

Abstract

The objective of this study was to determine chemical composition and digestibility of Banana tree residues and its silage characteristics. Treatments were in two type of fresh and silage and in four groups:1) control (without additive), 2) adding of 15% waste palm, 3) adding 5% wheat straw and 4) adding 15% waste palm plus 5% wheat straw. After two month, silages opened and determined pH of samples. Then, some parameters was determined which, including chemical compounds (dry matter (DM), organic matter (OM), crude protein (CP), fat (EE), water soluble carbohydrates (WSC), Ash, cell wall (NDF) and cell wall without Hemicellulose (ADF)). To measure the amount of dry matter degradability and digestibility of samples studied, by using nylon bag (*in situ*) and gas production (*in vitro*) techniques on the three Balouchi sheep were studied respectively. Data were analyzed by Factorial design (2×4) with SAS software. Results showed that adding of waste palm cause decrease NDF and increase WSC, so it improved fermentation quality in silage samples. Dry matter degradability in treatment silage of banana tree residues with 15% waste palm plus 5% wheat straw was the highest content, but treatments with 5 percent wheat straw was the lowest ($p<0.05$). In Gas production, the highest gas production volume and digestibility was related to treatment silage of banana tree residues with 15% waste palm plus 5% wheat straw . Overall, results of chemical compositions, dry matter degradability and gas production revealed that treatments with 15% palm plus are the best compare with other treatments. So, they have nutritive value higher than other treatments and can recommend for using in animal nutrition.

Key Words: Chemical composition, Silage, Dry matter degradability, Digestibility.



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**The Thesis Submitted for the Degree M.Sc
In the Field of Animal Nutrition**

Title:

**Investigation of Chemical Composition
and Digestibility of Banana Tree
Residues and Determination of its
Silage Characteristics**

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October 2010