

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

**VOLUNTARY CONSUMPTION OF LACTATING GOATS FED WITH DIETS  
CONTAINING MACROALGAE *Gracilaria birdiae***

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The food shortage that predominates for a large part of the year limits the milk and meat production. The macroalgae is available throughout the entire year and can be used in animal feeding. In order to evaluate increasing levels of inclusion of *Gracilaria birdiae* (GB) in the diet, about the voluntary food intake, 8 saanen goats were used, distributed in two 4 x 4 latin squares, each one with 15 days of duration. The animals were housed in individual bays, with access to drinkers and feeders for roughage, concentrate and mineral salt. The goats were fed three times a day with isoproteic balanced diets containing 13.2% protein (NRC 2007). The roughage was used in a proportion of 60% in dry matter for all treatments, and the concentrate was composed by 4 levels (0, 4, 8 and 12%) of inclusion of GB replacing corn and soybean meal. The voluntary consumption was calculated by the difference between the offered and the leftovers, collected during the last five days of the experimental period. Goats were milked daily, at 5 am and 5 pm, and between the 11th and 15th days the dairy control was performed. The statistical model included the effect of treatments, latin square, animal within latin square, period and interaction treatment with latin square. The comparison between treatments was performed by decomposing the sum of squares into orthogonal contrasts, using the SAS program, at 5% probability. Dry matter intakes, in g.day<sup>-1</sup> and percentage of live weight, were not influenced by the inclusion of GB in the diet. The goats accepted the diet with the inclusion of GB, being demonstrated by the similarity in the voluntary consumptions observed. The consumption of ethereal extract was linearly reduced due to the addition of GB in the diet (P < 0.05), possibly due to the low lipid levels in this macroalga. The intakes of protein, neutral detergent fiber and acid detergent fiber were not influenced by the diets tested (P > 0.05). The macroalgae *Gracilaria birdiae* can compose the concentrate destined to feed lactating goats in levels up to 12% in the natural matter without detriment to the consumption.

**Keywords:** alternative feeding, food intake, ruminants

Promoção e Realização:



Apoio Institucional:



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