



RESEARCH PAPER

In vitro bioassay to study phytotoxicity affects of *Quercus leucotrichophora* on some small millets varieties

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The present study was conducted for the evolution of phytotoxicity of leaves and bark extracts of *Quercus leucotrichophora* on seed germination and radical and plume growth of different small millets varieties. On average leaves extracts were more toxic to germination and growth of test crops as compared to barks extracts. Lower concentration of leaves and barks extracts stimulated the germination and radicle and plumule growth of the test crops as compared with the control. These results also indicated that radicle growth of test crops were more inhibited as compared to the plumule growth in all the test crops, irrespective of concentration. On an average, germination of all the small millets varieties resistance against the leaves and barks extracts. While seedling growth of *Echinochloa frumentacea* and *Amaranthus caudatus* showed some resistance and *Triticum aestivum* and *Eleusine coracana* were sensitive crops.

Key words : Allelopathy, Germination, Radicle, Plumule, Small millets

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