

Influence of Integrated Weed Management Practices and Bio-Fertilizers on Chlorophyll Content of *Kharif* Soybean [*Glycine max (L.) Merill*] in Southern Telangana Agro- Climatic Zone

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ABSTRACT

A field experiment entitled “Influence of integrated weed management practices and bio-fertilizers on chlorophyll content of *kharif* soybean [*Glycine max (L.) Merill*] in southern Telangana agro- climatic zone” was conducted at the Agricultural College farm, Rajendranagar, Hyderabad, Telangana State during 2014 and 2015. In the present investigation, the chlorophyll content cm^{-2} and mg^{-1} fresh weight of green leaves exhibited significant differences due to weed management treatments the leaves in the un-weeded crop had maximum chlorophyll content of 139.11 n moles cm^{-2} and 2.16 mg^{-1} fresh weight of leaves in 2014. The chlorophyll content was 142.33 n moles cm^{-2} and 2.22 mg^{-1} during 2015. Hand weeding at 25 and 45 DAS or the integrated weed management treatments did not change the chlorophyll remarkably. But, the pre and post emergence herbicide treatments significantly reduced the chlorophyll cm^{-2} and mg^{-1} . Therefore, the complete dependence on herbicide use should be minimized or avoided. The chlorophyll concentration were not influenced by the bio-fertilizers at any stage in the two years. The interactions due to weed management treatments and bio-fertilizers were also not significant.

Key words: *Bio-Fertilizers, Chlorophyll Content, Integrated Weed Management Practices.*