

MONITORING AIR POLLUTANTS IN KANO METROPOLIS BY TREE BARK

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ABSTRACT

Barks of three species of trees were used in monitoring programmes in Kano metropolis urban environment due to their ability to concentrate pollutants to several orders of magnitude above the ambient levels. Their barks recorded the changes in the environment as their conductivity varied with the health, thickness and the substrate upon which they grew. Each plant has a variability of conductivity, which tended towards similar latent values. These changes indicated the plants as capable of filtering the pollutants in their environment. The results thus showed the importance of biological indicators at evaluating effects, indicating the presence of phyto-toxic components in the ecosystem, assessing the total load, reacting upon the components of the atmosphere and permitting dependable prognoses of hazards to other components of their ecosystems.

Key words: Eucalyptus, Khaya senegalenses, Parkia clappertoniana, bark, conductivity.