

Research Article

Growth Regulation and Phytohormones in *Solanum lycopersicum* Infected with *Fusarium oxysporum* and Treated with *Verticillium glaucum*

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Abstract

Biological control of plant pathogens is an ecofriendly approach towards a sustainable development. The antagonist, *Verticillium glaucum* enhanced the growth and essential biomolecules by production of phytohormones such as auxins, gibberellins in both hybrid Namadhari (H1) and the local Periyakulam varieties (H2) of *Solanum lycopersicum*, irrespective of the presence or absence of the pathogen, *Fusarium oxysporum*. It was evident that the hybrid variety H2 (Namadhari) responded better to the antagonist when compared to the local variety of tomato. The Hybrid (H1) variety showed enhanced biomass and gibberellin production in *V. glaucum* treated plants, while the local variety (H2) had enhanced auxin levels when compared to the untreated plants.

Key words: Auxin, biomass, *Fusarium oxysporum*, Gibberellin, *Solanum lycopersicum*, *Verticillium glaucum*

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