

Project Participants

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Problem

Gilt progeny are born lighter and may have compromised protective immunity compared to progeny born to multiparous sows. Previous research has shown feeding conjugated linoleic acid (CLA) to gilts in lactation may improve pre-weaning survival rates. However, studies have not yet determined the optimum amount to achieve improvements in performance without incurring unnecessary feed costs.

Project

The project aimed to determine optimum amount of CLA in a top dress for gilts to achieve the best commercial outcomes, as well as the best time for feeding in late gestation and/or lactation to achieve these improvements.

Value for Producers

Including CLA in gilt diets as a top dress can decrease pre-weaning mortality by up to 1.1 per cent. Additionally, CLA can improve piglet average daily gain by up to by 7g a day per piglet, or by 6.8kg for the entire litter by day 19.



Background

Feeding CLA in late gestation and/or lactation has been shown to alter the fatty acid profiles and increase IgG in colostrum and milk, thus improving piglet growth and kickstarting the piglets' immune system to improve survival.

Recommendations

The ideal feeding strategy for a CLA-based top dress in gilt diets is 0.2 per cent total CLA isomers, fed one week prior to farrowing. This is the cheapest option for inclusion, costing 30 cents per litter per lactation, and still provides substantial improvements in performance.

Feeding CLA throughout lactation does not further improve reproductive performance or pre-weaning performance of progeny. It is not recommended to feed CLA more than 0.2-0.8 per cent of the daily ration or for longer than one week prior to farrowing.

Take care to store the top dress product properly and make in small batches so the fats do not oxidise and become rancid.

More Information

- For a copy of the manual, contact Rachael Bryant at rachael.bryant@australianpork.com.au
- For technical information, contact Rebecca Athorn at rebecca.athorn@australianpork.com.au