

ICAND 2019
International Conference on Animal Nutrition
and Diseases, Istanbul, Turkey July 29-30.

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

Z. Dorbane¹, S.A. Kadi², D. Boudouma³, T. Gidenne*

1: Ecole Supérieure agronomique (ESA) Mostaganem, Algeria (e-mail : zahiadorbane@hotmail.fr); 2: Faculté des Sciences Biologiques et Sciences Agronomiques, Université M. MAMMERY, UN1501Tizi-Ouzou, Algeria (e-mail : kadisiammar@yahoo.fr); 3: École Nationale Supérieure Agronomique, département des productions animales, Algeria (e-mail : dalila_boudouma@yahoo.com)

* INRAE, Université de Toulouse, INPT, INP-ENVT, Castanet Tolosan, France (e-mail : thierry.gidenne@inrae.fr)

Abstract—In rabbits feeding, a 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. The incorporation of olive cake as a source of fibre can allow a better balance between different fibre fractions and reduce health disorder. However, for a practical use of any raw material, it is necessary to know its chemical and nutritive value. The objective of this study was to assess the nutritive value of three-stage olive cake for growing rabbits. As well, the nutritive value of sun-dried three stage olive cake (TSOC) for growing rabbit was studied by comparing 3 diets containing increasing incorporation level of COC (0, 10 and 20%) in substitution to basal diet. Three groups of 12 rabbits (individually caged) were fed *ad libitum* the three diets. The faecal digestibility of the diets was measured between 42 and 46 days of age. Chemical analyses were conducted at INRA Toulouse (UMR 1388 GenPhySe, France). The average chemical composition shows that TSOC is a fibre source since it contains (% DM) 78.7% of NDF, 55.4% of ADF and 24.3% of ADL. The substitution of 20% of basal diet by three stage olive cake reduced the digestibility of organic matter, crude protein and NDF from 67.8 to 55.3%, 80.4 to 75.3%, 31.5 to 18.4% ($P < 0.001$) respectively. The digestible energy (DE) content of the olive cake estimated by regression was 2.94 ± 0.52 MJ DE/kg DM. Protein digestibility of three stage olive cake was estimated at 37.0%, corresponding to a digestible crude protein concentration of 22.4 ± 6 g DP/kg DM. Crude olive cake could be considered as a moderate source of nutrients for growing rabbit but a good fibre source.

Keywords— Digestibility, Nutritive Value, Olive Cake, Rabbit.