PERFORMANCE OF 1 TO 60 DAYS OF SLOW-GROWING CHICKENS FED WITH COTTON PIE

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Cotton pie is the third most widely-produced protein ingredient of vegetable origin in the world, obtained from the processing of cottonseed for the extraction of oil by solvent and fine grinding, being found in the market with crude protein content between 30 and 43%. The production of slow-growing chickens is mainly concentrated in family farms, whose main characteristic is the cultivation of several types of products and the conservation of native plants in their lands, such as babassu and oil palm, and the knowledge of the nutritional value of alternative products to corn and soybean meal in the diet of the birds can lead the family farmer to optimize their production. In this sense, the study of alternative food sources has the purpose of determining the level of inclusion in the diet and reducing the cost of the feed while, providing the nutrients essential for the good performance of the birds. The objective of this study was to evaluate the effect of soybean meal protein substitution by cotton pie protein on the performance of 1 to 60 days of slow growing chickens of the Pescoço Pelado. A total of 450 birds of both sexes, distributed in a completely randomized design (DIC), with five treatments (0, 10, 20, 30 and 40%), six replicates and fifteen birds per replicate were used. The birds and rations were weighed to calculate the feed consumption (CR), weight gain (GP), feed conversion (CA) and final weight (FP) of birds from 1 to 60 days. A linear decreasing effect was observed for the feed conversion variable (CA) from 1 to 60 days of age, where as the level of soybean meal replacement by the cotton pie increased, there being a improvement in the feed conversion rate of the birds in the studied period. For the other variables, no significant effects were observed. The improvement in feed conversion may be related to the increase of the ethereal extract content of the rations containing the cotton pie, with an improvement in the use of nutrients, due to the extra caloric effects of fat, which also acts in the satiety center, reducing the speed of emptying of the digestive tract. Thus, based on the results, it is recommended up to 40% the substitution of the soybean meal by the cotton pie in the feeding of slow-growing chickens.

Keywords: body weight, feed intake, weight gain,