

## **Effect of complete pellet containing *Asystasia gangetica* leaf on intake, digestibility, growth, carcass composition and meat quality of Muscovy duck**

### **ABSTRACT**

In poultry, one alternative is to reduce the feed cost using local feed ingredients. *Asystasia gangetica* is a weed that contains a lot of protein. Compared to other poultry, ducks can use more fibre. This study was conducted to determine the effect of diet, including *A. gangetica* leaf, on intake, digestibility, growth, carcass composition, and meat quality of Muscovy duck. A total of 30 unsexed ducks (4 weeks of age) with an average body weight of 900 g were divided into two dietary groups (with 3 replications of 5 ducks each): control (0% *A. gangetica*) and treatment (15% *A. gangetica*). Ducks were fed their respective diets ad libitum in pellet form for 28 days. Ducks were slaughtered at the end of the experiment to evaluate the carcass composition and meat quality. Results showed that the ducks fed a treatment diet showed a higher ( $p < 0.05$ ) nutrient intake than the ducks fed a control diet. Similarly, ducks fed a treatment diet showed higher ( $p < 0.05$ ) nutrient digestibility except crude protein. However, no effects ( $p > 0.05$ ) were observed in the growth, feed conversion ratio, and carcass composition between the groups except the wings part, where the ducks fed the control diet showed a higher yield (258 vs. 240g) of wings part than the other group, respectively. Similarly, no differences ( $p > 0.05$ ) were observed in the chemical composition, colour, or pH of meats between the groups, except for dry matter content. However, the meat obtained from the control group showed a higher (136.8 vs. 109.5 mg/100 g of meat) potassium concentration than the treatment group, respectively. It is concluded that the feed ingredients can partially be replaced with *A. gangetica* in duck's diets. However, further study is required to find out the optimum level of *A. gangetica* that can be included in the duck's diet.