

Acacia karroo, Acacia nilotica and Colophospermum mopane in pig diet

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Growth performance of pigs fed on diets containing
Acacia karroo
,
Acacia nilotica
and
Colophospermum mopane
leaf meals

Abstract

Growth performance of pigs fed diets containing 10 %
Acacia karroo, *Acacia nilotica*
and
Colophospermum mopane
leaf meals was investigated using 20 individually penned male Large White pigs weighing 32.4 ± 5.86 kg (mean \pm sd) over 56 days.

There was no significant effect of including leaf meals on average daily liveweight gain and feed conversion ratio (

P

> 0.05). Pigs supplemented with

Acacia karroo

had significantly higher intake than the other diets (

P

< 0.05). The control diet had a higher digestibility of crude protein and dry matter compared to the treatment diets (

P

< 0.05) except for the dry matter digestibility of the

Acacia nilotica

supplemented diet, which was not different to that of the control diet (

P

> 0.05). After the 56-day feeding period, there was an increase in the secretion of trichloroacetic acid soluble proteins from the parotid glands in all diets that contained leaf meals.

No change was observed in the mandibular glands (

P

< 0.05). The activity of hepatic microsomal uridine diphosphate glucuronyl transferase increased significantly for pigs fed on the supplemented diets (

P

< 0.05). Indices of mitosis in the small intestine, the kidney and the liver were not affected by inclusion of leaf meals (

P

> 0.05).

In conclusion, inclusion of leguminous leaf meals in pig fattening diets reduced digestibility of the feed, but did not affect growth rate. Inclusion of leguminous leaf meals in the diets of pigs is, therefore, a feasible technology that farmers may adopt as part of their feeding strategy for pigs.

Key words:

alternative feeds, flavonoids, salivary proteins, tannins, tropical legumes



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Yes