

EVALUATION OF EFFICACY OF TWO DIFFERENT *ESCHERICHIA COLI* VACCINES TO CONTROL NEONATAL DIARRHEA IN PIGLETS UNDER PHILIPPINE FIELD CONDITIONS

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INTRODUCTION

Infection with pathogenic *Escherichia coli* is a common and worldwide cause of diarrhea in suckling piglets and has become an important disease that should be considered by swine producers. It is also responsible for a substantial economic impact due to high morbidity, mortality and reduced growth rates.¹ Furthermore, passive maternal immunity remains the most effective way to protect piglets from this disease after sow vaccination.²

The purpose of this study was to compare the clinical diarrhea morbidity and piglet growth performance in sows vaccinated with two different commercial vaccines against neonatal enteric colibacillosis.

MATERIALS AND METHODS

Two hundred and twenty-eight pregnant multiparous sows were selected from a farrow-to-wean farm located in Tarlac Province (Philippines). The farm was *E.coli* positive for neonatal diarrhea. Sows were randomly divided into two groups; G1 received SUISENG®, and G2 was administered with Vaccine B (aluminum hydroxide-based adjuvant). Both vaccinations were given according to the manufacturer's instructions 8 and 4 weeks before farrowing. Parameters monitored were morbidity, mortality, birth weight, weaning weight (average of 26 days) and Average Daily Gain (ADG) of all the piglets included in the study.

RESULTS

Piglets from G1 had a 1.5% morbidity compared to 2.2% showed by G2. On the other hand, mortality recorded in G1 was 0.25% versus 0.2% with Vaccine B. In terms of suckling pigs growth performance, G1 grew an average of 242 grams per day, while G2 grew 227 grams per day.

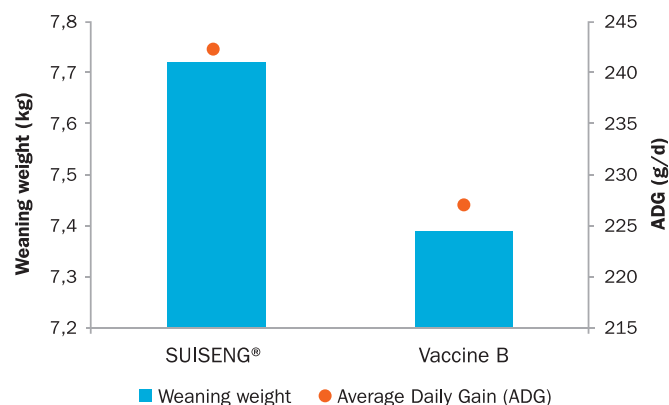


Figure 1. Suckling piglet grow performance.

DISCUSSION AND CONCLUSIONS

Current production conditions and low restrictions in order to decrease the use of antibiotics mean that, nowadays, pregnant sow vaccination against neonatal diarrhea is widespread. This is largely due to the excellent results obtained when vaccination programs are combined with good hygiene and management practices. This study shows different diarrhea-preventive effects of the two vaccines evaluated. SUISENG® achieved lower morbidity and better growth performance compared with Vaccine B.

REFERENCES

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