

**Editor:**

Wasu Pathom-aree,  
Chiang Mai University, Thailand

**Article history:**

Received: March 24, 2020;  
Revised: June 9, 2020;  
Accepted: July 9, 2020;  
<https://doi.org/10.12982/CMUJNS.2021.006>

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**Research article****Nutrient Yield of Brown Hemp and Its Utilization as Protein Source in Concentrate on Brahman×Thai-Native Cattle Performances****Supreena Srisaikhram<sup>1</sup> and Pipat Lounglawan<sup>2\*</sup>**

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**Abstract** Two experiments were conducted to evaluate the effects of cutting ages and height on the nutrient composition and yield of brown hemp (BH) in concentrate diets on Brahman×Thai-Native cattle performances. The first experiment was to determine the effects of cutting ages (30, 40 and 50 days) and height (30, 40 and 50 cm) on the nutrient composition and yield of BH. The experiment was a 3×3 factorial arrangement in a randomized complete block design. This study clearly showed that cutting ages at 50 days had a greater effect on the nutrient composition and yield than at 30 and 40 days, but the cutting heights did not reveal any significant differences in yield. However, the BH cutting for animal feed before plowing, besides improving the soil for green manure, also benefited feed resources. The second experiment was to study the effects of BH meal (BHM) in concentrate on Brahman×Thai-Native cattle performances. Twelve cattle, averaging  $252 \pm 18$  kg body weight and at ages of 16-18 months were stratified randomly and assigned to one of the three feeding treatments. Cattle were fed BHM in different ratios: the treatments were 0, 10, and 20% of BHM, respectively. There were no significant differences in the dry matter intake among the treatments of 0, 10 and 20% of BHM in concentrate rations. For average daily gain, the minimum response observed was a significant difference at the highest level of 20% of BHM. Therefore, 10% of BHM can be used in the concentrate rations for beef cattle.

**Keywords:** Brahman×Thai-Native cattle, Brown hemp, Concentrate ration, Performances

**Citation:** Srisaikhram, S., and Lounglawan, P. 2021. Nutrient yield of brown hemp and its utilization as protein source in concentrate on brahman×thai-native cattle performances. CMUJ. Nat. Sci. 20(1): e2021006.