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Allelopathic Potential and HPTLC Analysis of Ipomoea carnea

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Abstract

The current study was conducted to investigate the usage of waste plants in the world. In the present study, sandwich method was used to study the allelopathic interactions of Ipomoea carnea on two test weed seeds i.e. Amaranthus spinosus and Cassia fistula. Pot experiments were also conducted where Ipomoea extracts were applied on germinated seedlings in bags and the effect was observed after regular application of Ipomoea extract as a weedicide. Both methods showed inhibition of the weeds with respect to growth of seedlings. However, the results were more significant in Sandwich method as compared to Spray Bioassay, indicating the allelopathic properties of Ipomoea carnea are more significant on un-germinated seeds compared to grown plantlets. HPTLC analysis revealed the presence of flavonoids, phenols, tannins and terpenoids in Ipomoea carnea. Since all the four phytochemicals were present in Ipomoea carnea, these could be responsible for allelopathic properties of Ipomoea carnea on Amaranthus spinosus and Cassia fistula

Biography:

Anushi Divan, is graduated from Mumbai University, India

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