

Conference Abstract

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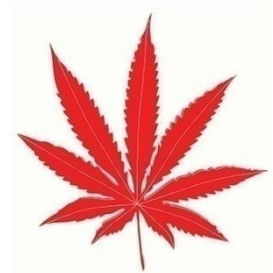
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Conference Abstract

WORLD FOOD SECURITY; STRENGTHENING BY IMPACT OF ENDOPHYTES

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Key words: Wheat, Climatic change and Tolerance

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ABSTRACT

The world food security, owing to a burning threat of climatic change, is highly disturbed by the unpredictable drought and diseases which will upsurge in frequency and severity in the near future leading to a probable decline in global food production. Endophytes are beneficial microbes and biologically safe for inducing tolerance in plants. Hence the present study was carried out to evaluate the potential of endophytes in wheat crop against drought stress and rust diseases. Plant samples were collected from desert areas of Pakistan (Cholistan, Rohi). The endophytes were isolated, purified and cultured on Potato Dextrose Agar media (PDA) and identified with their respective taxonomic keys. Inoculation of these selected endophytes was done by immersing the wheat seeds in suspension of known concentration of fungal spores. Drought and rust stresses were given to the drought sensitive and rust susceptible wheat genotypes respectively by delaying the irrigations and rust diseases were ensured. Inoculated endophytic wheat lines exhibited the tolerance against drought and diseases.



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