

ABSTRACT

The research work was carried out to investigate Air Pollution Tolerance Index of the selected plant species growing in vicinity of brick kilns of Tehsil Sharaqpur. Different parameters were also undergone by the process i.e. Air Pollution Tolerance Index (Ascorbic Acid Content, pH of Leaf Extracts, Relative Water Content and Total Chlorophyll Content), Dust content, % Moisture Content, Leaf Area, Carotenoids, Chlorophyll a and b, Stomata Index of Plants and Clogging Capacity as well of the plants were obtained.

The recorded ten plants species around were selected on the basis of commonness and evenness around brick kilns & plant sampling was carried on the basis of increasing distance from the source (Brick kilns) i.e. 100m, 300 an 500m. The rate of air pollution tolerance index (APTI) of the plants around brick kilns of Tehsil Sharaqpur were as *Cardiospermum halicacabum* (8.20) > *Trianthema portulacastrum* L. (7.61) > *Ricinis communis* (6.84) > *Chenopodium album* (6.64) > *Mirabilis* sp. (6.44) > *Amaranthus viridis* (6.40) > *Calotropis procera* (6.39) > *Acyranthes asper* (6.37) > *Parthenium hysterophorus* (6.20) and > (6.18) *Cucumis melo* var. *agrestis*. The plants APTI values were ranked under the sensitive condition. As it is suggested that the species growing around the brick kilns are sensitive to air pollution or brick kiln emissions as these are monitors to the pollution. And plants grown in the brick kiln surrounding could act as sink for the air pollution as well. Air Pollution Tolerance Index could said to as practical approach for the development of sinks for the pollutions caused by brick kiln emissions.