## THE EFFECTS OF GANGA WATER POLLUTION ON THE GROWTH OF ZEA MAYS

## Pramod Kumar, N.L. Sharma and Anil Sharma

Department of Botany, Meerut College, Meerut (U.P.) 250 001 Email: pkbotany@yahoo.com

**Abstract:** An experiment was conducted with an aim to evaluate the effluents in Ganga River and their impacts on Maize cultivar. The samples were collected from three different sites of Ganga River. The variety of food crop taken was Madhuri, F1 Hybrid. The replicas of *Zea mays* were grown in Petri dishes at different concentrations which were irrigated with 10 ml. solution at regular intervals. The Plumule and Radicle growth were measured after each 72 hours.

Keywords: Ganga, Zea mays, Plumule, Radicle, Germination

## REFERENCES

Ashvini Kumar Damayanti Tiwari Yogesh, J. S. Upadhyay, S. D. Shukla, S. Shukla, D. N. (2006). Seasonal variation in Physico-chemical properties of the Ganga water at Allahabad during 2004-2005. *Environment and Ecology*. 24S: Special 4, 1104-1107

**Birol,E. Sukanya Das** (2010). Estimating the value of improved wastewater treatment: the case of River Ganga, India. *Journal of Environmental Management.* 91: 11, 2163-2171

**Gupta, Suman, Gupta, Rudhera, Chaturvedi, Vidhan, Shukla, D.N.** (2003). Physio-Chemical and Biological Study of Polluted Ganga Water and its impact on *Ricinus communis*. *Jr Bioved* 14 (1/2) 45-50

**Jaiswal, R. K.** (2007). Ganga Action Plan – A critical analysis, working paper, 49 p.

Khwaja, A. R. Rashmi Singh Tandon, S. N. (2001). Monitoring of Ganga water and sediments vis-a-vis tannery pollution at Kanpur (India): a case

study. *Environmental Monitoring and Assessment*. 68: 1, 19-35

**Pal, M. Horvath, E. JandaT. Paldi, E.Szalai, G.** (2006). Physiological changes and defense mechanisms induced by cadmium stress in maize. *Journal of Plant Nutrition and Soil Science* 169:2, 239-246

**Pandey J. shubhashish K. And Richa Pandey** (2010). Heavy metal contamination of Ganga river at Varanasi in relation to atmospheric deposition. *Tropical Ecology* 51(2S): 365-373

**Sen, H.S.** (2010). The drying up of river Ganga: An issue of common concern to both India and Bangladesh. *Current science* 99:6, 725-727

**Pandey, S.N.Nautial, B.D. Sharma, C.P.** (2008). Pollution level in distillery effluent and its phytotoxic effect on seed germination and early growth of Maize and Rice. *Journal of Environmental Biology* 29:2, 267-270.

**Sujata Dubey, Gupta, A.K. Singh, D.V.** (2010). A Physio-chemical assessment of the River Ganga at Varanasi, U.P. *International journal of plant sciences* (Muzaffarnagar).5:1, 67-69.