

GENETIC VARIABILITY AMONG THE POTATO CLONES ORIGINATED FROM TUBEROSA x ANDIGENA CROSSES

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ABSTRACT

The objective of this study was to determine the genetic variability among the clones originated from the Tuberosa x Andigena crosses and to select the genotypes with desirable traits. The true seeds generated from the crosses were planted to seedlings beds at Bornova in 1992 to obtain seedling progenies. The seedling progenies were transplanted to field using the Randomized Complete Block Design with three replications at Menemen on 16 April, 1992. In 1993, the hybrid lines generated in Menemen were planted to the field at Bornova. Plant height (cm), the number of main stem and stem number, leaf length and width (cm), tuber yield (g per plot), berry number per plot and seed yield (g per plot) traits were measured.

There were statistically significant differences among the entries in terms of observed traits measured in both years. The lines 9-41 and 9-44 developed from the L506 x R143 gave the highest tuber yield. The lines obtained from L 506 x R 143, Isola x NT 78, Isola x R 143 and Cosima x R 68 crosses had large variation for plant height and the number of stems. The lines belong to 4-8 (Isola x NT 78), 7-1 (NT 77 x R68), 9-41 (L 506 x R 143) and the R162 had high leaf length and width values.