SENSORY ATTRIBUTES OF SLOW-GROWING CHICKEN MEAT 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 use of industrial co-products can influence not only the performance of poultry but also the final product, chicken meat. Caipira type birds attract consumer attention due to the organoleptic characteristics of the meat: more pigmented coloration and a more consistent texture that influence in a characteristic and different flavor of lineages created in an industrial system. It is therefore important that, when inserting an alternative source in the feeding for slow-growing chickens, the meat characteristics desired by the consumer are not modified. The objective of this study was to evaluate the effect of soybean meal protein substitution by cotton pie protein in the diet on sensory parameters of slow-growing chickens meat. A total of 450 birds of both sexes of the lineage Pescoço Pelado Vermelho were used to evaluate the characteristics of tenderness, succulence and flavor in a hedonic scale of nine points that indicated the intensity of each attribute. At 85 days of age, two birds of each plot, after 12 hours fasting, were identified, weighed and slaughtered by cervical dislocation and the sensorial evaluations performed on the breast fillets (Pectoralis major) by five trained tasters. The experiment was carried out in a completely randomized design (DIC), with a basal diet and four levels of substitution of the crude protein of the soybean meal for the crude protein of the cotton pie, totaling five treatments (0, 10, 20, 30 and 40%), six replicates and fifteen birds per replicate. No was observed significant effect of the levels of soybean meal protein substitution by the cotton pie protein for the sensory parameters of the meat, both for succulence, softness and texture. The organoleptic characteristics associated to these attributes, determine the pleasant sensation of the meat, provoking the acceptance by the consumer. According to the hedonic scale used, the meat was classified as very soft, slightly juicy and slightly tasteful, so based on the results, it is recommended up to 40%, the substitution of soybean meal protein for the protein of the cotton pie in the feeding of slow-growing chickens.

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