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Grazing behavior of lactating Murrah buffalo cows supplemented with cupuassu byproduct

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Brazilian water buffalos (*bubalus bubalus*) are known by their resistance to common bovine diseases, superior weight gain than cattle, high quality dairy and meat products and because of their adaptability to tropical climate and to farm management. The pulp processing of cupuassu fruit (*Theobroma grandiflorum*) originates almonds as by-product that can be used in animal nutrition, especially in the Amazon region. The goal of this work was to evaluate grazing behavior of lactating Murrah buffalo cows supplemented with cupuassu byproduct containing 16.8, 51.4, 8.3, 83.5 and 3.4% of ether extract (EE), neutral detergent fiber (NDF), crude protein (CP), total digestible nutrients (TDN) and nonfibrous carbohydrate (NFC), respectively. Experimental rations were balanced for reaching levels of 22.0 % of crude protein (CP) and 80.1 % of total digestible nutrient (TDN). Two 5 x 5 Latin Square trials were carried out for evaluating five inclusion levels (0, 15, 30, 45, 60 %, dry matter basis) of cupuassu byproduct in rations for 10 lactating Murrah buffalo cows. Rations were offered at milking in amounts of 1.5 $kg.cow^{-1}.day^{-1}$ for ten cows with initial averages of 5.89 ± 0.28 kg of daily milk yield, 596.30 ± 23.03 kg of body weight (BW), from 52 to 70 days of lactation. They were grazing Palissadegrass (*Urochoa brizantha* cv Marandu) pasture managed with 4.0 $AU.ha^{-1}$ of stocking rate during the rainy season. Cows were milking mechanically once a day at 6:30 a.m. in conjunction with their calves whose mean BW was 135.00 ± 3.19 kg. The activities of grazing, ruminating, resting and other activities (OA) were registered by visual observation from 8 a.m. to 18 p.m. in intervals of 15 minutes. Walking, drinking water and milking were considered as OA. The frequency of each activity was expressed as percentage of total number of observations. The general linear model (GLM) of SAS was used for variance analysis and means were compared by Tukey test at 5% of significance level. There were no differences among treatments for all evaluated variables. Means of grazing, ruminating, resting and OA were: 34.36, 12.08, 39.45 and 14.11%, respectively. Adding cupuassu byproduct in rations for lactating buffalo cows grazing Palisadegrass do not affect their grazing behavior.

Key Words: agro-industrial byproduct, dairy buffalo cattle, grazing system