



SELECTION OF PUTATIVE “TERRA MARANHÃO” PLANTAIN CULTIVAR MUTANTS OBTAINED BY GAMMA RADIATION

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The aim of this study was to select putative Terra Maranhão plantain cultivar mutants obtained by gamma radiation with good agronomic traits and short height. A total of 315 buds were irradiated *in vitro* with gamma rays in doses of 20 Gy, which were subcultivated and then evaluated in the field over two production cycles. Evaluation of the clones was made for the main purpose of selecting 10% of the best plants. Planting was undertaken at a spacing of 3 m x 4 m, and fertilization was carried out according to the technical recommendations for the crop. A total of 111 irradiated plants and 41 controls were evaluated in the field. Among the irradiated plants selected, genotypes that exhibited reduced height were observed. The genotypes Irra 04, Irra 13, Irra 19 and Irra 21 exhibited a height of 3.6 m, values below the mean value of the selected controls. Other selected irradiated genotypes such as Irra 14 and Irra 16, with a height of 3.65 m, are promising because in addition to reduced height, they exhibited good bunch weight and a shorter period of time to flowering in relation to the mean value of the controls, a significant factor for the next stages in breeding. These results confirm the possibility of use of mutation induction in Plantain for obtaining desirable agronomic traits and short height.