

Use of a bacterial complex on the surfaces of farrowing and post-weaning rooms: impact on digestive health and growth performance of piglets

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Aim

Use of a bacterial complex (Lactic acid bacteria and *Bacillus*; Cobotex®) in farrowing and post-weaning units and benefits on digestive health and growth performance of piglets.



Materials and methods

- Two farrowing rooms (24 sows) and two post-weaning rooms (260 piglets) with the same configuration were used in an experimental farm, one treated and the second as control.
- The bacterial complex (Cobotex® Biofilm 112) was pulverized on all surfaces of the treated rooms after cleaning, disinfecting and drying.
- The same bacterial complex in powder (Cobotex® 410 absorbent) was spread on the soil at the sows entry in farrowing rooms then after 8 and 16 days; in post-weaning unit, at the piglets entry then after 7, 15, 21 and 28 days.
- Analysis of growth performances:** Weight gain per litter in farrowing stage, piglet's ADG and FCR per pen in post-weaning.
- Analysis of health criteria:** digestive health by scoring the consistency of faeces, arthritis and mortality.

Results

In farrowing stage

- The percentage of weaned piglets did not differ between the 2 groups.
- Weight gain per litter** in the treated room was higher than in the control room, but this difference was not significant.
- Arthritis** : The percentage of arthritis was lower in the treated room, but this difference was not significant.
- Fecal scores** were significantly lower in the treated group at 4 days. This difference was not confirmed at 21 days.

In post-weaning stage

- The percentages of mortality between the two groups were not significantly different.
- During the first fourteen days post weaning, **ADG and FCR** were significantly improved for piglets in the treated room. They were not different for the period from 14 to 35 days after weaning. For the post-weaning stage ADG and FCR were significantly improved.
- Fecal scores** 7 days after weaning showed significantly less diarrhea in piglets of the room treated. Fecal scores 14, 21 and 28 days after weaning were not significantly different.

	Control room	Treated room	p*
Farrowing stage			
Weaned/living at 48 h	96,1%	95,9%	ns
Arthritis	12,5%	10,5%	ns
Day 4: fecal score/litter	3,0	2,3	<0,01
Day 4: individual fecal score	3,0	2,3	<0,01
Weight gain/kg/day/litter	3,1	3,2	ns
Post-weaning stage			
Mortality	4,6%	1,5%	ns
Day 7 : individual fecal score	2,9	2,7	0,03
ADG 1-14 day	143	177	<0,01
ADG 14-35 day	558	562	ns
ADG post-weaning	380	398	0,02
FCR 1-14 day	1,63	1,45	<0,01
FCR 14-35 day	1,51	1,52	ns
FCR post-weaning	1,53	1,50	0,06

Conclusion

The bacterial complex promoted optimal digestive health (assessed by fecal score) during the suckling and post-weaning periods. The post-weaning growth performances during the first age (ADG and FCR) were significantly improved.

