Tomato seedling development is improved by a substrate inoculated with a combination of rhizobacteria and fungi

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© 2014, © 2014 Taylor & Francis. Chile's seedling production industry has been growing for the last 10 years, and demand has actually reached 1250 million seedlings per year. This system has special relevance due to the high cost of seeds. In addition, there is an increasing demand for substituting synthetic agrochemicals. Therefore, the potential use of plant growth-promoting rhizobacteria (PGPR) in tomato production has been investigated. Before sowing, the micro-organisms provided by Biogram S.A. were inoculated into the substrate diluted in 250 mL/L unchlorinated water. The experiment was laid out in a ?split-plot? design with the two plant substrates as main plots and the inoculants as subplots, including six replicates per treatment. Tomato seedlings were grown using two different plant substrates: a mixture of 70% peat and 30% perlite by volume, and a substrate with 20% peat, 20% perlite and 60% compost by volume, both inoculated with Bacillus subtilis or Pseudomonas fluorescens