Quality Evaluation of Silage in Plastic Bag with Additives.

Saranya Witayanupapyenyong 1 Jantakarn Arananant 2

Abstract

The evaluation of quality improvement on the ensiling of ruzi grass and graham stylo in plastic bag was carried out with four additives as following: 1% salt and 8% molasses, 8% molasses, 85% formic acid at the rate of 5 ml/kg and 8% ground cassava chip or maize.

The result indicated that all of the additives can improve the quality on the ensiling of both ruzi grass and graham stylo. The best quality of silage was found in the additives of salt mixed with molasses and molasses alone which can decrease pH to the lowest level, increase the highest production of lactic acid and reduce to the lowest of butyric acid.

The lower quality of silage was found with the additives of formic acid and ground cassava or maize. There is no significantly difference in ensiling either on pH or level of lactic acid. Interestingly, the additives of formic acid give a better result in decreasing butyric acid than those in ground casava or maize.

* Research project No. 37 - 0713 - 098
1 Pakchong Animal Nutrition Research Center, Pakchong, Nakon-Rachasima
2 Animal Nutrition Laboratory Section, Division of Animal Nutrition, Department of Livestock Development.