

## **AOTX Indices – A Tool for Assessment of Impact of Ozone on Plants**

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Tropospheric Ozone is a phytotoxic pollutant which causes huge impacts on plants especially targeting agricultural crops. The present study focuses on role of ozone to Accumulated exposure Over a Threshold of X ppb (AOTX) indices and their effect of crop yield in capital city of India, Delhi. In addition to that, estimation of rice (*Oryza sativa*) reduction due to ozone exposure calculated on the basis of European benchmark. Regular monitoring of ozone was done from 6 a.m. to 6 p.m. every day during year 2013. According to European benchmark, for AOT40 values above 3000 ppb, a 5% of yield loss would be occur. On the basis of this study, the value of AOT40 signifies most of the months in the year 2013 which had exceeded the European benchmark. Thus, study concludes with the fact that ozone exposure to crops will reduce its yield.

Keywords: Tropospheric ozone, AOT40, Rice, yield, Delhi.