

QUALITY OF EDAMAME BY- PRODUCT SILAGE (*Glycine max*) WITH DIFFERENT TANNIN DOSSES ADDITION

Saifur Rohman

*Animal Feed Technology Study Program
Animal Husbandry Department*

ABSTRACT

The purpose of this research was to determine the best dosage given to silage and the effect of tannin additives on silage quality. This study used 4 treatments and each treatment consisted of 6 replications, namely P0 (edamame silage without tannin), P1 (100% edamame waste silage + 0,9% tannin), P2 (100% edamame waste silage + 1,8% tannin), and P3 (100% edamame waste silage + 2,7% tannin). The parameters measured are silage quality consisting of pH, color, aroma, mold, texture, dry matter (DM), Organanic matter (OM), Crude Protein (CP), Crude Fat (CF), and Crude Fibre (CFI). The research design used was a completely randomized design (CRD). The significantly ($P < 0,05$) different results will be further tested using the Duncan Multiple Range Test (DMRT). The results showed that the addition of tannin had a significant effect ($P < 0.05$) on the decrease in pH, color, fungus, DM, CP, and CF content. While the parameters of texture, aroma, OM, and CFI did not have a significant effect ($P > 0.05$). The conclusion of this study is that the best silage treatment, namely (P1) with the addition of a tannin dosses of 0.9%, produces the best edamame waste silage.

Keywords: *Feed additive, tannin, edamame by-product, silage, silage quality*