

TOTAL FERMENTATION SILAGE OF TOFU INDUSTRY BY PRODUCT AND ITS APPLICATION FOR LOCAL SHEEP PRODUCTION OF FARMER GROUP

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ABSTRACT

This work had two programs, the first program had an objective was an evaluation of total fermentation silage of tofu industry by product (TFSTbyP) and the second program was based on the result of the first program was applied on local sheep production belong to the farmer group. TFS TbyP by different proportion of feedstuff added had three kinds of treatments: First treatment (P1) compose of tofu industry by product (TbyP) 60%, rice brand (RB) 20% and pollard (PL) 20%; Second treatment (P2) compose of TbyP 50%, RB 25% and PL 25%; and third treatment (P3) compose of TbyP 40%, RB 30% and PL 30%. All treatments having 3 replication were fermented by lactic acid bacteria inoculation for 14 days. The result of this study showed that based the pH of silage fermentation, all formula had pH below 4, while based on lactate production that the second treatment that compose of 50% TbyP, 25% RB and 25% PL had was the highest content. However based on chemical composition for TFS TbyP that composes of TbyP 40%, RB 30% and PL 30% was the best one. Therefore by those formula of TFS TbyP was applied for sheep production on farmer group as the second program. The TFS TbyP as result of the first program was fermented for 14 day as ration then was given to sheep for fattening programme by management of farmers. The application of TFS TbyP as ration on local sheep production of farmer group had an average daily gain (ADG) was 70 gr, while the profit of farmer that sell their sheep during Idul Adha day was 104%. Application of TFS TbyP as ration on local sheep production of farmer group also increased the percentage of carcass, 55,4%, the cooking loss, water holding capacity, and tenderness were 20,84%; 34%; and 4,37 kg/cm² respectively and fat 8,05%; protein 19,42% and water content 70,23%. The conclusion of this study was that TFS TbyP can be an alternative of good ration for sheep production of farmer group.

Key word: Total fermentation silage, Lactic Avid Bacteria, Tofu industry by-product, Local Sheep, and Farmer Group

