PREMATURE SELECTION OF GENOTYPES FROM PROGÊNIES OF HALF-SIB OF CUSTARD APPLE WITH GREATER ADAPTABILITY AND STABILITY

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RESUMO

The custard apples (*Anonna squamosa* L.) has wide distribution in many tropical and subtropical regions of the world, that produces fruits with excellent nutritional and organoleptic quality .The objective of this work was to select progenies of half-sib of *A. squamosa* L. based on genetic parameters, genotypical gains and stability and adaptability. The parental genotypes were selected from the germplasm collection of *A. squamosa* L. from UNIMONTES (State University of Montes Claros-MG). To obtain the four progenies, fruits from natural pollination were selected, these were identified as UNI-1, UNI-2, UNI-3 e UNI-4, and were distributed in the experimental area in a randomized block design, with three replicates containing 5 plants each. It was evaluated the numbers of flowers per plant (NF) and number of fruits per plant (NFr) in four harvests. The analysis were perfomed by the REML/BLUP procedure, in the Selegen® program. Low and moderate magnitude were observed for individual heritability and repeatibily among progenies 0,2% and 41% (Nfr); 11% e 42% (NF) respectively. The greatest genetic gains were, 4 (UNI-1) e 25 (UNI-1), for both traits. It was found that for NFr progenies differ between the parameters of MHGV (genotypical stability) and RPVG (genotypical adaptability) Progenies 4, 2, 3 and 1 were more stable, progênies 2, 4, 1 and 3 more adaptable. MHPRVG (stability and adaptability) presented the same ranking of adaptability. For NF, porgenies were classified as 4, 3, 2 and 1, for stability. For adaptability, progenies 1, 4, 2 and 3 stood out. With the simultaneous analysis, adaptability and stability, ranking 2, 3, 4 and 1 was observed. When the parameters diverge, the breeder will choose one of the criteria to capitalize on adaptability and stability. Considering the results of this work, the genotypes 4 and 25 (UNI-2) are very promising to continue the breeding program.

PALAVRAS-CHAVE: Heritability, Mixed model, Anonna squamosa L

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