

The effect of graded levels and forms of sweet potato to substitute the corn in diets on growth performance and carcass characteristics of grower and finisher crossbred pigs ⁽¹⁾

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Abstract

A total of 32 LD (Landrace × Duroc-Jersey) crossbred pigs, average body weight 34 kg, were used as experimental animals. Pigs were allocated into 4 treatments by body weight (BW) and fed with four diets, i.e. Control (C), graded levels substitution of corn in control diet by sweet potato meal, 25%, 50% and 100% added 0.1% lysine (SP 25, SP50, SP100 + Lys). Feed and water were provided on an *ad libitum* basis. When BW of the pigs reached approximately 65 kg, the grower pigs experiment was finished and growth performance were measured. From BW 66 kg, pigs were reallocated into three treatments and provided with control diet (C), 25% sweet potato chip substituted diet and 25% sweet potato meal substituted diet. Experiment was finished when the BW of pigs reached 124 kg. Six pigs from each treatment were slaughtered and the carcass characteristics were measured. Growth performance, carcass characteristics, chemical composition and panel test of loin meat were evaluated. The results showed that the average feed intake and daily gain of grower pigs decreased with the increase of the substitution levels of sweet potato for corn in diets. For finisher pigs, there were no difference on average feed intake, daily gain and feed conversion rate among treatments. No difference were also observed on chemical composition of meat, carcass characteristics and meat color. The chewiness score of loin meat from pigs fed 25% sweet potato meal was higher than either the control group or 25% sweet potato chip group. Nevertheless, the overall acceptability of the meat from those pigs was lower than the other two groups.

Key words: Sweet potato, Forms, Crossbred pig, Growth performance, Carcass characteristics.

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