



**The Thesis Submitted for the Degree of Master of Science
(In the Field of Animal Nutrition Science)**

Title:

**The effect of different levels of water and whey
on the nutritional value of forage corn silage**

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Abstract

This research was carried out to determine the chemical composition and nutritional value of forage corn with different levels of cheese water and water. Forage corn was harvested from Zabol farms and crushed into 43 centimeters for silage. Forage crops with additives per hectolitre of warm The dry matter included cheeses of water, 0.5 and 1%, and water at 0.5 and 1% in silica plastic buckets. After 60 days silos were opened. The chemical compounds included dry matter (DM), organic matter (OM), crude protein (CP) , Cell wall (NDF), cell-free cell-free cell wall (ADF), standard methods (AOAC), and metabolic energy metabolism The method of gas production (in vitro) and dry matter degradability were also measured by in situ method. The results showed that the addition of whey resulted in a significant increase in dry matter, crude protein, crude fat, organic matter . Therefore, the reduction of cell wall and cell wall without hemicellulose significantly increased ($p < 0.05$). Also, the addition of whey resulted in a decrease in pH, but no significant difference was found between the ash and the cheese water and juice composition, both separately and in combination with chemical compounds. The degradability results showed that both additives increased degradability during all incubation times, as well as the results of the production Heavy water and cheese increased the production of gas as compared to the control treatment.

Key words: Forage corn, digestibility, whey,