

Abstract:

This research was conducted to determine the chemical composition and nutritional value of whole forage forage, silage with urea, sugar beet pulp and formic acid. For this purpose, complete forage was harvested from the farms of the city of Hearmand and crushed into 4-3 cm pieces for siltation. Full feed in barley with additives per kg of dry matter including urea at 5%, sugar beet pulp at 10%, and formal acid at 0.08% in 5 kg plastic buckets, and after 45 days silos Opened up. Chemical compounds include dry matter (DM), organic matter (OM), crude protein (CP), cell wall (NDF) and standard cellular (ADF) cell wall with standard methods (AOAC) and digestibility of organic matter and energy. Metabolism was measured by in-vitro method and dry matter degradation by (in situ) method. The results showed that addition of urea caused a significant increase in crude protein and reduced dry matter, organic matter, cell wall and cell wall without hemicellulose compared to control. Adding sugar beet pulp increased organic matter and reduced cell wall, cell wall and hemic cellulose cellulose and ash ($P < 0.05$). Adding sugar beet pulp increased organic matter and reduced cell wall, cell wall and hemic cellulose cellulose and ash. Adding formic acid increased the cell wall, cell wall without cellulose and dry matter, as well as decreased pH and did not have a significant effect on the rest of the chemical compounds. In sum, urea, sugar beet pulp and formic acid, both individually and in combination with chemical compounds, were affected. The degradability results showed that all three additives increased degradability at all incubation times. Also, the results of gas production showed that urea and sugar beet pulp increased the amount of gas produced compared to control treatment and formic acid decreased the amount of gas produced.

Key words: Whole barley, Beet sugar pulp, Urea, Formic acid, Nutritive value



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