



IMPROVING WEANER GROWTH AND PERFORMANCE WITH STRONTIUM

THE SUPPLEMENTATION OF PIG DIETS WITH
MINERAL STRONTIUM

Project Participants

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Problem

The development of a healthy skeletal structure, along with optimal muscle growth in growing pigs is dependent on receiving a balanced diet composed of essential nutrients. Strontium is a trace mineral which has been reported to increase bone volume and density. However, there is limited data on supplementation in commercial livestock. There is potential for strontium supplementation at low doses to improve the performance of growing pigs.

Project

This study involved supplementing pig diets with strontium and measured production performance (weight gain and feed efficiency). The effect on carcase characteristics and joint temperature on inflammation and the likelihood of osteochondrosis (a welfare issue in pigs) was also explored.

Value for Producers

Supplementing weaner pigs with strontium in a commercial environment can improve growth performance and feed efficiency.



Recommendations

Supplementation of 500 parts per million (ppm) of strontium during the weaner period supported higher average daily gain and had no effect on the daily feed intake, resulting in better feed efficiency. The supplementation also resulted in higher bodyweight and average daily weight gain, which persisted until day 49 of the treatment.

There were significant improvements in weaner growth performance and feed efficiency when pigs were supplemented with 500 ppm of strontium in a commercial environment. During the weaner period, pigs consumed approximately 10 kilograms of feed, therefore consuming 5 milligrams of strontium. This is a small economic cost which provides benefits to performance.

There was no benefit – either economic or in pig performance and growth - to supplementing strontium during the grower or finisher stages.

More Information

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