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Effect of *Endomycorrhiza* (*Glomus intraradices*) and organic matter on cactus pear (*Opuntia albicarpa*) growth in two soil types

Abdul Khalil Gardezi¹, S R Márquez-Berber², B Figueroa-Sandoval¹, H Flores-Magdaleno¹, M Martínez-Menes¹, M U Larque-Saavedra³ and G Almaguer-Vargas²

¹Postgraduate College, Mexico

²Chapingo Autonomous University, Mexico

³Metropolitan Autonomous University, Mexico

Most cactus pear farmers use manure as fertilizer. This practice provokes problems. The use of *Endomycorrhiza* is almost unknown by such farmers. The objective of this work was to study the effect of organic matter and *Endomycorrhiza* on cactus pear (*Opuntia albicarpa*) growth in two soil types under greenhouse conditions. There were differences ($p \leq 0.05$) in all the variables recorded due to the inoculation with *Glomus intraradices* and in most for the application of organic matter. Mycorrhiza and organic matter as vermicompost promoted higher stem and root growth. Overall, based on cactus pear vegetative growth, the application of 50 t ha⁻¹ of vermicompost can be considered as the best alternative. The soil type did not affect plant growth. Mycorrhiza can be useful to improve mineral nutrition. These fungi can increase yields and reduce cost of production in cactus pear plantations. Vermicompost is a better alternative to apply organic matter in this crop.

Biography

Abdul Khalil Gardezi is a distinguished Scientist and Academic Member of the Hydro Science Center, Postgraduate College in Agriculture Science in Mexico since 1981. He has received distinctions for teaching, research and service from 1988 until 2014. He has been selected for the originality of his research, presented as the best paper and oral presentation during 2016, 2005, 2008, 2009, 2010, 2011, 2012, 2013 and 2014 in international congresses in Australia, Canada, England, Mexico and USA. He has published more than 170 papers national and internationally. He has been honored among 2000 outstanding intellectuals of the 21st century by the International Biographical Center Cambridge, England.

kabdul@colpos.mx

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