# Performance improvement after using Enterisol® lleitis on an organic farm in South Korea



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#### INTRODUCTION

Porcine proliferative enteropathy caused by *Lawsonia intracellularis* mainly affects the mucosa of the distal ileum<sup>1</sup>. Subclinical ileitis can occur in the weaning and fattening period with daily gain loss without any obvious clinical signs. Chronic infection is characterized by proliferation of mucosal crypt cells in the ileum, jejunum and sometimes large intestine<sup>2</sup>. This pathogen can cause significant losses in swine farms, even in subclinical or mild forms.

# **MATERIALS AND METHODS**

This field study was conducted on a farm with 100 sows in Southern West Korea. This farm is a continuous flow and single site farm. The breed of all pigs is Berkshire. The farm is certiefied as an organic farm and cannot use any antibiotics to treat animals even though porcine proliferative enteropathy is present. The veterinarian responsible for the farm took blood samples for antibody testing and conducted necropsies for PCR testing to confirm lleitis. Enterisol® lleitis vaccination was implemented in the attempt to control ileitis. Piglets were vaccinated at 3 weeks of age via trough for 5 – 6 hours.

## **RESULTS**

The PCR test was positive from the ileum taken during necropsy. The ELISA test was conducted at the same time. Seroconversion was observed in 9 week old pigs before moving to fattening house. We gathered information and scores for productivity with mortality and days-to-market. The first month of vaccination was July 2015. They marketed their pigs per batch at the same time. Additionally, there was no movement of pigs between batches. Before vaccination on average 8.6 pigs died per batch, and 4.6 for 5 months after vaccination. Almost all of the dead pigs were reported in the fattening period. Additionally, there is a big difference for slaughter days between the vaccinated group and the non-vaccinated group. The days-to-market for the vaccinated group was 16 days shorter than for the non-vaccinated group.

Table 1: Mean of mortality and days-to-market in Non-vac and Vac.

	Non-Vac	Vac
Mortality	20 %	10 %
Days- to-market	241	225.6

There were a lot of clinical symptoms like diarrhea in the non-vaccinated group. But there were no pigs with clinical signs in the vaccinated group. Also, there was little variation in the pigs of the vaccinated group.

Figure 1: Mortality according to batches.

