

PLANT GROWTH PROMOTING RHIZOBACTERIA ON TOMATO

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Plant growth promoting rhizobacteria (PGPR) were recently used to increase plant growth in greenhouse and field tests. Also alternative methods for control of the soilborne pathogens with rhizobacteria are being sought since adequate chemical control has not been achieved. Fifteen rhizobacterial strains isolated from carrot rhizoplane and selected for their ability to inhibit Erwinia carotovora were inoculated in tomato seeds and sown in sterilized and non-sterilized soils. The evaluations were realized thirty days after seed emergence. Results obtained in sterilized soil showed that some bacteria induced increases in shoot dry weight of 113% and root weight of 100% greater than controls. In non-sterilized soil increases of 48% and 38% of shoot dry weight and root weight were observed, respectively.