ANALYZES OF TEXTURE OF CHICKEN MEAT FED WITH RATION CONTAINING DRY DISTILLERY GRAIN WITH SOLUBLE

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Evaluation of texture and tenderness of a muscle is given front a texture analyzes that measures the capacity in kilogram-force (Kgf) in which a blade can break muscles fibers. Inclusion of ethanol coproducts on bird diets is still little defunded, and the ingredient is a a good feed alternative, based in its nutritional qualities. The objective on the present research was to evaluate objective tenderness of breast meat of chicken fed with inclusion in different levels of dry distillery grains with soluble (DDGS) of corn in the diet. There were used 700 broiler chickens, in a period of 1 to 42 days of age, from 500Cobb lineage, divided in a completely randomized design with 5 treatments, 7 repetitions and 20 birds per experimental unit. Levels of DDGS of corn studied were: 0; 4; 8; 12 and 16 per cent. At 42 days of age, two birds of each experimental plot were slaughtered so the breasts could be separated from the remain carcass in order to make the analysis. Tear force was the parameter utilized. Meat samples of raw breast were packaged, and after that they were transferred to water bath in 85°C for 30 minutes for vape cooking. After the procedure, the samples were withdrawals of the water bath, cooled to room temperature and were cut to pieces with 1cm x 1cm x 2cm (height, width and length respectively). Those were placed with fibers oriented in perpendicular direction to the blade of the texturometer. The texturometer used was a Stable Micro Systems TAXT2 Plus equipped with probe blade set V Wmrn Bratzler, calibrated to standard weight of 5Kg and traceable pattern. The speed of deciding and cut of the device was adjusted to 200mm per minute. Means of the parameters evaluated was submitted to variance analysis with 5% of probability using SAS program (SAS institute). Tear force of the control group showed means of 4,22 kgf, the one of the treatment with 4% of DDGS was 4,88 kgf, the treatment with 8% presented 4,09 kgf, the treatment with 12% of DDGS obtained 3,55kgf and finally the treatment with 16% DDGS acquired 4,90kgf. These values corroborate with literature in this segment. There was no significative difference (P>0,05) among the tested groups. Addition up to 16% pf DDGS in broiler chicken’s diet does not interfere in objective tenderness of breast meat of the birds in the period tested.

Keywords: coproducts, ethanol, tear force, tenderness