



Research Article

Dust Pollution Affect Morphophysiological traits of Plant *Mangifera indica* Linn.

Sandeep Shukla, R.B. Sharma and Mukesh Sahu

Department of Botany, Govt. E.V.P.G. College, 495677 Korba, India

Abstract

Background and Objective: Many air pollutants seriously affect morphological traits of the plant. Dust is the major and important part of air pollutants, generated by coal mines, thermal power plants, cement industries, cursor industries, road transport etc. When this dust comes with contact with the plants it cause many negative effects on morphology and physiology of the plant. **Materials and Methods:** In this study, dust deposition on the leaves decrease the productivity e.g., chloroplast content, stomatal blockage etc. Korba is the industrial city of the Chhattisgarh state. Many coal based power plant and coal mines are situated here which produced plenty of dust. In this study three parameter have been taken e.g., dust load, leaf area and pH of leaf wash and tried to understand effect of dust on *Mangifera indica*, the Mango plant. **Results:** In this study four different sites have been selected where thermal power plants and coal mining produce plenty of dust and ash particles. Leaves collected from the Korba, which is mining area are suffering badly from dust stress. **Conclusion:** During the study we observed that leaves of the *Mangifera indica* have been damaged morphologically and physiologically due to the dust. Dust load and high pH cause physical injury, necrosis, stomata blockage, reduce photosynthesis etc. Dust pollution decreases the economical and nutritional value of the Mango.

Key words: *Mangifera indica*, pollutants, dust load, stomatal blockage, morphological traits

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Corresponding Author: Sandeep Shukla, Department of Botany, Govt. E.V.P.G. College, 495677 Korba, India Tel: +91 98271 11919

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PRINCIPAL,
GOVT. ENGINEER VISHWESWARAIYA
P.G. COLLEGE, KORBA (C.G.)

