ABSTRACT

The Influence of Usage of Sweet Potato, Garut and Onggok Flour on Physical Properties and Long Storage of Broiler Feed in Pellet

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Pellet was agglomerated feeds formed by mixtures, compacting and forcing through die openings by any mechanical process. The purpose of this research was to study the effect of usage of garut, sweet potato and onggok flour as binder and storage period on physical quality of diet in pellet form. A Factorial Completely Randomize Design two factors and three replications was used in this experiment. Factor A was binder i.e. A1=control, A2= onggok 2%, A3= potato sweet flour 2%, A4= garut flour 2%, and factor B was storage periods i.e. B1=0 week, B2=2 weeks, B3=4 weeks, and B4=6 weeks. Data were analyzed using ANOVA and the significant difference was further analysed using orthogonal contrast test. The results showed that usage binders highly significantly affected (P<0.01) increase on angle of repose, loose bulk density and pellet durability index (PDI). Storage period highly significantly affected (P<0.01) increase on particle size, angle of repose, loose bulk density, compacted density, shatter test pellet and pellet durability in dex (PDI). Interaction the binders addition and storage period highly significantly effect (P<0.01) decrease on pellet durability index (PDI). There was not found insect in the pellet after six weeks storage period. It was concluded that pelleting using onggok as binder yielded the best quality of pellets in term of physical characteristics.

Keyword: binder, garut flour, sweet potato flour, onggok.