VEGETATIVE GROWTH OF NINE GENOTYPES OF FORAGE CACTUS

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The spineless forage cactus has a potential for use in animal feed. In arid and semi-arid regions, spineless forage cactus stands out among other forage crops due to its high adaptability and resistance to water deficit. Thus, studies involving productive traits and plant growth are essential to identify potential spineless forage cactus genotypes that can be grown and used for animal feed. The objective of this study was to evaluate the vegetative growth of nine genotypes of forage cactus. This study was carried out at the Experimental Station of the State Agricultural Research Facility of Paraíba, in Tacima, PB, Brazil. Before planting, soil fertility analysis and correction was performed, the planting was carried out in November 2015 and the harvesting occurred in December 2016. A randomized block design was used, with nine treatments and three replications, with 20 plants per experimental unit. Nine genotypes were evaluated: (Negro Michoacan, Polotitlan, Tamazunchale, Texas, Califórnia, Blanco San Pedro, Nopalea Uruapan, Negro Michoacan II e Doce), belonging to the genus *Nopalea*. The total number of cladodes (TNC) in unit, plant height (PH) and plant width (PW) in cm, were evaluated. Analysis of variance and means comparison was performed by the Scott-Knott test at 5% of significance. The genotypes with the highest total cladode numbers were Nopalea Uruapan (59a), California (59a) and Tamazunchale (58a). The genotypes with the lowest total cladode number were Polotitlan (5d) and Texas (10d), while the other genotypes had intermediate cladode quantities. For plant height, the highest genotypes were Nopalea Uruapan (86.33a), Tamazunchale (85.33a), Negro Michoacan (83a), California (78.33a) and Negro Michoacan II (72a). The genotypes with the smallest width were Polotitlan (43.33c) and Texas (62,33c). The other genotypes presented intermediate plant width. According to the obtained results, the genotypes that presented the most desirable vegetative growth characteristics for cultivation were Nopalea Uruapan, California, Tamazunchale and Cactus Doce.

**Keywords:** animal feed, cultivation, forage, genus *Nopalea*, semi-arid