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EVALUATION OF MANGO (*Mangifera indica* L.) PROGENIES OPEN POLLINATEDF. R. FERREIRA<sup>1</sup> & L. C. DONADIO<sup>2</sup><sup>1</sup>SAIN-Parque Rural, CP 02372-70.849-970, Brasília-DF, <sup>2</sup>Dept<sup>o</sup> Fruticultura UNESP/FCAVJ, Jaboticabal - SP, Brasil.

The mango crop in Brazil, despite of its vigor, present some serious problems, mainly related to its varieties. The objective of this research was to select superior plants with purpose to obtain new Brazilian varieties. The work was development in Jaboticabal, São Paulo State (Brazil) where was established 210 plants, propagated through the seeds open pollinated, of 11 varieties. Were evaluated 6 characteristics of plant, 5 of inflorescence through flower and 27 of fruit. The mango propagation through the seeds promoted a great genetic variability; in some fruit features, the progenies exceeded the female progenitor or the standard varieties. It was possible select 11 plants, with the majority of the main characteristics similar or superior to 'Tommy Atkins' and 'Haden 2H'.

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IMPROVEMENT OF HYBRIDIZATION TECHNIQUES ON MANGO TREE (*Mangifera indica* L.) IN THE REGIONS OF BRAZILIAN CERRADOSA. C. DE Q. PINTO<sup>1</sup><sup>1</sup>EMBRAPA/CPAC, Km 18 BR-020, C.P. 08223. Brasília-DF, Brasil.

An intervarietal hybridization study was started at EMBRAPA/CPAC in 1980 with the objective to obtain a dwarf cultivar with high yield and fruit quality. However, the techniques used nowadays are inefficient and expensive. A technique from Indian Agriculture Research Institute (IARI) which requires few flowers per panicle and many plant shown reduced success in the percentage of hybrid fruits (1.45%). The improvement of IARI's technique using the selection of flowers in the panicle, the anther opening, the control of humidity and also the fungus attack promoted an increase in the success of hybrid fruits for 8.2%. A new technique using top-working on dwarf genotypes and confining them in small cages with pollinator flies, may increase the efficiency and decrease the cost of this research.

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## BANANA GENETIC IMPROVEMENT PROGRAMME IN EXECUTION AT THE CNPMF/EMBRAPA - RESULTS OBTAINED

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The principal problems affecting the Brazilian banana crop include low productivity of the cultivars in use (less than 15 t/ha), their lack of drought tolerance, the tall stature of some of them and the presence of diseases and pests. Aiming at solutions, the National Centre for Research in Cassava and Tropical Fruit Crops (CNPMPF) of the Brazilian Enterprise for Agricultural Research (EMBRAPA), in Cruz das Almas-BA, started in November 1982 a programme of genetic improvement for bananas. This paper treats of the main advances achieved during the development of the work, with mention of the present necessities for research and support of the programme, as well as of the priority targets for the biennium 1993/94. Within this general context there are presented information and results concerning the research projects