

Nutritive Value of Three-Stage Olive Cake (*Olea europaea* L.) for Growing Rabbit

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Abstract : In rabbits feeding, minimum fibre intake is essential to avoid digestive disorders. However, this concentration of fibre is not easy to obtain when formulating feeds, without reduction of nutritional value. Three stage olive cake, the residual material after oil extraction by centrifugation, including pulp and stones, can be used as a fibre source in rabbit diet. The incorporation of olive cake can allow a better balance between different fibre fractions and reduce health disorder. However, for practical use of any raw material, it is necessary to know its chemical and nutritive value. The aim of this study was to assess the nutritive value of three-stage olive cake (TSOC) for growing rabbits. Thus, 36 rabbits weaned at 35 days (702.8 ± 28.5) were divided into three groups of 12 receiving one of the following diets: control with 0% of TSOC, TSOC10 (10% of TSOC) and TSOC20 (20% TSOC). The rabbits were individually housed in digestibility cages and received ad libitum one of the three diets, fresh and clean water was provided ad libitum. After an adaptation period of 7d, feces were collected for 4d. Collected feces were frozen and stored for further analysis. The chemical composition of TSOC shows that it is a rich fiber raw material since it contains (%DM): 6% of CP; 7.4% of EE; 78.7% of NDF; 55.4% of ADF and 24.3% of ADL. The inclusion of TSOC at 20% of basal diet reduced the digestibility coefficient of organic matter, crude protein and NDF from 67.8 to 55.3%, 80.4 to 75.3% and from 31.5 to 18.4% ($p < 0.001$) respectively. The digestible energy and digestible protein content of the three-stage olive cake estimated by regression was 2.94 ± 0.52 MJ DE/kg DM and 22.4 ± 6 g DP/kg DM respectively. In conclusion, based on the results of the present experiment, the three-stage olive cake can be used as a fibre source for rabbit.

Keywords : digestibility, nutritive value, olive cake, rabbit

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