

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

**PERFORMANCE OF NELLORE HEIFERS UNDER PROTEIN-ENERGY
SUPPLEMENTATION IN STOCKPILED PASTURE OF *UROCHLOA DECUMBENS***

Jaciara DIAVÃO*¹, Alex Junio dos SANTOS¹, Rosa REIS¹, Fábio Costa dos SANTOS¹,
Pedro Henrique Ferreira da SILVA², Robson Leandro FERREIRA¹, Carlos Augusto
Brandão de CARVALHO¹

*corresponding author: jacidiavao@gmail.com

¹ Universidade Federal Rural do Rio de Janeiro, Seropédica, Rio de Janeiro, Brasil

² Universidade Federal Rural de Pernambuco, Recife, Pernambuco, Brasil

Protein-energetic supplementation (PES) is a strategy to maintain the performance of ruminants in pastoral systems, and studies on the PES period and the best date of its initiation need to be investigated. The aim of this study was to evaluate the performance of Nellore crossbred heifers supplemented with PES in stockpiled pastures of *Urochloa decumbens*. The experiment was conducted at Santana farm, Valença - RJ, Brazil, under a completely randomized design, with two treatments: 147 and 55 days of PES, (in the dry period of the year) beginning on 06/21/2016 and 09/21/2016 respectively, and ending on 11/15/2016 for both. The experiment was submitted to the ethics council (CEUA-IZ number 23083.00822/2015-56). The Nellore heifers were distributed in two homogeneous lots in according with the racial group (3/4 Nellore), category, age and body weight (mean of 296 kg) and allocated in two pastures of *Urochloa decumbens* (8 ha each), deferred and fertilized with 60 kg ha⁻¹ of N, 50 kg ha⁻¹ of P₂O₅ and 50 kg ha⁻¹ of K₂O on 02/22/16. The mean daily gain (MDG) and the mean weigh (MW) of heifers were evaluated by weighing every 21 days, after a full 12 hours fasting, with a total of eight weighings during the experimental period. The results of MDG and MW were analyzed by PROC MIXED of SAS® 9.2. The periods of supplementation and weighing dates were considered as fixed effect and its interactions as random effects. The means of treatments were estimated by LSMEANS and compared by PDIFF (p <0.05). Higher MDG occurred for heifers of 147 days from the second to fourth evaluation period (from 07/07/2016 to 09/17/2016) due to the PES supply for heifers of 147 days, with additive effect to the low forage intake quality. The MW of heifers was similar between 147 and 55 days PES in last weighing (11/15/2016) due to the greater efficiency of supplemental nitrogen utilization by heifers of 55 days PES, which resulted in an increase in the MDG (compensatory growth) in the final evaluation phase (17/09/2016 to 11/15/2016). The PES supply for heifers of 55 days provided similar performance (MDG and MW) in relation to 147 days of protein-energy supplementation.

Keywords: compensatory growth, dry season supplementation, forage allowance.

Promoção e Realização:



Apoio Institucional:



Organização:

