Effect of Urea and Molasses on the Chemical and Fermentational Properties of Citrus Pulp Silage

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This experiment was conducted to determine the effects of different levels of enzyme on the chemical composition and fermentational properties of citrus pulp silage. In this experiment, the whole citrus pulp was manually chopped (3-4 cm length) and used as untreated or treated with urea (1g/kg fresh citrus pulp), molasses (10g/kg fresh citrus pulp), or urea (1g/kg fresh citrus pulp) and molasses (10g/kg fresh citrus pulp). Treatments were ensiled under anaerobic condition for 6 weeks. Each treatment had 4 replicates. After 42 days, trial silages were evaluated for chemical composition and fermentational properties (pH and NH_3-N concentration) and the quality of silage was estimated by calculation of flieg point. The data was analyzed by SAS (2004) program and Proc GLM in a completely randomizing design. Means were separated by Duncan test at 0.05 probability level. The result showed that there were significant differences among treatments for DM, NDF, ADF, NH_3N ($p<0.05$). The EE, Ash, and pH were not influenced by treatments. Based on fileg point data, the quality of treatments was different, and the control treatment and control with 1g U and 10g M were the best treatments for quality. This study suggests that increasing 1g U and 10g M to citrus pulp silages can be useful for ensiling of citrus pulp.

Key Words: Citrus pulp silage, Urea, Molasses