

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

CHARACTERIZATION OF THE CELL CONTENT OF FORAGE CACTUS PEAR GENOTYPES IN POST-HARVEST STORAGE PERIODS AND SILAGES

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The cactus pear stands out due to morphological characteristics that makes it tolerant to droughts. Considering its energy value, high digestibility and adaptability, it became the basis for the feeding of ruminants in the Brazilian semi-arid region. However, there are limitations in the operability of the harvest. Alternative ways such as post-harvest storage and silage making are presented as options to reduce costs within this operation. The objective was to evaluate the cellular content of the silage of three forage cactus pear genotypes regarding their storage for up to 60 days post-harvest. The experimental design was completely randomized consisting of twelve treatments and three replicates, where the treatments were composed of the combination of three genotypes of forage cactus pear (Doce Miúda, Doce Baiana and Orelha de Elefante Mexicana - OEM) and three storage periods (0, 30 and 60 days), plus the silages of the forage cactus pear genotypes. The silages were made in experimental silos of 3.0 kg and opened after 60 days. A fresh sample of 300 g was collected for analysis from each experimental unit. The samples were placed in paper bags to pre-dry in a forced air circulation oven at 65°C for 72 hours and then ground in a Wiley mill using a 1-mm sieve. The dry matter (DM), crude protein (CP), ether extract (EE), mineral matter (MM) and non-fibrous carbohydrates (NFC) were determined. The results were submitted to analysis of variance, and the treatments compared by the Scott-Knott's test at 5% of significance level. Significant difference ($P < 0.05$) was observed for DM, CP, EE, MM, and NFC contents between the different storage periods of forage cactus pear genotypes and their respective silages. The Doce Miúda genotype presented the highest DM contents at 30 days post-harvest storage and as silage (135.3 and 137.0 g kg⁻¹). The OEM variety presented the highest CP contents for storage periods, when compared to silages and other genotypes. The Doce Baiana genotype silage presented the lowest EE content with 7.6 g kg⁻¹. OEM genotype silage showed the lowest NFC content. Doce Miúda and OEM genotypes stored up to 60 days as silage, maintained satisfactory results for the cellular content, except for CP.

Keywords: conservation, silage, *Nopalea* sp., *Opuntia* sp.

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