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+ =T3 =T2 () =T1
+ =T5 + =T4
+ + =T6

Archive of SID

Pdff

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=T₁ :

=T₂ ()

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=T₃

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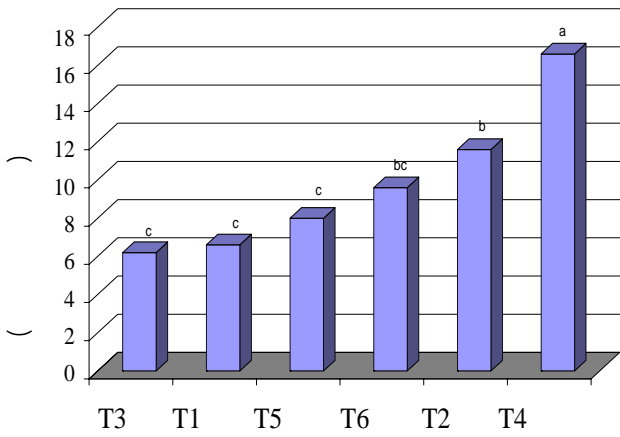
=T₄ (P₂O₅

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Archive of SID

T₄ (

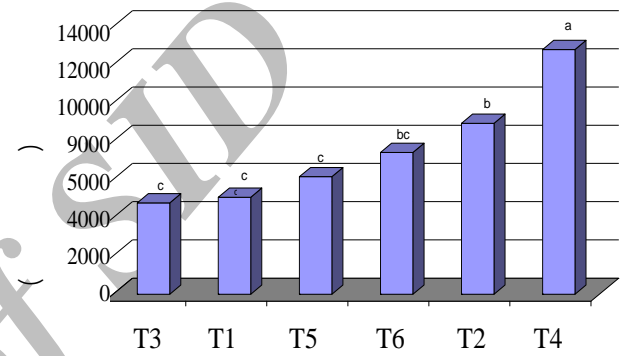
.) ()



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+) T₄
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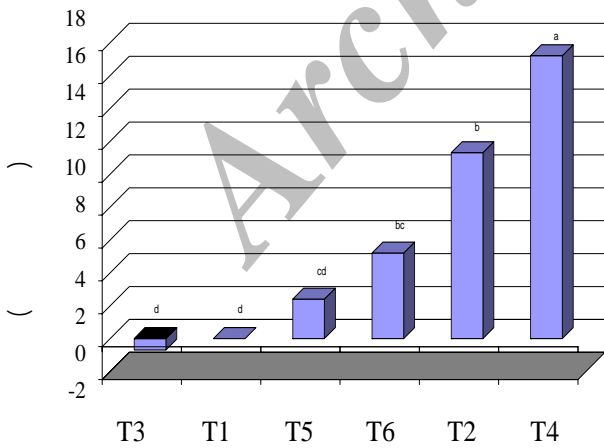
.) ()



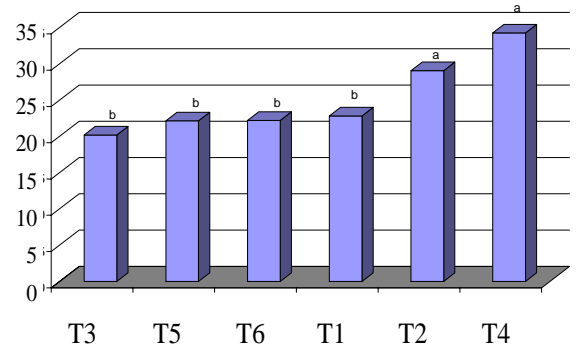
l)

T₄ (

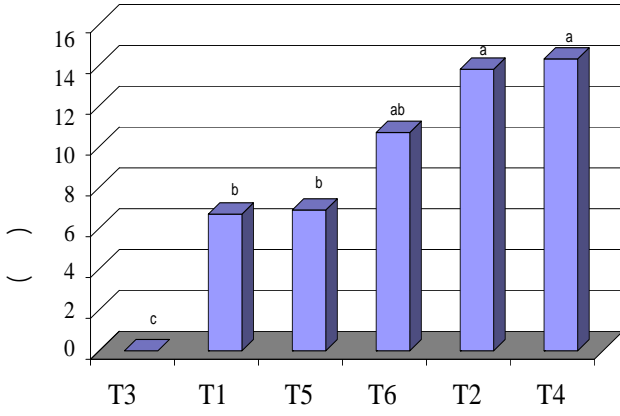
.) ()



T₄ (/)
T₆ T₅ T₃ T₁
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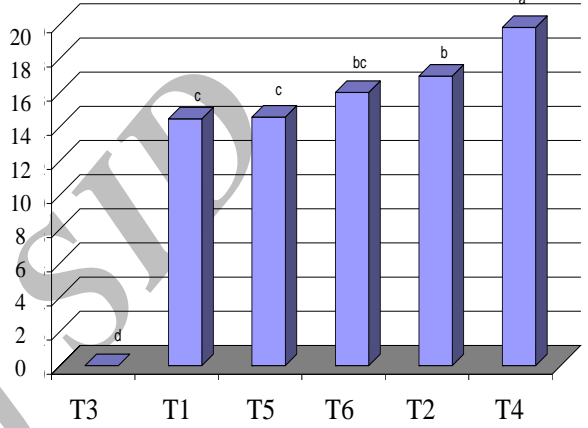


