Utilization of two by products silages in fattening and lactation rations

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Abstract:

The objective of this project was to make two by-product silages in order to be utilized in lambs fattening and lactating ewes rations. The two silages were made using different local by-products such as by-products of fruit and vegetable markets, by-products of greenhouses, the by-products of olive pressing (olive cake) and poultry manure (silage 1). While silage 2 was made of vegetable by-products. Three fattening and lactation trials were conducted at three locations at Tulkarm and Jenin. The two silages were fed to fattening lambs and to lactating ewes. Along with one of fattening trial, a digestibility and slaughter trials were performed. Results of these experiments showed that incorporation of silage at different levels caused a significant reduction ($P<0.05$) in feed intake and feed conversion ratios however, had no significant effect on visceral organs. Average weight of tail, breast, shoulder, thigh were affected ($P<0.05$) by BS feeding. BS reduced ($P<0.05$) the weight of pelvic and kidney fat and the carcass fat compared to total carcass fat. Feeding BS improved ($P<0.05$) the nutrient digestibility of dry matter, fiber, crude protein and ash (Al Quisi farm). Results of the other two fattening trials showed that BS improved ($P<0.05$) both average daily gain and feed conversion ratios. Milk yield and average milk fat were increased by feeding BS. Results of the experiments showed that feeding silages resulted in about 5-26% reduction of cost of gain (al Quisi farm) while the reduction in gain was 11 and 31% at Ramin and Beit Qad farms, respectively. It can be concluded that incorporation of BS could be of economical advantages to local sheep farmers.

Key words: silage, by-products, lambs, lactating ewes, performance