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Influence of an encapsulated fatty acid combination and plant-based additives on certain parameters of lactating sows

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Introduction

Medium-chain fatty acids (MCFA) are known for their pronounced antibacterial effects against gram-positive bacteria like clostridia and streptococci. Streptococcus suis is considered the most important bacterial pathogen in the suckling piglet and rearing sector nowadays. The antimicrobial potential of MCFA described in the literature has already been tested in practice. However, the areas of application and the effects of the respective acids are very different, wherein lauric acid is considered to be a particularly active and antibacterial agent (Kabara et al., 1972; Batovska et al., 2009). Only by a specific selection and combination of acids with plant-based additives such as essential oils and their extracts, synergistic effects can be achieved (Ferrara, 2012). Therefor, the objective of this study was to investigate the influence of an encapsulated fatty acid combination and plant-based additives on certain parameters of lactating sows.

Material and Methods

- The study was conducted on a conventionally managed farm with 1800 sows in north-west Germany.
- A total of 75 sows (genetics: Topigs TN70 x Topigs TN Select) were assigned to a
- In the trial group, the sows were given 12 g **BEWI-FATRIX®** SynerG+ daily as a top dressing from 5 days before the calculated farrowing date until weaning.
- The supplementation was carried out without nutrient compensation.
- The piglets were weaned after an average of 28 days.
- The parameters of this study during the 4-week suckling period were the number of piglets born alive, the losses during the suckling period and the number of weaned piglets.

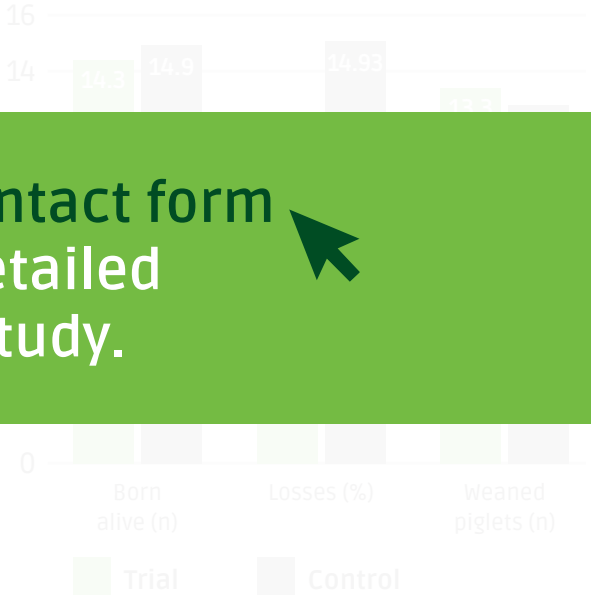

Figure 1: Selected performance parameters of the lactating sow

Conclusion

- Through addition of a matrix-encapsulated combination product based on a special fatty acid combination and plant-based additives (**BEWI-FATRIX®** SynerG+) in the lactation feed, the suckling piglet losses significantly reduced and the number of weaned piglets per litter increased.
- Due to the positive influence on the piglets' intestinal development and microbiota and its antimicrobial properties, the health status of the animals is positively influenced.
- The use of purely plant-based products in a targeted combination of active ingredients can effectively reduce the risk of infection of the suckling piglets with streptococci, clostridia and other infections in advance through their use in lactation feed and contribute to a significant reduction in the use of medicines on farms through the resulting synergy effects.

Literature

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