

Abstract

This study was carried out to determination of chemical composition and nutritive value of *Alhagi Persarum* ensiled by adding of sugar beet pulp and urea. For this aim *Alhagi persarum* forage were harvested from Hirmand region of Sistan & Baluchestan province and chopped with cutting length about 3 to 4 cm for ensiling. Then were mixed with different levels of sugar beet pulp (0,10,20 and 30%) and urea (0 and 4%) per KG dry matter and test of factorial method (4×2) was performed in a completely randomized design and ensiled in 5 Kg plastic baskets. The silages were opened after 45 days and chemical compositions including dry matter (DM), organic matter (OM), crude protein (CP), cell wall (NDF) and cell wall without hemicelluloses (ADF) were measured according to the standard methods. Organic matter digestibility, metabolizable energy content and dry matter degradability were also determined by *in vitro* gas production and *in situ* nylon bags methods. Results showed that the addition of sugar beet pulp and urea increased DM, OM, Ash, CP and EE content and significantly decreased ADF and NDF content over the control ($p < 0.05$). Also adding of sugar beet pulp to silage caused a decreased PH in compare with control group. Addition of urea to silage caused a significant increase in CP content in compare to control group ($p < 0.05$). The results of *in situ* degradability showed increase DM degradability in all times of incubation by adding of sugar beet pulp and urea to silage. Also, results of *in vitro* gas production showed that the addition of sugar beet pulp and urea increased amount of gas production in compare to control group. It appears to addition of sugar beet pulp at level of 30% and urea at level of 4% to *Alhagi Persarum* ensiled was better than other treatments and nutritive value of *Alhagi Persarum* has been improved.

Key words: *Alhagi persarum*, Sugar beet pulp, Urea, Digestibility



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**Effect of adding sugar beet pulp and urea on
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