

BIOAKTIV Far East

Australia: A Study by the University of Queensland



THE UNIVERSITY
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Australasian Pig Institute commissioned the University of Queensland, Australia to carry out a research investigation on the effect of BioAktiv for Animal Feed on pigs, which was reported in May 2001. A test group and control group each with 10 sows were selected for the study. The study continued with the offspring of each group of sows until they reached finisher phase. The test group of 10 sows were fed 200 g of BioAktiv added to every tonne of their feed. The control group of 10 sows were fed only the standard feed.

Sows: Sows fed BioAktiv ate 16% more, with better condition score at weaning and lost 18% less weight over lactation (see Table 1). The BioAktiv sows were quiter and more content. There was no difference in back-fat depth between both groups.

Table 1: Results on sows

Parameter	BioAktiv	Control	Difference
Mean intake (kg/day)	5.43	4.58	✓ 850 g or 16% more
Condition score at farrowing	2.8	2.8	No difference
Condition score at weaning	2.5	2.1	✓ 0.4 better
Weight loss over lactation (kg)	22	27	✓ 5 kg or 18% less

Each group of sows produced 104 piglets. Offsprings from the BioAktiv sows were fed BioAktiv from sucker pigs to finisher pigs, while those from the control sows were not. Table 2 summarises the major findings for this second stage of the study.

Table 2: Results of the second stage of the study

Parameter	Suckers (10-23 days)		Weaners (24-56 days)		G-F (57-140 days)	
	BioAktiv	Control	BioAktiv	Control	BioAktiv	Control
Dead/Removed*	3	3	1	4	1*	4*
Pigs remained	101	101	100	97	99	93
Incident of scours (%)	4.8	20	0	15	0	0
Mean weight gain (kg)	6.98 ^a	6.57 ^b	9.8	10.2	80.2	77.8
ADG (g/day)	291 ^a	273 ^b	306	313	979.1	949.4
Mean feed intake (kg)			29.04	32.53	156.8	177.3
FCR (kg/kg)			2.96	3.19	2.96 ^a	3.28 ^b

a,b – statistically significant

Health status: Both groups have the same mortality rate of 2.88% before weaning. Piglets from BioAktiv sows had lower incidence of scours (4.8% vs 20%). One BioAktiv weaner died of undetermined cause, while four¹ weaners from the control group died of post-weaning scours. Post-weaning scours were only seen in the control group, with 15% of control weaners being treated with antibiotics. **No antibiotics were used in BioAktiv group.** During the grower-finisher phase, one BioAktiv pig was removed due to injury (head caught in fence). Four control pigs were removed due to illhealth, three of which were diagnosed with Campylobacter. The health status of the BioAktiv pigs at the grower-finisher phase was substantially better than that of the controls.

Feed efficiency: Piglets from BioAktiv sows grew 6% faster than the controls ($p < 0.05$). During the weaner phase, although the control pigs gained on average 20 g/day more than the BioAktiv pigs, their mean pig weights at the end of the phase were similar at 18.0 and 18.1 kg for the BioAktiv group and the control group respectively. The FCR for BioAktiv weaners was 7% better than that of control. At the grower-finisher phase, BioAktiv pigs grew 50 g/day faster than the controls ($p = 0.06$). The FCR was 14% in the pigs fed BioAktiv ($p < 0.05$).

Conclusion:

- The addition of BioAktiv to the diet improved the health status of the pigs.
- There was a significant improvement in piglet growth performance when lactating sow and creep diets contained BioAktiv.
- Weaner FCR was improved slightly by the addition of BioAktiv to weaner feeds.
- Grower-finisher pig FCR was improved significantly (14%) by the addition of BioAktiv to the diet.

Original paper: [The Effect of BIOACTIVE on the Health and Growth Performance of Pigs](#)

¹ It was reported as three in the [original report](#).