

# EFFECT OF PROBIOTIC SUPPLEMENT TO PIGLET AND SOW FROM AFTER SERVICE, 84 DAYS OF GESTATION ON IgA AND MILK QUALITY, BIOCHEMICAL, MICROBIAL, PIGLET PERFORMANCE

Winai Thongmak<sup>1</sup>, Pairat Thitisak<sup>2</sup>, Nattaya Banglarp<sup>2</sup>, Onanong Chawalitjinda<sup>3</sup>

<sup>1</sup>Live informatics Co., Ltd., Nonthaburi, Thailand. <sup>2</sup>K.M.P. Biotech Co., Ltd., Chonburi, Thailand.

<sup>3</sup>Innovet Corporation Co., Ltd., Samutprakarn, Thailand.

## Treatment program of Bactosac

Treatment 1: Supplementation of probiotic 1 month before farrowing to weaning

Treatment 2: Supplementation of probiotic after service to weaning

Mix BACTOSAC-P<sup>TM</sup> in sow feed, 0.05% during gestation and 0.10% on lactation

## Effect of probiotic on IgA in milk

Group	Number	IgA(mg/ml)
Control	30	3.05 <sup>B</sup> ± 1.59
Treatment1	30	5.85 <sup>A</sup> ± 1.94

<sup>A,B</sup> Values in different columns with different superscripts are significantly different (P<0.01)

## Effect of Probiotic on serum biochemical and milk quality at 1 week after farrowing

Parameter	Control	Treatment1	Treatment2
<u>Serum biochemical</u>			
Chol (mg%)	66.8 <sup>ab</sup> ± 5.31	64.0 <sup>b</sup> ± 5.89	79.1 <sup>a</sup> ± 13.43
TP (g%)	7.32 <sup>b</sup> ± 0.78	7.53 <sup>ab</sup> ± 0.43	8.28 <sup>a</sup> ± 0.73
Albumin (g%)	3.82 ± 0.13	4.03 ± 0.46	4.25 ± 0.35
<u>Milk quality</u>			
Fat	9.02 ± 0.93	8.56 ± 2.02	9.11 ± 1.59
Protein	5.14 ± 0.18	5.33 ± 0.93	5.39 ± 0.38
Lactose	7.06 ± 0.06	6.92 ± 0.38	6.71 ± 0.43
Total solid	21.94 ± 1.06	21.29 ± 1.52	22.13 ± 2.04

<sup>a-b</sup> means with different superscript letters in the same row are significantly different (P < 0.05).

## Effect of Probiotic supplement in sow and their piglet on piglet performance

	Born alive	Birth weight	Wean /litter	Weaning weight	ADG
Ctrl	12.54	1.76	8.38 <sup>b</sup>	5.87 <sup>C</sup>	167 <sup>C</sup>
Ctrl+Bac	12.50	1.60	10.12 <sup>ab</sup>	6.13 <sup>BC</sup>	185 <sup>BC</sup>
T1	12.94	1.57	11.00 <sup>a</sup>	6.62 <sup>ABC</sup>	206 <sup>AB</sup>
T1+Bac	13.21	1.55	10.32 <sup>b</sup>	6.92 <sup>AB</sup>	219 <sup>B</sup>
T2	11.06	1.62	10.40 <sup>a</sup>	7.35 <sup>B</sup>	234 <sup>A</sup>
T2+Bac	12.40	1.54	11.67 <sup>a</sup>	7.43 <sup>A</sup>	240 <sup>A</sup>

<sup>A-B-C</sup> means with different superscript letters in the same columns are significantly different (P<0.01).

<sup>a-b</sup> means with different superscript letters in the same columns are significantly different (P < 0.05).

## Summary

BACTOSAC-P<sup>TM</sup> Supplementation showed improvement of sow and piglet performance including weaning weight, ADG and survival rate. The probiotic also effect on milk composition and serum biochemistry.