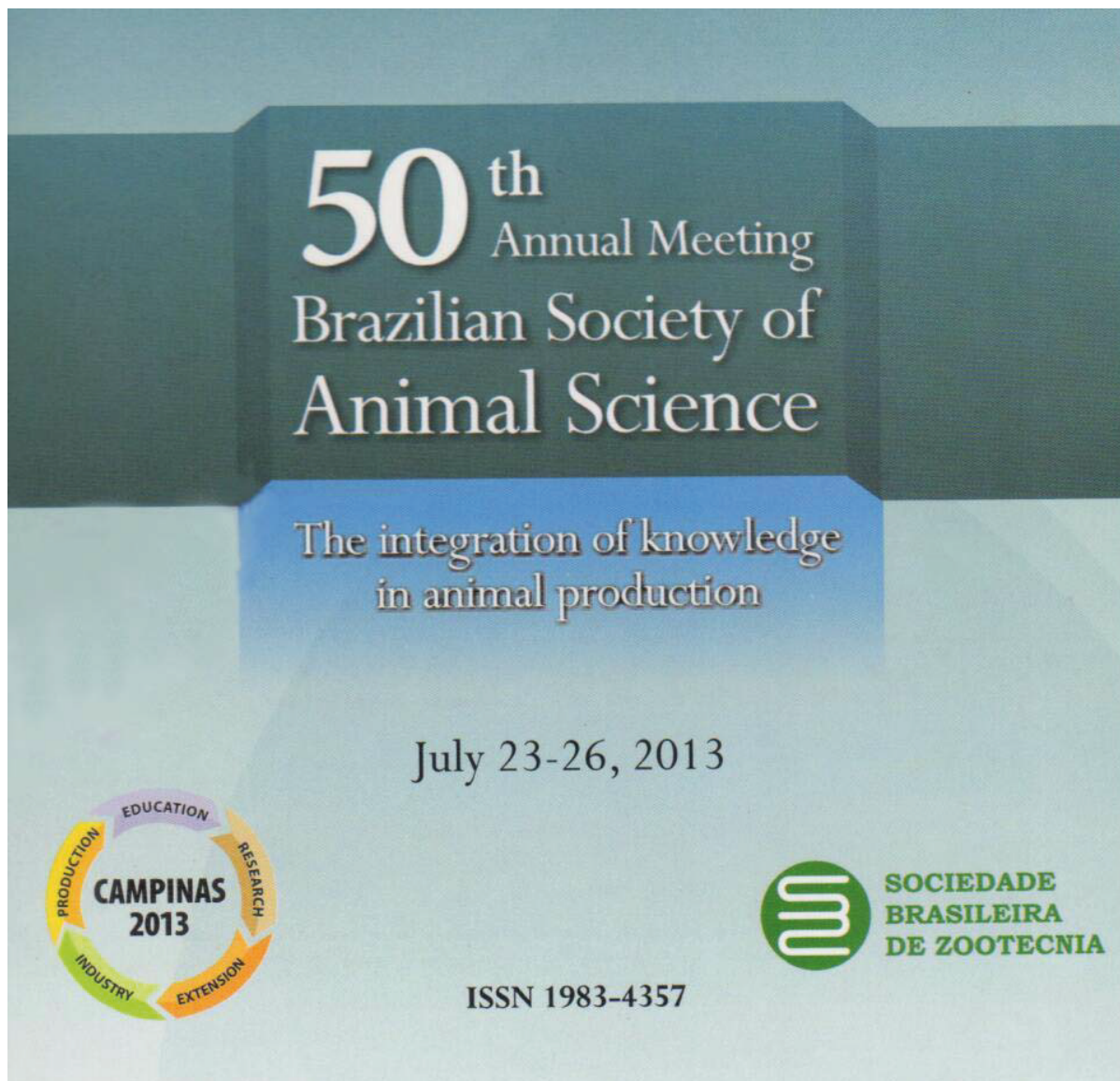


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Lactating dairy cows fed diets with different levels of cupuaçu (*Theobroma Grandiflorum*) meal

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Many agro-industrial byproducts can be utilized for feeding domestic ruminants, which should reduce significantly the livestock feeding cost and also decrease the negative environmental impact due to waste accumulation. Cupuaçu meal is a byproduct of butter extraction from *Theobroma Grandiflorum* nuts. This work aimed to evaluate the inclusion of cupuaçu meal (CM) in substitution to ground corn in diets for lactating dairy cows considering voluntary intake, milk yield and milk composition. The CM evaluated in this study had 93.5% of dry matter (DM), 12.6% of crude protein (CP), 12.3% of ether extract (EE), 54.7% of neutral detergent fiber (NDF), 43.5% of acid detergent fiber (ADF), 11.3% of hemicellulose (HEM) and 4.4% of ash. A Latin Square trial was carried out with four crossbred Holstein x Zebu cows with 536±42 kg of Body Weight (BW) and 102±7.75 days in lactation at experimental start. Experimental diets were based on corn silage and concentrate with 16% CP following a roughage:concentrate ratio of 70:30. Concentrates were balanced with soybean meal and CM in substitution to ground corn following four levels: 0%, 10%, 20% and 40%. Four periods of 15 days (10 for adaptation and five for sampling) were realized, totalizing a 60-day experimental period. During this period, cows were confined in individual feedlot with continuous access to fresh water and mineral mixture. Intake was measured by the difference of offered and refused meal. Daily milk yield was measured during the last five days of each experimental period by weighting milk from morning and evening milking. Milk protein, fat and density were measured in an ultrasonic milk analyzer (Ecomilk M[®]) at Sanity Laboratory of Embrapa Rondônia. Means were compared by Tukey test at 5% of probability. Total intake (kg per day and % of BW) did not differ among treatments and mean values were 19.10 and 4.22% of LW, respectively. Similarly, no statistical differences were observed among means of milk yield and the mean values of milk yield non-corrected and corrected for 4% of fat were 8.40±11.78 and 10.06±13.79 liters per day, respectively. In relation to milk composition, no significant differences were observed and means of fat, protein and milk density were: 3.21±0.33; 5.36±0.73 and 31.11±2.31. Cupuaçu meal as energy source in concentrates mixtures until the level of 40% did not affect total intake, milk yield and milk traits (protein, fat and density) of lactating crossbred dairy cows.

Key-words: agroindustrial byproducts, dairy cattle, alternative feeds

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