Carmen María Mederos et al.2004

Carmen María Mederos et al.2004 Growth performance of pigs fed hand-chopped sugar cane stalks

Swine Research Institute, PO Box 1, Punta Brava, La Habana, Cuba

Abstract -

Two experiments were conducted to study feed intake and growth performance of growing-finishing pigs fed either fresh, hand-chopped unpeeled stalks from sugar cane (SC) or fresh unpeeled milled SCI. In experiment 1, 20 crossbred castrate male pigs were allotted at random into five treatments consisting of milled fresh SC stalks or stalks chopped at different sizes (3, 5, 20 and 40 cm length) and offered ad libitum plus a supplement containing protein, vitamins and minerals (NUPROVIM) given at a restricted level (crude protein from soybean, 190 g/day). The trial lasted approximately seven weeks. In experiment 2, 27 crossbred castrate male pigs were allotted at random into three treatments consisting of the same milled SC stalks and chopped SC stalks (3 and 40 cm length) given ad libitum as in experiment 1, but given a supplement (NUPROVIM, crude protein, 34.7%) to supply 225 g protein/day per animal. The trial lasted approximately from 20 to 25 weeks.

In experiment 1, average daily gain was 348, 392, 375, 408 and 405 g for pigs fed SC freshly milled or the stalks with increasing length respectively. In experiment 2, fresh consumption of milled SC was 3.3 kg/day whereas chopped SC stalk consumption was 11.1 and 9.9 kg/day for pieces of 3 and 40 cm length respectively. Pigs fed the milled SC significantly less (378 g/day) than animals fed SC stalks of 3 and 40 cm length (451 and 378 g/day respectively). Final live weight of pigs eating SC stalks of 3 cm length was 94.3 kg, higher than that of animals eating either milled SC (86.3 kg) or SC stalks of 40 cm length (90.3 kg).

It is suggested that small scale pig production can be sustained if animals are fed ad libitum sugar cane stalks hand-chopped to pieces of 3 cm length plus a protein supplement offered to supply a relatively low level of protein (200 g/day) in the entire daily ration as compared to what is currently recommended in intensive, high input pig production systems. The fibrous sugar cane residue mixed with pig excreta could be a valuable substrate for culture of earth worms. An economical evaluation of this feeding system for small scale animal production is recommended.

Key words

: , Growth, intake, pigs, sugar cane stalks

Reference

: Mederos Carmen María, Figueroa Vilda, García A, Alemán E, Martínez Rosa María and Ly J 2004: Growth performance of pigs fed hand-chopped sugar cane stalks. Livestock Research for Rural Development, Vol. 16, Art. #14. Retrieved May 13, 2004, from http://www.cipav.org.co/lrrd/lrrd16/3/med16014.htm

Oui