A survey on probability of using pistachio residues in ruminant feeding

P. Shakeri1*, N. Forough Ameri1 and A.D. Forozandeh2
1. Academic Members of Kerman Agricultural Research Center
2. Assistant Professor of Islamic Azad University, Khorasgan Branch, Isfahan

Wet Pistachio Dehulling Process Residues produced in Iran (PDPR) is about 480000 ton every year. Kerman province have about 400000 ton and what remain is produced in Semnan, Isfahan, Ghazvin, Tehran, Ghome and other provinces. Nevertheless the moderate nutritive value of these matters, they have been released without any usage, near the pistachio gardens and cause pollution especially by aflatoxin. Studies in Kerman agricultural research center, about the possibility of using (PDPR) in ruminant rations show that these matters are a combination of 64.5% epicarp, 25% cluster, 10% leaf and 0.5% kernel and hard hull. Also in different condition, in Kerman province, the quantity of wet (PDPR) is 1.25-2 Kg in payment of 1 Kg dried pistachio nuts. The average of DM, CP, CF, Crude Ash, EE, NFE, NDF, ADF, DDM, total Phenolic compounds, Tannin, Ca, P, Mg and K were: 95.8, 12.5, 16.0, 10.0, 4.2, 55.5, 23.6, 17.4, 50.1, 10.5, 5.0, 1.1, 0.11, 0.31, 4.4 percentage respectively, Fe, Mn, Cu and Zn were: 660.7, 236, 16.2, 27.5 Mg/Kg respectively and GE was 4444 Meal/Kg. The body weight gain of Kermani lambs fed with diet containing 0, 10, 20, 30 percentage of (PDPR) were respectively 19.5, 16.0, 15.0 and 10.2 Kg for a period of 90 days. No significant differences (P<0.05) had occurred with consumption of diets containing up to 20 percent (PDPR).

Keywords: Pistachio by, Poduets, Diet, Ruminant, Feeding

* Corresponding author

Email: pirouz_shakeri@yahoo.co.uk