THE EFFECT OF ADDING BANANA WEEVIL LOCAL MICROORGANISM ACTIVATOR (MOL) ON THE PHYSICAL AND NUTRITIONAL QUALITY OF COFFEE HUSK AS ANIMAL FEED

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ABSTRACT

Coffee is a plant that produces coffee husk waste,100 kg of coffee can produce 43.2 kg of coffee husk. To reduce the accumulation of coffee husk waste, it is necessary to manage coffee husk waste as animal feed with the addition of local microorganism activator (MOL) of banana weevil in order to change the physical quality and nutritional content of coffee husk. Therefore, it is necessary to conduct research on "The Effect of Adding Concentration of Banana Weevil Local Microorganism Activator (MOL) on the Physical Quality and Nutrition of Coffee husk as Animal Feed". This study used a non-factorial Completely Randomized Design (CRD) consisting of 5 treatments Ax: control, Bx: 35 ml, Cx: 40 ml, Dx: 45 ml, and Ex: 50 ml repeated 3 times. Parameters observed include pH, physical quality (color, aroma, texture, and mold), and nutrient content (crude fiber, crude protein, and water content). Physical quality data were analyzed using the Kruskal Wallis test, while nutrient content data were analyzed using Analysis of Variance (ANOVA)). If there was a significant difference, it was further tested using the BNJ test at the 5% level. Organoleptic results of color parameters had the highest value in Cx treatment (40 ml). Texture parameters were solid and not hard in Ex (40 ml) treatment. Fresh sour aroma in Dx (45 ml) and Ex (50 ml) treatments, and the absence of mold Bx (35 ml) treatment. Highest value of water content parameter of 11.8% was produced by treatment in Cx (40 ml). The pH parameter has a very good value from all treatments ranging from 4.2-4.5. Ex treatment (50 ml) produced the highest crude protein content of 1.51%. It can be concluded that the addition of banana weevil MOL gives the best results for physical and nutritional quality in Ex (50 ml) treatment.

***Keywords**: Banana weevil, Coffee husk, Fermentation, Physical quality, Silage*