

Smog And Plant Health; A Risk Assessment of Smog

**Arvind Arya¹, Neelesh Kapoor², Sandeep Kumar³, Asif Siddiqui⁴,
Asad Amir⁵, Hirdesh Kumar⁶ and D. K. Awasthi⁷**

ABSTRACT

Meerut is one of the important industrial zones of western Uttar Pradesh and rich in agricultural area. Around 500 industries are active in Meerut related to tyres, textiles, transformer, sugar, distiller, chemical etc. A remarkable increase in population and industries in Meerut raises a concern of air pollution in the city. Majority of crops and leafy vegetables are found affected by air pollution and facing severe injury. In present paper we have surveyed and compiled the information on smog and its detrimental effect on plants in Meerut region. Smog and its four major constituent viz. sulphur dioxide, fluoride, ammonia and particulate matter were studied with respect to their effect on the flora of Meerut. Investigation revealed that in Meerut major pollution based injury to plants is due to industries and transportation. Plantation under urban forestry program in Meerut was found much affected by smog than the plants in field.

Key Words: Smog, Sulphur dioxide, Fluoride, Dust, Soot, Particulate matter.