

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

PRODUCTIVITY OF CACTUS PEAR GROWN USING DIFFERENT PLANTING METHODS

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Alternative ways of planting cactus pear may contribute to facilitate the management and reduce implementation costs. Planting in which the cladode is not buried is little investigated. This study aimed to evaluate the total green forage accumulation rate of the 'Orelha de Elefante Mexicana' cactus pear using different planting methods. The experiment was conducted at the Federal Institute of Piauí - IFPI, Campus Paulistana, starting in March 2017. Three planting methods were studied in a system of beds: with the largest side of the cladode facing the ground, without burying, (P1); with the largest side of the cladode in the north-south direction, 45° slope to the ground and buried (P2); with the largest side of the cladode in the east-west direction, 90° slope to the ground and buried (P3). In all, two harvests were made, and the harvest frequency was six months. This was a randomized block experimental design with three replications. Cactus pear was fertilized (single superphosphate, micronutrients, agricultural gypsum, calcitic limestone and urea) and irrigated by drip irrigation (10 mm weekly water). The total green forage accumulation rate was estimated by harvesting the total biomass of the plot from the first-order cladode and divided by the evaluation period. The comparison of means was performed by the Tukey's test at 5% of probability, using the Statistical Analysis System (SAS 9.0). The P1 treatment resulted in a lower total green forage accumulation rate, with a mean value of 372.36 kg ha⁻¹ day⁻¹. The highest values of productivity were found in treatments P2 and P3, which did not differ from each other, with a mean of 886.18 kg ha⁻¹ day⁻¹. This reduction in the total green forage accumulation rate in the P1 treatment is related to the delay in the onset emergence of cladodes due to later rooting and lower plant density per hectare. There was no interaction between planting methods and harvest cycle. The productivity of cactus pear is influenced by the planting method. The lower productivity of cactus pear in the P1 treatment can be offset by increasing the acreage.

Key words: cactus, forage, *Opuntia*

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