

Effect of the GSNO in the Genic Expression in Cells Suspension of Sugar Cane.

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Plant-pathogen interactions, apoptose, respiration and stomatal closure are some of the process that are modulated at least in part by nitric oxide (NO). Only recently a NO forming enzyme was cloned in *Arabidopsis thaliana* and the knowledge on the genes that are modulated by this molecule is limited. In this work we evaluated the effect of a NO donor on the gene expression in sugarcane cells suspension. Nylon cDNA arrays containing 6144 genes were hybridized with cDNA obtained from cells exposed to 0.1, 1.0 and 5.0 mM for six hours. Thirteen genes were induced and two were repressed. Genes encoding aminotransferases, peroxidases and proteins with unknown functions were differentially expressed. The role of these gene in the putative NO pathway in sugarcane will be described.

Keywords: Sugar Cane, Cell Suspension, Nylon Arrays and Nitric Oxide.

Financial Support: CNPq and FAPESP