ABSTRACT

WULAN TRIFADILAH, The Addition of Cassava Waste on Elephant grass (*Pennisetum purpureum*) Silage to Improve Animal Feed Nutrition Content, Supervised by ROSA TRIHERTAMAWATI and NURKHOLIS.

The Making silage is intended to preserve the forage to be used in the future. The making of silage have the advantage of the hay, because it is less dependent on daily weather conditions.

The aim of this research was determine the addition of cassava waste on elephant grass (*Pennisetum purpureum*) silage to the content of crude protein, crude fiber and dry matter digestibility and dry matter values.

Research Implementation started in March 2012 to June 2012, research conducted in the UPT (Unit Produksi Peternakan) Ranch and Animal Feed Laboratory Jember State Polytechnic.

This study used the Completely Randomized Design (CRD) with 4 treatments and 5 replications. The treatment are P0 without the addition of cassava waste; P1 4%; P2 6% and P3 8%.

The results of this study provide significant effect on silage pH values but did not significantly affect the content of crude protein, crude fiber and dry matter. The best treatment is at P2 (Addition 6% of cassava waste). The addition 6% of cassava waste could provide enough energy for fermentative bacteria and microorganisms in the elephant grass silage fermentation process.

Keywords: elephant grass silage (*Pennisetum purpureum*), cassava waste