AN AJSS

An Asian Journal of Soil Science

Volume **9** | Issue 1 | June, 2014 | 63-66 | e ISSN–0976–7231 | Open Access | *www.researchjournal.co.in*

Research Article

Effect of bioinoculants and fertilizer levels on growth, yield attributes and yield of soybean (*Glycine max* L.) grown on Vertisol

A.A. BODKHE **AND** SYED ISMAIL

Received : 16.11.2013; **Revised :** 25.04.2014; **Accepted :** 07.05.2014

MEMBERS OF RESEARCH FORUM :

Corresponding author :
A.A. BODKHE, Department of Soil Science and Agricultural Chemistry, Karmayogi D.S. Patil College of Agriculture, NASIK (M.S.) INDIA
Email: ashu.risodkar@gmail.com

Co-authors :
SYED ISMAIL, Department of Soil Science and Agricultural Chemistry, Marathwada Agricultural University, PARBHANI (M.S.) INDIA
Email: syed_ismail123@rediffmail.com

Summary

Field experiments were conducted during *Kharif* 2009 and 2010 at Research Farm of Department of Soil Science and Agricultural Chemistry, Marathwada Agricultural University, Parbhani to study the effect of bioinoculants and fertility levels on growth, yield attributes and yield of soybean. The experimental soil was clay in texture with pH 8.30. It was moderately fertile, being low in organic carbon, available nitrogen, medium in phosphorus with high content of potassium. Three fertility levels (100 % RDF, 75 % RDF and control) and four levels of bioinocualtns (*BradyRhizobium* inoculation, PSB (Phosphorus solubilizing bacteria) inoculation, *BradyRhizobium* + PSB and uninoculated control) were replicated four times in factorial randomized block design. The results emerged out indicated that application of 100 per cent RDF showed significantly higher seed (1732 and 1811 kg/ha, respectively) and straw yields (2331 and 2378 kg/ha, respectively) in 2009 and 2010. Inoculation of seed with *Rhizobium* + PSB recorded significantly higher growth, yield attributes, seed and straw yields over control. Sole inoculation of *Rhizobium* and PSB also performed well in improving above parameters as compared uninoculated control.

Key words : Soybean, Bioinoculants, Yield, Yield attributes

How to cite this article : Bodkhe, A.A. and Ismail, Syed (2014). Effect of bioinoculants and fertilizer levels on growth, yield attributes and yield of soybean (*Glycine max* L.) grown on Vertisol. *Asian J. Soil Sci.*, **9**(1): 63-66.