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/ ns	/ *	/ ns	/ ns	/ ns
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()	()	()	()	()	()	
/ c	/ b	d	d	/ c	c	T ₁ =Control
/ b	/ a	/ b	b	/ b	/ a	T ₂ = TSP
/ c	/ b	/ c	/ d	/ c	/ b	T ₃ = Ap
/ a	/ a	bc	/ a	/ a	/ a	T ₄ = Ap+PSB
/ c	/ b	/ c	/ cd	c	/ b	T ₅ = Ap+OM
/ bc	/ b	/ a	/ bc	/ bc	/ ab	T ₆ = Ap+PSB+OM
/	/	/	/	/	/	LSD 0.05

/)

:(

(=) T₁=Soil*

T₂

Pdfs=% / Pdf(Ap)=% / Pdfs =% Pdf =

T₄=Soil*+Ap+PSB T₂ =Soil*+TSP

(+) / /

T₂ Pdfs=% / Pdf(TSP)=% /

T₃ T₂ T₃=Soil*+Ap ()

... :

+) T₄
 (:

Pdfs=% Pdf(Ap+PSB)=%
 T₅= Soil*+Ap+OM

() T₂ (+) /

T₅ Pdfs=% / Pdf(Ap+OM)=% /
 (+) T₆ =Soil*+Ap+OM+PSB
 ()

+) T₆
 (+) /
 () / (+

T₃ Pdfs=% / Pdf(Ap+ PSB+OM) =% /
 ()

() ()
 () ()
 ()
) ()
 ()

pH

REFERENCES

2. Abedi, M. J., & O. Talibudeen.1974. The calcareous soils of Azerbaijan. I. Catena development related to the distribution and surface properties of soil carbonate. J. Soil. Sci. 25(3) 357-372

3. Abedi, M. J. & O. Talibudeen. 1974. The calcareous soils of Azerbaijan. II- Phosphate status. J. Soil. Sci., 25(3): 373-383
4. Campbell, G. S, D. R. Nielsen, R. D. Jackson, A. Klute. Chair, & M. M. Mortland. 1986. Methods of soil analysis. Part 1. Physical and mineralogical methods. Second edition. American Society of Agronomy, Inc. Soil Science of America, Inc. Madison, Wisconsin.
5. Cifuentes, F. R. & W. C. Lindemann. 1983. Organic matter stimulation of elemental sulfur oxidation in calcareous soil. Soil. Sci. Soc. Am. J., 57: 727-731.
6. Dubey, S. K. & S. D. Billore. 1992. Phosphate solubilizing microorganisms inoculant and their role in augmenting crop productivity in India: a review. Crop Research Hisar. 5: Suppl, 11.
7. Elliott, L. F. & F. J. Stevenson. 1986. Soils for management of organic wastes and waste waters. American Society of Agronomy, Crop Science Society of America, Inc, Soil Science Society of America, Inc, 677-South Segoe Road. Madison. W. J.
8. Ghani, A., S. S. S. Rajan, & A. Lee. 1994. Enhancement of phosphate rock-solubility through biological process. Soil Biology and Biochemistry, 26: 127-136.
9. Hardarson. G. 1990. Use of nuclear techniques in studies of soil – plant relationship. Training course series No.2. International Atomic Energy Agency. Vienna.
10. Khavazi, K., F. Nourgholipour, & M. J. Malakouti. 2001. Effect of *thiobacillus* and phosphate solubilizing bacteria on increasing P availability from rock phosphate for corn. International meeting on direct Application of Rock Phosphate and Related Appropriate Technology Latest Development and Practical Experience. Kuala Lumpur. Malaysia.
11. Malakuti, M. J., K. Khavazi, H. Besharati, & F. Nourgholipour. 2001. Review on the direct application of rock phosphate on the calcareous soils of Iran (Country report). International meeting on direct application of rock phosphate and related appropriate technology – latest development and practical experiences. Kuala Lumpur. Malaysia.
12. Maqsood, A. C. & M. Salim. 1994. Growth responses of twelve wheat cultivars and their phosphorus utilization from rock phosphate. Journal of Agronomy and Crop Science, 173: 204-209.
13. Rajan, S. S. S. 1982b. Availability to plants of phosphate from “biosuper” and partially acidulate phosphate rock. New Zea. J. Agric. Res., 25: 355-261.
14. Page, A.L., D. R. Keeney, D. E. Backer, R. H. Miller, Jr. Roscoe Ellis & J. D. Rhods. 1982. Methods of Soil Analysis. Part 2. Chemical and microbiological properties. American Society of Agronomy, Inc. Soil Science of America, Inc. Madiso, Wisconsin. USA.
15. Rajan, S. S. S. 1983. Effect of sulfur content of phosphate rock/sulfur granules on the availability of phosphate to plants. Fert. Res. 4: 287-296.
16. Rastogi, R. C., B. Mishra, & B. P. Ghildyal. 1976. Effect of pyrites and organic matter on release of phosphorus from rock phosphate. Journal of Indian Society of Soil Science. 24: 175-181.
17. Singh, S. & K. K. Kapoor. 1992. Inoculation with phosphate solubilizing microorganisms and a vesicular micorrhizal Fungus improves dry matter yield and nutrient uptake by wheat grown in a sandy soil. Biology and fertility of soils, 28: 139- 144.
18. Suba Rao, N. S. 1988. Biofertilizers in agriculture. first ed. Oxford and IBH Co. New Dehli: India.
19. Tandon, V. & A. Parakash. 1998. Influence of soil inoculation with VAM and phosphorus solubilizing microorganisms on growth and phosphorus uptake in *sesamum indicium*. International Journal of Tropical Agriculture, 16: 201-209.