

THE EFFECT OF OPERCULIA TURPETHUM ON THE BACH THAO GOAT'S GROWTH

Ho Quoc Dat¹, Nguyen Thi Kim Quyen¹, Nguyen Thuy Linh¹, Truong Van Hieu¹, Lam Thai Hung¹ and Mererith Anne Wilson²

¹Department of Animal Husbandry, Faculty of Agriculture, Tra Vinh University in Vietnam, ²International of the Fisheries and Marine Institute of Memorial University of Newfoundland in Canada

Corresponding author: Ho Quoc Dat; Tel: 0931.046.086. Email: hqdatty@tvu.edu.vn

ABSTRACT

A study was conducted at Tra Vinh University to evaluate the effect of *Operculia turpethum* on increasing weight gain and feeding efficiency of this kind in feeding Bach Thao goats. The study was arranged in a completely randomized design with four treatments and three replications, using 12 Bach Thao goats with an average live weight of 13.0 ± 1.18 kg. Four treatment groups were given with varying levels of *Operculia turpethum* in the diets: 0% (OT0, control), 25% (OT25), 35% (OT35) and 45% (OT45) respectively. The ratios (25, 35 and 45%) were calculated on the basis of 5% body weight and feathered grass. The results showed that the average weight gain of goats in treatments OT0, OT25, OT35 and OT45 was 77, 104, 111, and 91 g/unit/day respectively. The greatest weight gain was seen in treatment group OT35, and was statistically significant ($P < 0.01$). Additionally, dry matter intake of goats in different treatments was statistically significant in the OT35 treatment ($P < 0.05$). The lowest feed conversion ratio was found in OT25 (7.89) and the greatest was found in OT0 (9.38). However, the difference between OT25 and OT35 indicated no statistical meaning. The OT35 treatment showed better weight gain and better economic efficiency in feeding Bach Thao goats in Tra Vinh.

Keywords: *Operculia turpethum*, *Brachiaria mutica*, Bach Thao goats and feed conversion ratio.