BIOMONITORING OF TROPOSPHERIC OZONE POLLUTION IN KANDY DISTRICT AREA

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ABSTRACT

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Ozone in the ambient air at three locations within the Kandy District: Peradeniya University premises, Kandy city and Ambuluwawe biodiversity complex, were examined by both chemical and biological monitoring methods. Twenty individual specimens from two cultivars of (Bel-B and Bel-W3) *Nicotiana tabacum* were planted at three sites and monitored for a period of four months. Bel- W3 is super sensitive to ozone and may produce easily recognizable symptoms for several weeks on the fully expanded leaves while Bel-B is tolerant. This biomonitoring method was validated by comparing results obtained with those from the physico-chemical analytical method. Results revealed that ozone concentrations were higher in Kandy city than those in other two locations. This study also proves that biomonitoring is a low-cost and an environmentally friendly method, which is suitable to apply in Sri Lanka.