TECHNICAL REPORT

by **Groupe Cérès and Nutrition Athéna**

THE BENEFIT OF USING *PHYTOVIA VITIS* IN LACTATION DIET ON PERFORMANCE

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In recent years, there has been a growing interest in the antioxidant and antimicrobial properties of a number of polyphenols found in plants. Polyphenols have anti-inflammatory, anti-allergic, immunomodulatory, and antimutagenic properties. Most importantly, polyphenols are powerful antioxidants that prevent oxidative stress and cell damage.

In a recent trial, we studied the effect of polyphenols in feed by supplementing lactating sows with *Phytovia Vitis*. It was hypothesized that sows supplemented with polyphenols would have increased concentrations of IgG in their colostrum and better milk quality which would then improve litter performance.

A total of 300 sows were randomly allocated to control and test groups with sows in the TEST group receiving a ration containing 150g/tonne of *Phytovia Vitis*. Sows were fed lactation diets for either the control group or the test group immediately after entering the farrowing room.

	CTRL	TEST	P-VALUE
Piglet ADG (g/day)	**215**	**232**	**< 0.0001**
Wean Weight (kg)	**5.34**	**5.61**	**< 0.0001**
Litter Weight (kg)	**63.52**	**66.54**	**0.033**
Wean Weight adjusted 21 days (kg)	**6.01**	**6.36**	**< 0.0001**
Litter Weight adjusted	**71.44**	**75.39**	**0.0147**

Piglets from the TEST sows had significantly higher wean weights after 18 days of lactation (+0.27kg, P<0.0001). Once adjusted for a 21d lactation length, the difference remained statistically different with piglets being 0.35kg heavier (P<0.0001). All other variables not shown in the result table did not differ within treatments (number of piglets weaned, back fat loss, weight loss, etc.).

The piglets were followed even further to see if the lactation diet would have a carryover effect on their performance in nursery. After 2 weeks in nursery, the TEST piglets were still heavier, weighing an extra 0.63kg more than the CONTROL (CTRL) piglets.

The extra cost, per tonne of feed, of adding *Phytovia Vitis* to the lactation diet is estimated at $10.50-11.00/t. Annually, this represents a cost of $3.80/sow/year. With the increased weaning weight, our economics evaluation shows a potential benefit of $13-38/sow/year based on 24 pigs marketed by sow/year. This represents a return on investment (ROI) of 3.4 to 10:1.

Based on the results of this trial, we recommend adding *Phytovia Vitis* to the lactation ration at an inclusion rate of 150g/tonne. Contact your representative at SMI, Nutrition Partners, or Farm House to know how to start using *Phytovia Vitis* today.

Phytovia ® Vitis

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