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Farmers’ and academia’s views”

## Effect of willow silage ecotypes on carcass characteristics and meat quality of Black Mountain kids

SAMI AWABDEH, RAWAD SWIDAN

*National Agricultural Research Center, Livestock, Jordan*

### Abstract

The objective of this study was to evaluate the effect of willow silage from different ecotype on carcass characteristics and meat quality of Black mountain kids in Jordan. Twenty-eight male black mountain kids were randomly assigned to four groups with different ecotype of willow silages; Control group were kids fed wheat straw, Shoubak, Madaba and Nazareth groups were kid fed willow silage from ecotype. Concentrate were formulated accordingly to each diet to fed iso-caloric, iso-nitrogenous rations. Black mountain kids were fed high concentrate diet (20:80, F:C ratio) for 90 days after which 3 kids from each group were sacrificed to study the effects of willow silage from different ecotypes on carcass characteristics and meat quality in goat meat. Hot carcass weight, cold carcass weight, dressing percentages were not affected by feeding different willow silage ecotype. Weight of internal organs were all unaffected by feeding willow silage from different ecotypes except for spleen weight Madaba group were higher ( $p < 0.05$ ) compared to Control and Shoubak group, while Nazareth group were intermediate. Kidney fat for control lambs was significantly ( $p < 0.05$ ) higher (395 g) compared to willow silages groups (238, 233 and 223g, for Madaba, Shoubak and Nazareth, respectively). As a percentage of cold carcass weights, control had significantly ( $p < 0.05$ ) lighter racks cuts compared to other silage groups. Although the depth (A) of Longissimus dorsi muscle were significant ( $p < 0.05$ ) lower in control kids, total loin area was not significant. In conclusion, silages from different ecotypes of willow had similar effects on carcass characteristics of black mountain kids, however feeding willow silage decrease the deposition of kidney fat and produce heavier rack cuts compared to kids fed wheat straw as a source of roughages.

**Keywords:** Carcass characteristics, meat quality, willow (*Salix* spp.) ecotypes, willow silage