Abstract

The purpose of this study was to determine the effects of different levels of yeast and molasses on chemical component, nutritional value and *Atriplex lentiformis* silage digestibility. The levels of yeast include: zero (control), 2.5 and 5 g/kg dry matter and levels of molasses include: zero (control), 10 and 15 percent were added to Atriplex and they were silo. The experiment was conducted the factorial method (3 × 3) on a completely randomized design. The chemical compound were include: dry matter (DM), organic matter (OM), ASH, cell wall (NDF), cell wall without hemicellulose (ADF), ether extract (EE), crude protein (CP) and water soluble carbohydrate (WSC). Then, in order to measuring of the degradation percent dry matter and organic matter digestibility in the investigated treatments were used by the nylon bag technique and gas production test on three fistulated male calves, respectively. Test results showed that adding the levels of 2.5 g/kg yeast had not significantly effects on organic matter, cell wall, cell wall without hemicellulose, crude protein and ether extract compare with treatment control but increased dry matter and pH, and decreased water soluble carbohydrate. adding the levels of 5 g/kg yeast increased dry matter, Ash, cell wall, cell wall without hemicellulose and decreased organic matter, ether extract, water soluble carbohydrate and pH but had not significantly effects on crude protein. adding the levels of 10 percent molasses decreased cell wall, cell wall without hemicelluloses, organic matter and pH but increased dry matter, water soluble carbohydrate, Ash and had not significantly effects on crude protein and ether extract. levels of 15 percent molasses decreased cell wall, cell wall without hemicelluloses, crude protein, Ash and increased dry matter, water soluble carbohydrate, ether extract and pH. The levels of 5g/kg yeast and 15 molasses produce the highest amount of gas they showed significant difference (p<0.05) with control. levels of 2.5 g/kg yeast and 10 molasses were showed the highest amount digestibility dry matter and no significant difference with control. The results indicate adding yeast and molasses in *Atriplex lentiformis* silage improvement its nutritive value and levels of 5g/kg yeast and 15 molasses were showed the best results.

Keywords: yeast, molasses, silo, Atriplex, nutritive value.
Effect of yeast (*Saccaromyses cerveasia*) and molasses on the nutritive value of *Atriplex lentiformis* silage

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