GutPlus® Virsorb

enhances immune status and litter performance of Porcine Epidemic Diarrhea virus (PEDV) infected sows

Trial conducted in 2024, at Cuirassier Daping Pig Farm, Guizhou, China

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PEDV infection leads to intestinal damage and diarrhea in piglets. Current vaccines offer limited protection, highlighting the need for alternative strategies. GutPlus® Virsorb, a multi-strain Bacillus-based probiotic, helps alleviate PEDV and rotavirus infections while inhibiting Gram+ and Gram- bacteria.

OBJECTIVE

To evaluate the effect of GutPlus® Virsorb supplementation in late gestation and lactation diets on the immune status and litter performance of PEDV infected sows under field conditions.

ANIMALS

Large white × Landrace crossbred sows (parity 2–7, 8 sows / treatment) and their litters (12 suckling piglets / litter).

TREATMENTS

Duration: 12 days before and 21 days after farrowing

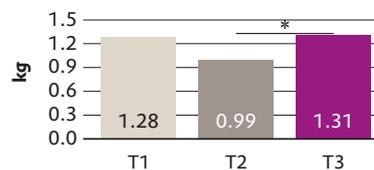**T1:** basal diet, unchallenged

T2: basal diet, PEDV infected

T3: basal diet + GutPlus® Virsorb (*500 g/t, 1E6 CFU/g*), PEDV infected; piglets received 3–5 ml GutPlus® Virsorb on day 2–9 of life via oral gavage.
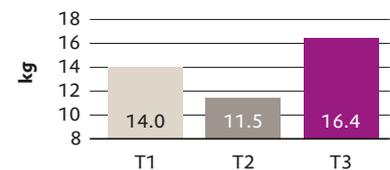
RESULTS

GutPlus® Virsorb improved average birth weight (+32 %), average litter weight (+43 %, day 1), body weight (+31 %, day 21) and reduced mortality rate (-68 %, day 1–21), vs. infected group
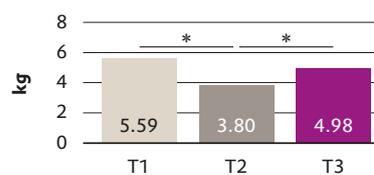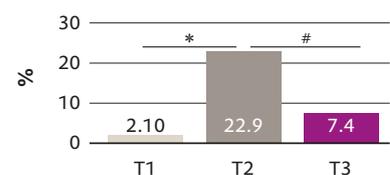
Average birth weight

	kg
T1	1.28
T2	0.99
T3	1.31

Average litter weight/sow (day 1)

	kg
T1	14.0
T2	11.5
T3	16.4

Body weight of piglets (day 21)

	kg
T1	5.59
T2	3.80
T3	4.98

Mortality rate of piglets (day 1 – 21)

	%
T1	2.10
T2	22.9
T3	7.4

*#tend to be significant, P <0.1; *significant, P <0.05*

GutPlus® Virsorb improved colostrum IgA and IgM (+52 to 64 %)

Immune Antibody in Colostrum (1d postpartum)

	T2	T3
IgA	50	76
IgG	87	123
IgM	44	72
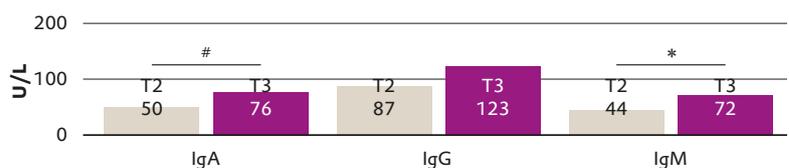
*#tend to be significant, P <0.1; *significant, P <0.05*

CONCLUSION

GutPlus® Virsorb supplementation in late gestation and lactation diets:

1. Effectively enhances immune status and improves litter performance of PEDV-infected sows
2. Boosts profitability by improving overall production efficiency.

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