Ristaqul Husna Belgania

ABSTRACT

Rice bran is potential farm byproduct which can be used for poultry feed because of its abundance in Indonesia. In other side, rice bran contains high crude fiber and easy to rancid which can be solved by fermentation. The aim of study is to prove the potency of *Actinobacillus sp.* ML-08 in increasing crude protein and organic matter content of fermented rice bran. The research design used complete randomized design. There were six groups: P0: rice bran only as negative control, P1: rice bran and molasses 2% as positive control, P2, P3, P4, P5 also rice bran and molasses 2% with addition of *Actinobacillus sp.* ML-08 as fermentation starter doses 5%, 10%, 15%, and 20%. Proximate Analysis was done after 7 days of facultative anaerobes fermentation. Research result showed significant different (p<0.05). The highest concentration of crude protein content was 13.70% in P4 increase from originally (P0) 8.43% and the highest concentration of organic matter showed 90.28% in P3 from originally (P0) 85.93%. The conclusion of this research is *Actinobacillus sp.* ML-08 can increase crude protein and organic matter in rice bran so it can be used to make quality poultry feed efficiently.

*Keywords*: Rice bran, Fermentation, *Actinobacillus sp.* ML-08, Crude Protein, Organic Matter