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Effects of Different Dietary Crude Fiber Levels on the Growth Performance of Finishing Su-Shan Pigs

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Abstract : The utilization of dietary crude fiber in different breed pigs is not the same. Su-shan pigs are a new breed formed by crossing Taihu pigs and Yorkshire pigs. In order to understand the resistance of Su-shan pigs to dietary crude fiber, 150 Su-shan pigs with 60 kg of average body weight and similar body conditions were allocated to three groups randomly, and there are 50 pigs in each group. The percentages of dietary crude fiber were 8.35%, 9.10%, and 11.39%, respectively. At the end of the experiment, 15 pigs randomly selected from each group were slaughtered. The results showed as follows: average daily gain of the 9.10% group was higher than that of the 8.35% group and the 11.39% group; there was a significant difference between the 9.10% group and the 8.35% group (p < 0.05. Levels of urea nitrogen, total cholesterol and high density lipoprotein in the 9.10% group were significantly higher than those in the 8.35% group and the 11.39% group (p < 0.05). Ratios of meat to fat in the 9.10% group and the 11.39% group were significantly higher than that in the 8.35% group (p < 0.05). Lean percentage of 9.10% group was higher than that of 8.35% group and 11.39% group, but there was no significant difference in three groups (p > 0.05). The weight of small intestine and large intestine in the 11.39% group was higher than that in the 8.35% group, and the 9.10% group and the difference reached a significant level (p < 0.05). In conclusion, increasing dietary crude fiber properly could reduce fat percentage, and improve the ratio of meat to fat of finishing Su-shan pigs. The digestion and metabolism of dietary crude fiber promoted the development of stomach and intestine of finishing Su-shan pig.

Keywords : Su-shan pigs, dietary crude fiber, growth performance, serum biochemical indexes
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