

ABSTRACT

Efendi, Baikuni. 2011. The influence of use of soy sauce grounds as Substitutes of Soybean meal in rations on digestibility value of broiler chicken of Grower Period. Thesis of Biology Department , Science and Technology Faculty, The State Islamic University of Maulana Malik Ibrahim Malang . Advisor I: Dra. Retno Susilowati, M.Sc. Advisor II: A Fitri Amalia, M. Si

Key words: broiler chicken, soy sauce grounds, digestibility of dry matter (DM), organic matter (OM), crude protein (CP); crude fat (CF), crude fiber (CF).

The success of broiler chickens farm is determined by the needs of feed, but it is often constrained by availability and high prices of raw materials. soy sauce grounds that has still a high nutritional value could be expectedly used as an alternative feed. Potential of soy sauce grounds in the ration can be determined by measuring the its digestion value. This study aims to determine the effect of using of soy sauce grounds in the ration on broiler chickens digestibility.

This study is experimental quantitative using Completely Randomized Design (CRD) with 4 treatments and 5 replications. Treatment is distinguished according to levels of use of soy sauce grounds as a soy soybean meal substitute in the ration as much as 0% (P0), 10% (P1); 20% (P2), and 30% (P3). The parameters observed included digestibility dry matter (DM), organic matter (OM), crude protein (CP), crude fat (CF) and crude fiber (CF). Before having treatments, the chickens is fasted for 24 hours, then feed given with force feeding and fasted again for 14 hours. Calculation done by testing levels of nutrients in the ration and feces. To determine the influence processes, the data of counted digestibility result were analyzed using One Way Anova statistics, if there are any real influence, it can be continue to the Smallest Real Difference test (SDT).

The results of study showed that the use of soy sauce grounds influences significantly ($P < 0.05$) on digestibility of dry matter (DM), organic matter (OM), crude protein (CP), crude fat (CF) and crude fiber (CF). LSD digestibility DM (Dry Matter) P1 and P2 showed significantly increased digestibility of DM (Dry Matter). SDT digestibility CP (Crude Protein) and OM (organic matter) show P1 and P2 and it increased significantly the digestibility of OM (organic matter) and CP (Crude Protein). SDT digestibility CF (Crude Fat) proved P3 and P2 which did increased significantly the digestibility CF (Crude Fat). Beside, the results of SDT digestibility CF (Crude Fiber) proved P3 which did increased the digestibility CF (Crude Fiber).