

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

## PERFORMANCE OF GOAT KIDS FED INCREASING LEVELS OF BABASSU MESOCARP FLOUR

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The use of byproducts in ruminant production can reduce the cost of production with feed. The mesocarp produced from industrialization of the babassu (*Attalea speciosa*) coconut for edible oil production has been used to produce the babassu mesocarp flour (BMF) that is available throughout the year, thus making it an important alternative for producers due during the conventional grains off-season. Twenty eight crossbred goat kids (initial BW of  $21.6 \pm 3$  kg) were used in a randomized complete block design according to initial BW for evaluating the intake, average daily gain (ADG) and feed:gain (F:G) ratio. Lambs were penned individually during 50 d and fed an isonitrogenous diet ( $125.15 \pm 1.16$  g kg<sup>-1</sup> CP, DM basis) containing 700 g kg<sup>-1</sup> concentrate and 300 g kg<sup>-1</sup> coastcross hay. Increasing levels of BMF were 0, 100, 200 and 300 g kg<sup>-1</sup>, DM basis, corresponding to the experimental diets BMF0, BMF100, BMF200 and BMF300, respectively. Daily, amounts of total mixed ration fed to animals were calculated according to previous day of animal's intake, and adjustments were made when needed so that refused feed did not exceed 10 % of daily intake. Orts (10% of the total weighted) and feed were recorded every week and frozen at -20°C for later analysis. To determine the average daily gain (ADG) and feed efficiency, the animals were weighed weekly after a 14 h fast. Orthogonal polynomials for treatment were determined by linear and quadratic responses to increasing concentrations of BMF addition. Significance was considered at  $P \leq 0.05$ . The BMF did not change ( $P > 0.05$ ) the dry matter intake ( $0.78 \pm 0.22$  kg d<sup>-1</sup>), crude protein intake and organic matter intake. However, BMF increased ( $P < 0.05$ ) the neutral detergent fiber intake (0.20, 0.29, 0.37 and 0.40 kg d<sup>-1</sup> for 0, 100, 200 and 300 g kg<sup>-1</sup>, respectively). The ADG and F:G ratio also did not change ( $P > 0.05$ ) with increasing levels of BMF. BMF can be used in the diet of goat kids at concentration up to 300 g kg<sup>-1</sup>.

**Keywords:** byproduct, consumption, productive indices, weight gain

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