# 利用T8菸草指標植物監測室內臭氧

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## 摘　　要

本研究之目的為利用菸草指標植物監測室內臭氧。臭氧超敏性T8菸草於經活性炭過濾之生長箱中培育21天，再置於無活性炭過濾之小型生態箱中馴化1日後進行室內臭氧監測。在臺大農場附設實驗室內除進行生物監測外，亦以儀器同時監測室內臭氧，結果顯示菸草幼苗出現典型臭氧病徵。於臺大校園六個室內測點中，葉片受害指數百分比(leaf injury index percentage, LII%)以男生宿舍影印間最高，其次則為植物醫學中心辦公室。在臺北市區內六所學校中，葉片受害指數百分比(LII%)以文化國小最高。研究結果顯示T8菸草幼苗之靈敏度極高，適用於室內臭氧監測。

**關鍵詞**：臭氧；室內污染；生物監測；指標植物。

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# The Use of Tobacco T8 Indicator Plants to Monitor Indoor Ozone

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## Abstract

The purpose of this study was to use ozone supersensitive indicator plants to detect indoor ozone. The ozone supersensitive tobacco T8 seedlings were cultured from seeds placed in a charcoal-filtered growth chamber for 21days and then transferred to a small growth chamber without the charcoal filter. After one day of acclimation, the 22-day-old seedlings were used to monitor indoor ozone at 13 monitoring sites. The indoor ambient of the experimental station at the experimental farm of Nation Taiwan University (NTU) was monitored by $O_3$ Monitoring Devices and bio-monitors simultaneously. The result showed that the leaves of T8 seedlings showed typical ozone-induced foliar lesions. Among the six monitoring sites in the NTU campus, the leaf injury index percentage (LII%) of T8 seedlings were largest in the copying room of the dormitory. Among the six classrooms in Taipei City, the foliar injuries of the T8 seedlings in Wen-Hua Elementary School were most serious. The results of this study showed that tobacco T8 seedlings are suitable for monitoring indoor ozone.

**Key words**: ozone; indoor pollution; biomonitoring; indicator plant.

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