



Australasian Pork Research Institute Ltd APRIL

PROJECT SUMMARY

Project Number and Title: 5A-122 Can the provision of silage at weaning improve sow welfare and subsequent reproduction?

Project Leader: Dr Lauren Staveley (SunPork Group)

Project Participants: Dr Kate Plush, Sally Tritton, Robert Hewitt, Dr David Lines and Dr Darryl D'Souza (SunPork Group); Alison Leary (Lallemand Animal Nutrition).

Aims and Objectives:

Silage and an enrichment block are suitable enrichment materials for sows, offering advantages over straw, which pose challenges in effluent blockages, cost and biosecurity risks. While previous studies have focused on group housed gestating sows, these materials may be particularly beneficial during the stressful wean to mate period, especially for sows that are group housed during this period. We hypothesised that the provision of enrichment, either silage or enrichment blocks, during the wean to mate period would reduce aggression, enhance affective state, and improve reproductive outcomes in a group mating system.

Key Findings:

- Sows in both the Block and Silage treatment showed a reduced reaction to the adverse stimuli with a lower startle test score measured after six days of treatment application when compared to the Control.
- There was no difference in injury score (1.0 ± 0.06), wean to service interval (4.1 ± 0.06 days), conception rate (91%), or litter size (12.7 ± 0.19 pigs) between the three experimental treatments.

Applications to Industry:

- Both Block and Silage provision were able to positively influence sow welfare during the stressful weaning to mating period.
- Further work is required to see if Silage provision can replace specialised diets, meeting both enrichment and nutritional requirements during this reproductive stage.