

AGRONOMIC AND GENETIC PROGRESS IN SUGAR-CANE BREEDING PROGRAM

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- **ABSTRACT:** *A number of 277 experiments performed by IAC Sugar-Cane Center were analyzed, in the period 1994 to 2006 in different environmental conditions. For genetic progress, a number of 49 were analyzed, where seeds and seedlings were generated from 1977 to 1996. A standard cultivar was kept in every location and year along the experiments, in order to analyze the adjusted yield of the superior genotypes (MED) and the best ones of each year (TOP). The results showed average agronomical progress of 1% per year to first harvest production and some stability for the others. The yield is dependent on the environment, with differences up to 40 t/ha between the best and worst environmental conditions. The genetic progress in the program was somewhat higher than 1% per year, showing the efficiency of the program.*
- **KEYWORDS:** *sugar-cane experiments, genetic and agronomical gain; breeding program.*

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