

Interaction of Water Stress and VA Mycorrhizal Inoculation on Green Bean under Different P Levels

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Abstract : In a greenhouse experiment, green bean were inoculated with three levels of phosphorus (P1, P2, P3, respectively 0, 50, 100 kgP/h) and four levels of water stress (Fc1, Fc2, Fc3, Fc4, respectively 0.8Fc, 0.7Fc, 0.6Fc, 0.5Fc) and one species of VA mycorrhiza (*Glomus versiform*) or left uninoculated as control plants in the steril soil. AM colonization significantly stimulated plant growth, leaf area, shoot, and pod dry weight but water stress significantly decreased colonization, pod and shoot dry weight, and shoot P. The use P levels significantly increased leaf area, shoot, and pod dry weight, pods length, and colonization.

Keywords : green bean, plant growth, VA mycorrhiza, water-stress

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