighted clostridia as a potential health hazard to pre-weaning piglets which might have previously been masked by the preventative use of antibiotics.

A farm with 550 sows in production with an average weaning age of 20 days experienced sudden, severe, early onset diarrhoea in most litters affecting entire litters. Diarrhoea was most severe in gilts' litters with antibiotics failing to resolve the issue. Mortality was moderate in the piglets, loss of condition, however lack of homogeneity and overall lack of welfare could be observed. Laboratory analysis ruled out the original E.coli hypothesis, additionally confirming the presence of PRRS in the herd. Clostridia was suspected to act as an opportunistic pathogen infecting the immunosuppressed piglets.

As *Bacillus subtilis* PB6 (ATCC PTA-6737) has been described as a management tool for clostridia in poultry, it was administered to both sows and piglets in a trial to manage clostridia proliferation in the herd. 15 days after the start of the experimental treatment an almost complete disappearance of clinical signs in new born piglets could be observed. Diarrhoea incidence reduced to 5% of the litters, mortality had returned to normal farm levels; litter uniformity and welfare reestablished.

Clostridial modulation is a main activity of *B. subtilis* PB6. The success of this experimental trial suggests that clostridia could be an emerging pathogen in neonatal piglets in systems with low use of antibiotics. Further systematic studies are needed to confirm this hypothesis.