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RESEARCH ARTICLE:

In vitro screening of zinc solubilizing rhizospheric isolates for agrochemicals compatibility

■ Y. NAGARAJU, S. TRIVENI, A. VIJAYA GOPAL, G. THIRUMAL, K. BHAVYA AND B. PRASANNA KUMAR

SUMMARY: In the present investigation, an attempt was made to assess the compatibility of six

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agrochemicals such as Fungicides (Metalaxyl and Tricyclazole), Insecticides (Profenophos and Chloranthraniliprole) and Herbicides (Glyphosate and Atrazine) were tested against ten bacterial and five fungal Zn solubilizing isolates isolated from Rajendranagar, Hyderabad. Compatibility tests indicated that glyphosate has much severe effect on microbial load at low, recommended and double doses. Among insecticides Chlorantraniliprole have much more effect than Profenophos. Among fungicides Metalaxyl exerted more effect on the microbial growth, whereas among herbicides glyphosate stands out to effect microbial load. Among all isolates ZnSB-4 and ZnSF-1 are found to be susceptible for most of the agrochemicals more or less at all the concentrations.

KEY WORDS:

Zn solubilizing bacteria, Cloropyrifos, Chlorantraniliprole, Metalaxyl, Tricyclazole

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 $\begin{tabular}{ll} \bf Author for correspondence: \\ \end{tabular}$

Y. NAGARAJU

Department of Agricultural Microbiology, Professor Jayashankar Telangana State Agricultural University, Rajendranagar HYDERABAD (TELANGANA) INDIA Email: nagarajulvrth 62@gmail.com

See end of the article for authors' affiliations