

Potassium diformate in the diet of reproducing sows: Effect on performance of sows and litters

Abstract

The effects of adding potassium diformate (K-diformate) to diets for primiparous and multiparous sows (Dutch × Scandinavian Landrace) (n = 156) were evaluated with respect to performance of sows and their litters, apparent total tract digestibility (TD) of nutrients, milk composition, and microbiota of sows' feces.

Treatments comprised a basal diet and a basal diet containing 0.8 or 1.2% K-diformate. The experiment lasted from mating, through gestation and lactation until the next mating.

Sows were fed restrictively according to a commercial feeding regime during the gestation period, and had free access to feed from d 10 post-farrowing. The addition of K-diformate to diets increased backfat thickness ($P = 0.03$) of sows during gestation. No effects on average daily feed intake or body weight gain were seen.

Piglets born to sows receiving K-diformate tended to have increased individual ($P = 0.05$) and litter ($P = 0.08$) birth weight, tended to have increased average daily gain (ADG) ($P = 0.07$) and to be heavier at weaning ($P < 0.05$). Birth weights, ADG, and weaning weights were similar for piglets born from sows fed 0.8 and 1.2% K-diformate. There was no effect of K-diformate on the number of pigs born alive, number of stillborns or mortality rates of piglets.

Adding 1.2% K-diformate to diets increased TD of ash by 4.9% ($P = 0.001$) and crude fat by 3.4% ($P = 0.08$), and calculated NE-content by 2.3% ($P = 0.02$). Sows fed K-diformate tended ($P = 0.09$) to show an increased milk fat content on d 12 post-farrowing.

In conclusion, adding K-diformate to diets for sows had a positive effect on sows' backfat thickness in gestation and on growth performance of piglets.

Keywords

Sows Piglets Potassium diformate Growth performance Digestibility Milk composition

Cited By

The article is quoted from the research results and data reports of well-known international researchers-hereby express our gratitude for the experimental research support of this product.

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Potassium Diformate, Sodium Diacetate, Calcium Formate

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More in-depth product exchange, organic acid product supplying, get more consultations.