

*Short Communication*

Pakistan J. Sci. Ind. Res. Vol 25, Nos 1-2, February - April 1982

**EFFECTS OF INDUSTRIAL WASTE EFFLUENTS ON THE SEEDLING GROWTH OF SOME COMMON PLANT SPECIES**

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(Received April 16, 1981)

The effects of waste effluents of three chemical and one pharmaceutical industry in the industrial area of Karachi City have been studied on the seedling growth of *Prosopis juliflora* DC., *Cressa cretica* L. and *Albizia lebbek* Benth. Seedlings of these species were raised from seeds and were transferred in the pots containing loamy type of soil. These seedlings were treated with different concentrations of all the waste effluents for one and a half month. The seedlings of *A. Lebbek* were found nonresistant even to a low concentration (2%) of polluted effluents of all the industries. The seedlings of *P. juliflora* were found resistant to all the industrial polluted effluents except that of chemical industry. It showed wilting after 7th dose and completely wilted after 8th dose with 20% polluted effluent. Whereas no apparent effect was observed with 2, 5, 10 and 15% concentrations of the polluted effluent. The seedlings of *C. cretica* were found more tolerant to polluted conditions as compared to the other two species. These seedlings were resistant to all the polluted effluents except that of 40% effluent of the chemical industry. The seedlings survived in all the concentrations, but in the 40% concentration they showed wilting after 4th dose and completely wilted

after 5th dose.

The relative resistance of *P. juliflora* and *C. cretica* to the industrial pollution is rather expected because the former species along with other species such as *P. glandulosa* Torr., *Calotropis procera* (Willd.) R. Br., *Datura alba* Nees., *Cassia holosericea* Fres. (species of disturbed areas) and the latter species along with *Suaeda monoica* Forsk. ex. Gmel., *S. fruticosa* (L.) Forsk. and *Salsola foetida* Willd. (halophytes) were frequent outside the waste disposal drains of the industrial areas [1]. Moreover, the seeds of *P. juliflora* showed better germination in the polluted conditions [2]. On the other hand, *A. lebbek* is a cultivated plant, and it is planted in the industrial areas as a roadside tree, therefore it could not withstand the polluted conditions of even low degree.

## REFERENCES

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2. M.Z. Iqbal and S.A. Qadir, Pakistan J. Bot., 5, 155 (1973).

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