





## CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

## GASTROINTESTINAL TRACT MORPHOLOGY OF CHICKENS FED WITH RATION OF DESTILARY DRY GRAIN SOLUBLE

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An animal performances is intrinsically chained, among another factors, to its capacity to absorb nutrients. Manipulation of gastrointestinal functions on birds is an important tool to improve feed efficiency. In order to accomplish so the nutritional program of the animal must be according to its physiological needs. The technique of adding ethanol sub products to bird's diet is still little diffused, and can be a good alimentary alternative, due to its nutritional qualities. Therefore, the present study has the objective to evaluate the length of the segments of the small intestine of chickens fed with different levels of inclusion of distillery dry grains soluble (DDGS) of corn in the diet. There were used 700 hick broilers in a period of 1 to 42 days of age, from 500Cobb Lineage. The animals were divided into a completely randomized design with 5 treatments and 7 repetitions, containing 20 birds per experimental unit. The levels of DDGS of corn used in the study was 0; 4; 8; 12 and 16%. In the day 42, 2 birds of each experimental plot were slaughtered for extraction and measurement of the segments of small intestine. Length measurement of duodenum, jejunum and ileum were realized after gastric content emptying. The measurement was made using a roller of 30 centimeters, with 0,1 millimeters precision. The means of evaluated parameters were submitted to variance analysis at 5%, utilizing the SAS program (SAS institute). The addition of different levels of DDGS in the diet of hick broilers did not affect the length of the duodenum and jejunum (P>0,05). For the treatments with 0; 4; 8;12 and 16% of inclusion into the diet, was observed on duodenum length: 29,78; 29,72; 28,61; 28,38 and 28,63 centimeters respectively. For jejunum length we had: 72,06; 74,95; 72,70; 71,19; 72,26 centimeters for the same treatments. However, in relation to ileum length and small intestine total size there was significant difference (P<0,05), where the treatment with 4% of inclusion showed greater mean on the size of the ileum (79,83), when in the small intestine total size it was (184,50). The treatments 0, 8, 12 and 16% presented respectively for ileum length: 72,10; 76,31; 73,89; 72,87 and small intestine total size: 178,95; 117,62; 173,47 and 173,78. The addition of until 16% of DDGS in the diets for hick broilers do not cause undesirable effects in the size of the segments of the small intestine of hick broilers.

Keywords: Co product, ethanol, nutrition, birds, birds nutrition

Promoção e Realização:













