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MANIPUEIRA: ITS USE IN OBTAINING A BIOFUNGICIDE

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In the search for an alternative to the intensive use of fungicides in crop production, a soil bacterium was isolated in Guaira, São Paulo State (Brazil). This Bacillus gave good control of the fungus Fusarium solani, an important plant disease. In order to apply this bacterium in larger experimental areas, it was necessary to study its production by liquid fermentation on cheap agroindustrial residues. Manipueira (the waste water from cassava flour industry) was the main component of the medium, supplemented by sugarcane molasses. It was inoculated with the Bacillus sp. (isolated from Guaira soil) and incubated under constant agitation and temperature in 250-ml Erlenmeyer flasks. Bacterial growth, pH and sugar consumption were analyzed over 48 h of fermentation.

The results obtained indicated the ability of the residue to support the growth of the strain tested and the importance of scaling up the fermentation process.