IMPACT: International Journal of Research in Applied, Natural and Social Sciences (IMPACT: IJRANSS)
ISSN(E): 2321-8851; ISSN(P): 2347-4580
Vol. 2, Issue 7, Jul 2014, 7-14

EFFECT OF FLY ASH ON SOME BIOCHEMICAL PARAMETERS OF SELECTED PLANTS GROWING AT DUMPING SITE OF BADARPUR THERMAL POWER PLANT IN DELHI

SAMI ULLAH QADIR & WEQAR AHMAD SIDDIQUI

Department of Applied Sciences and Humanities, Faculty of Engineering and Technology,

Jamia Millia Islamia, New Delhi, India

ABSTRACT

One of the important causes of woodland destruction is the emission exhausts, Particulate pollutants from waste dumping sites and the consequent air pollution. Particulate pollution not only hampers plant growth instead disturbs the ecological balance. Tryouts on particulate pollution monitoring were directed in order to ascertain behavior of Fly ash dust on various plant Species at and around the Badarpur thermal power plant fly ash dumping site in Delhi. The plant species at these selected sites comprises of Neem (*Azadirachtaindica*), jungle jalebi (*Pithecellobium dulce*), Mast tree or Ashoka (*Polyalthialongifolia*), and Sheesham (*Dalbergiasisoo*). For this study leaf area, total chlorophyll, protein, Ascorbic acid was evaluated in order to study the effect of fly ash particulate contaminants resulting from dumping site. Substantial decline was found in total chlorophyll, protein content with condensed leaf area/size, however, a significant increase was observed in case of Ascorbic acid content across the study. From the study it was concluded that these plant species can be used as best indicators for assessing the fly ash contamination and the need arises to plant resistant species at this dumping site in order to remediate the same.

KEYWORDS: Chlorophyll, Fly Ash, Particulate Pollution, Remediation, Woodland