

Effect of *Jatropha curcas* Linn. on some field crops under nursery condition

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ABSTRACT : Agro-forestry system incorporates a mixture of woody perennials and annual crops to step up the production per unit area. Its adoption becomes a basic need because of less availability of land for production and fulfilling the demands of higher rate of civilization. To keep in this in view, a pot culture study on three test crops namely maize (*Zea mays* L.), mung (*Phaseolus aurens* L.) and mustard (*Brassica campestris* L.) grown in various *Jatropha* soil concentrations were carried out at nursery of SHIATS, Allahabad during 2009-10. It was found that, Germination in all test crops were reduced as compared to control. Growth parameters indicating Shoot length, Root length and Collar diameter showed stimulatory effect when supplied to 50% *Jatropha* soil concentration. Allelopathic effect was highly influenced in mung plant as compared to maize and mustard.

Key Words : Agro-forestry, allelopathy, growth parameters and pot culture.