

ABSTRACT

Suryani, Anis. 2011. **The Effect of Combination Golden Apple Snails Flour (*Pomacea canaliculata*) and *Azolla pinnata* Flour Fermentation toward Ration Consumption, Body Weight and Ration conversion of Isa Brown Strain Hens on Layer Period**. Thesis Department of Biology, Faculty of Science and Technology, The State Islamic University (UIN) Maulana Malik Ibrahim Malang. Advisor I: Dr. drh. Bayyinatul Muchtaromah, M.Si. Advisor II: Dr. Munirul Abidin, M.Ag

Key words: Golden apple snail flour, *Azolla pinnata* flour fermentation, Ration consumption, Weight gain, Ration conversion

The poultry feed problems in Indonesia will remain for along with poultry orientation is on the productivity. The problem that happens is the propensity of the feed prices wich are unstable, especially fish meal and soybean meal. Fish meal and soybean meal are the best protein sources of animal protein but the prices tend to be expensive around Rp.11000/Kg for fish a meal and Rp. 6200/Kg for soybean meal. The use of a combination of golden apple snail flour and aquatic ferns fermentation as a substitute for fish meal and soybean meal is one alternative that is used to overcome the high cost the feed ingredients of aquatic ferns and golden apple snails have a similar protein content of fish meal and soybean meal. In addition, the utilization of aquatic ferns and golden apple snail is one effort to reduce the problems that faced by the farmers. Weeds and pests that damage the rice can be used as poultry feed so that the detriment from weeds and pests can be overcome.

This research was conducted in March until May of 2011 in poultry farming, Tumpang district of Malang. This study uses a Completely Randomized Design (RAL) with five treatments and each treatment is consisted of 4 replications. The material used is 20 laying hens layer 1.7-year period with an average initial body weight of 1655.75 grams. The data obtained were analyzed by using a test that is one way ANOVA-Test and if the calculation results significant difference, then futher tests with BNT 0.05% is conducted.

F test on all treatments showed a significsnt difference that is Fcount > Ftablel (0.05). Ration consumption $3.09 > 3.06$, weight gain $4.51 > 3.06$ and conversion ration $3.19 > 3.06$. The results of further testing of BNT 5% on the consumption of rations showed that the combination of 10% golden apple snail flour and 2.5% of aquatic ferns flour fermentation (AP4) has the highest consumption as well as those for weight gain. The ration conversion value in this combination has the lowest conversion rate (11.94) it means that the ration of AP4 has the best quality than other treatments so that a combination of 10% golden apple snail flour and 2.5% aquatic ferns flour fermentation on can be used as a substitute for fish meal and soybean meal in the ration of laying hens on *layer* period.