

Effect of agro-chemicals on microflora in soybean rhizospheric soil

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Abstract : After application of agrochemicals at 1, 30 DAS and at harvest the total number of fungi, bacteria, actynomycetes, *Pseudomonas*, *Azatobactor, Rhizobium* were counted. The result with regard to bacterial population in soybean field were significantly influenced by bioinoculant *viz.*, *Rhizobium*. The bacterial populations were inhibited by herbicides alachlor in soybean and fungicides *i.e.* thiram and mancozeb in soybean. After 30 days of spraying of chemicals the bacterial populations were restored. With regard to *Rhizobium* population, the bioinoculant were significantly influenced the population soybean field. The herbicides and fungicides significantly decreased bioinoculant population, maximum inhibition was observed in mancozeb treated plot at 30 DAS. The results with regards to *Pseudomonas*, Actinomycetes and fungi, population were influenced by bioinoculant *viz.*, *Rhizobium*. While population were inhibited by alachlor, thiram and mancozeb in soybean field. The *Pseudomonas*, Actinomycetes and fungi population were restored after 30 days of spraying. Yield of soybean was significantly influenced by bioinoculant in combination with herbicide and fungicide.

Key Words: Agro-chemicals, Bio-inoculants, Soybean

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