

**THEME 5 | GRASSLANDS AND FORAGES**

**Animal performance in pastures of Ipyporã brachiariagrass (*B. ruziziensis* and *B. brizantha*) under continuous stocking**

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The large amount of agriculture area and the weather contribute with the based-pasture livestock production systems in Brazilian Amazon. Actually, the high demand for animal protein with quality increases productivity and profitability challenge's. Focus on that, animal production research aim to identify and apply new technologies to improve livestock productivity. The objective with this study was to evaluate Nellore performance in pastures of Ipyporã brachiariagrass in Amazon biome. The experiment was carried out at Embrapa Agrossilvipastoril, from June/2016 to February/2017, and analyzed in two seasons: dry (June-October) and rainy (November/2016-February/2017). The experimental design was in randomized complete blocks with two treatments (hybrids: BRS RB331 Ipyporã and Mulato II) and four replications. The experimental area were divided into 8 paddocks with 1.5 ha each, totalizing 12 hectares. For performance evaluation, 24 not castrated Nellore steers (tracers), an average, with initial weights of 250 kg and 12 months of age were weighed every 28 days, after 16 h of fasting. Data was analyzed using the method of mixed templates, with special structure in the parametric covariance matrix, through the MIXED procedure of SAS statistical software. To choose covariance matrix, the Akaike information was used. Treatment means were estimated using LSMEANS, and was considered a 0.05 significance level. Stocking rate was affect by season and cultivar ( $P < 0.001$ ). The values were higher during rainy ( $3.8 \text{ UA ha}^{-1}$ ) than dry season ( $2.35 \text{ UA ha}^{-1}$ ). Mulato II, an average, had higher stocking rate ( $3.56 \text{ UA ha}^{-1}$ ) than Ipyporã ( $2.59 \text{ UA ha}^{-1}$ ). There was a season effect for average daily gain (ADG;  $P < 0.0088$ ). Rainy season had lower ADG ( $588 \text{ g d}^{-1}$ ), while during dry season was  $688 \text{ g d}^{-1}$ . Gain per area differ for cultivar ( $P < 0.0231$ ) and season ( $P < 0.0488$ ). An average, higher value were measured in Mulato II ( $511 \text{ kg ha}^{-1}$ ) than Ipyporã pastures ( $360 \text{ kg ha}^{-1}$ ). During rainy season, gain per area was  $492 \text{ kg ha}^{-1}$ , higher than  $380 \text{ kg ha}^{-1}$  registered in dry season. Ipyporã presented high resistance for spittlebugs during the rainy season, when there was a severe attack. At the same time, Mulato II was hardly attacked and some tussocks died. These results indicates Ipyporã as an alternative for forage-base beef cattle production systems in Brazilian Amazon.

**Keywords:** Animal production, Diversification, Mulato II

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