

Abstract:

The aim of this research was to investigate the chemical compositions and nutrition value of processed *Prosopis Juliflora* pods. It was treated for 24 and 48 hours by using sodium hydroxide, sodium chloride, and heat. All samples were collected from Hormozgan province. After drying, samples prepared in 2 mm by grinding,. The treatments include; 1- treated with heat at 70 °C for 24 and 48 hours 2- treated with sodium hydroxide (4%) for 24 and 48 hours 3- treated with sodium chloride 4- control group. According to standard methods, DM, CP, EE, ADF, and NDF were measured. Metabolizable energy and organic matter digestibility were determined by using *in vitro* gas production and *in situ* nylon bag technique used to determining dry matter degradability and the data was statistically analyzed by complete random design. The results of chemical composition showed that processing significantly ( $P \geq 0.05$ ) changed the DM, OM, NDF, ADF, CP, and ASH than the control group as. The DM degradability results showed that processed groups were affected ( $P \geq 0.05$ ) at 3, 6, 12, 24 of incubation time compared with the control group. Gas production and gas production parameters results also affected notably by treatments. Overall, this study showed that probably processing with Sodium hydroxide, Sodium Chloride and heat can improve the nutrition value of *Prosopis Juliflora* pods.

Keywords: Gas Production, Digestibility, *Prosopis Juliflora*, pods, Processing.



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**Titel:**

**Study of chemical composition and nutritive value of  
processed *Prosopis Juliflora* pods**

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