International Journal of ChemTech Research
CODEN(USA): IJCRGG ISSN: 0974-4290
Vol.9, No.03pp 60-65,2016

Relationships between soil characters and r of three sugar beet varieties grown in newl

O.A. Nofal, H.I. El Eila and S.A.A. El Sayed

Plant Nutrition Dept., National Research Centre, Dokki, Cairo, Egypt.

Abstract: Three sugar beet varieties i.e., E. poly, Chems and R. poly which grown in calcareous soil at Fayoum Governorate, Egypt, were evaluated for their nutrients uptake relationship to soil characters during two successive seasons (2008/2009 and 2009/2010).
Results indicated that a remarkable and significant difference between root nutrients uptake and soil characters were found for the three sugar beet varieties in two growing seasons.
Root-P of R. poly variety was significantly affected by soil pH. In addition, positively affects were obtained between O.M and both of N-uptake of E. poly variety as well as B-uptake of Chems and R. poly varieties. Moreover, Chems and R. poly varieties could not take enough nutrient requirements i.e, P and K for high clay content. Also, data revealed that there were negatively affects between soil-N and root-K of E. poly variety. However, positively affects were gained with root-B for the same variety in two tested seasons.
It can be concluded that the disturbance in nutrition of the three sugar beet varieties was accompanied by physical and chemical soil characters and genetically factors.
Key words:Sugar beet – varieties - nutrients uptake - soil characters.

*****