

INTESTINAL BACTERIAL INFECTIONS IN GROWING PIGS: EFFICACY OF PHYTOGENIC FEED ADDITIVE ON HEALTH STATUS AND ANTIBIOTIC CONSUMPTION

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The growing attention towards a responsible/reduced antibiotic use in farming animals determines the need to find effective alternatives in treatment and prevention of the most common health problems afflicting swine farms, such as intestinal bacterial infections. The present study investigated the efficacy of phytogenic feed additive on health and antibiotic consumption of growing pigs naturally infected with a common co-infection of enteric bacteria.

This research was conducted on an Italian commercial pig farm with previous clinical and laboratory records of enteric disease caused by *Escherichia coli*, *Lawsonia intracellularis* and *Brachyspira hyodysenteriae* co-infections. A total of 800 pigs of the same origin and age was involved from 30kg BW until slaughtering at 175kg BW: group A (n=400) was fed all trial long with a phytogenic feed additive (Enterosan®Green, Dox-al Italia SpA; 2kg/t); group B (n=400) was housed without any additive. After the onset of enteric clinical signs, the clinical group was orally treated with lincomycine (Filolinc®400mg/g, Huvepharma SpA; 0,25gr/kg BW/7 days) as supported by antibiogram. For each group, 40 animals were ear-tagged and individually weighted at the beginning and at the end of the trial. Diarrhea was scored twice a month using a 3-points scale¹, and antibiotic consumption recorded². During the first month of the growing cycle, group A showed lower average diarrhea score (2,2 vs 2,5; P<0,05) and antibiotic consumption (9,62 vs 19,63 DDDita²; -49%) than group B. The number of DDDita consumed by group B was 2,4 times greater than the Italian benchmark (8 DDDita²); differently, DDDita of group A were similar. No differences in weigh gain were showed. This study suggests beneficial effects of the phytogenic feed additive in the control of enteric bacterial co-infections in growing pigs and consequent antibiotic consumption. Given the emerging problem of antimicrobial resistance, alternatives to previously largely used antibiotics should be considered.

References

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