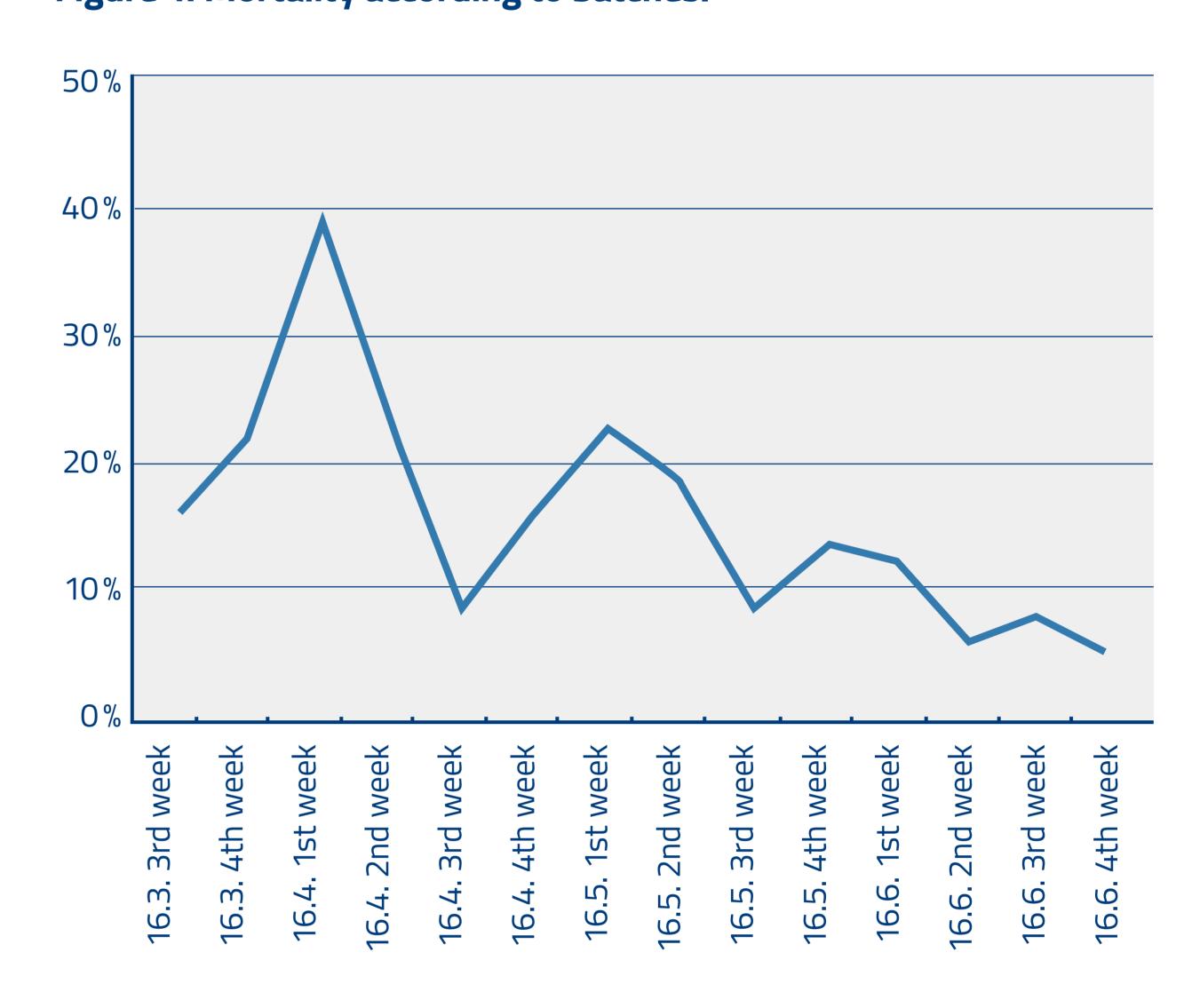
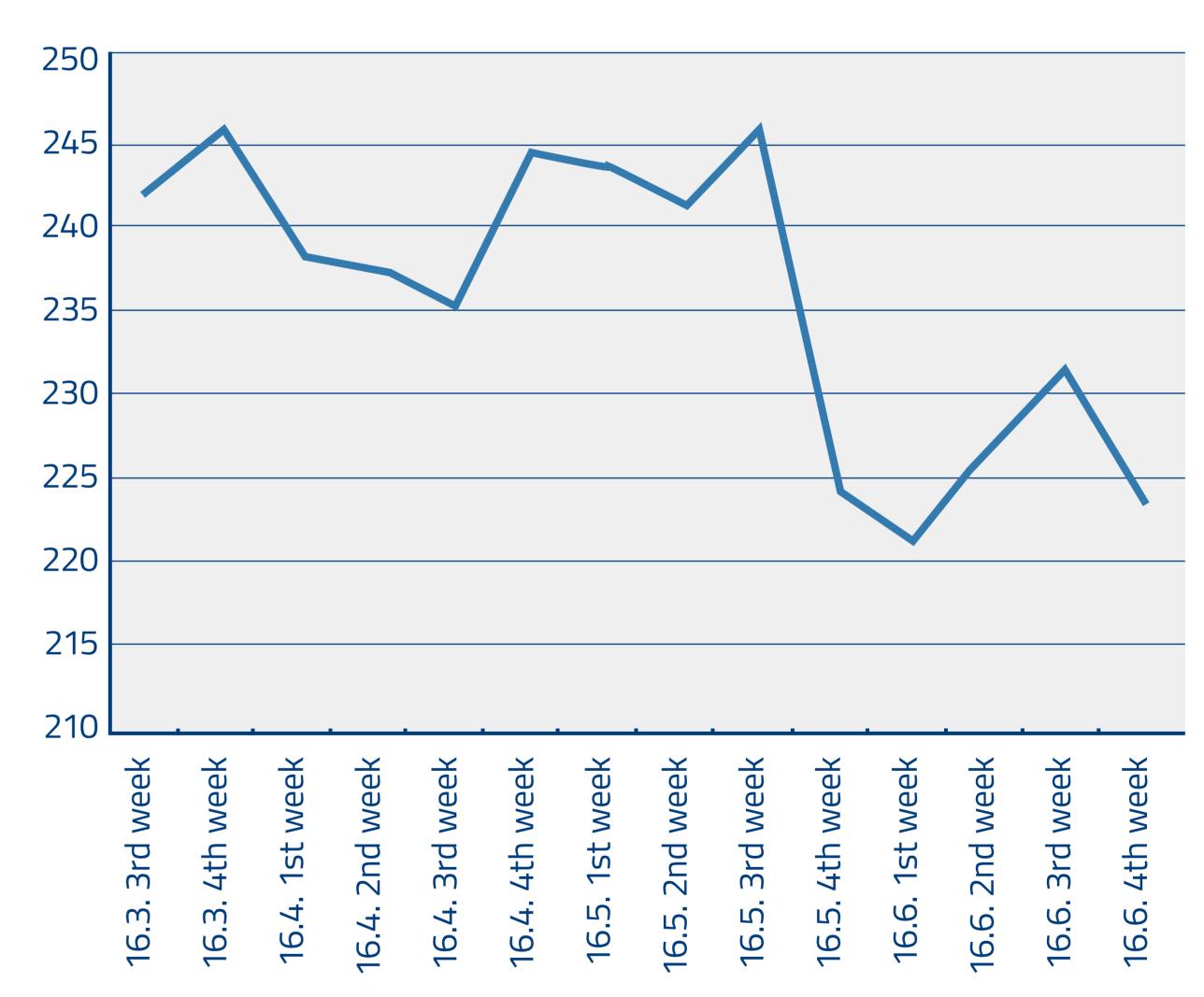


Figure 2: Days to market according to batches.



# **DISCUSSION AND CONCLUSION**

This field case investigated the impact of vaccination with Enterisol® lleitis on mortality and days-to-market. The results of the field case demonstrate that productivity in Berkshire pigs can be markedly increased with vaccination of Enterisol® lleitis.

### **REFERENCES**

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