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Regrowth capacity after harvest in elite genotypes of forage palm under the agroclimatic conditions of the Southern Agreste of Pernambuco, Brazil

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Cacti of the genus *Opuntia* spp. and *Napolea* sp., called "forage cactus" in Brazil, have become the main alternative for food production for domestic ruminants. In the state of Pernambuco, the Agreste mesoregion is considered climatically favorable to forage palm cultivation, but little is known about the agronomic performance of the new genotypes developed by the Agronomic Institute of Pernambuco – IPA in the agroclimatic conditions of this geographic mesoregion. Thus, the objective of this study was to evaluate the regrowth capacity of ten elite genotypes of forage palm after harvest under the agroclimatic conditions of the Agreste mesoregion of Pernambuco, Brazil. To this end, a field competition trial was implemented in the municipality of Garanhuns-PE, containing six genotypes of *Opuntia* spp. (IPA-200016, IPA-200174, IPA-100661, IPA-100662, IPA-200149 and IPA-200008) and four genotypes of *Nopalea* sp. (IPA-200205, IPA-100004, IPA-200206 and IPA-100664) distributed in randomized blocks (DBC) with 3 replications and 20 plants per plot. The cladodes of the mother plant were harvested at 420 days after planting (DAP) and after 60 DAP the number of cladodes that resprouted was counted. The data were submitted to ANOVA and the means were compared using Scott Knott's post-hoc test at 5% probability. It was observed that the number of cladodes at 60 days after harvest differs (p=0.0226) between genotypes. The IPA-100661 genotypes; IPA-200149; IPA-2000008 and IPA-100664 showed a regrowth of approximately 20 to 30% higher compared to the others. This results in a larger area of cladodes and consequently provide increased photosynthetic capacity which is directly linked to a faster vegetative growth and harvest time. It was also possible to observe, among the genotypes that showed greater regrowth capacity, three of them belong to the genus *Opuntia*. This fact is directly linked to the morphological characteristics of the genus, where they have a higher number of cladodes when compared to those of the genus *Napolea*, respectively. It is concluded that the IPA genotypes 100661; IPA 200149; IPA 2000008 and IPA 100664 have greater regrowth capacity, decreased harvest time and higher biomass production in the agroclimatic conditions of the Agreste of Pernambuco.
Keywords: Cladodes; *Napolea*; *Opuntia.*

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