

利用相思樹氟含量等濃度曲線探討氟化物之 汙染範圍

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摘 要

此研究目的為調查離汙染源不同距離的植物體氟化物累積含量，故藉由廣域性的採樣並測量植物體內之氟化物含量，再以Surfer軟體繪出等氟含量曲線(Iso-fluoridee map)，由此做出之氟汙染分布圖可供了解汙染與受害區之關係，並供汙染範圍及危害程度之評估。本研究發現1997年鶯歌地區相思樹等濃度曲線，十分吻合上述論點，而此一汙染區之汙染面積超過32×64平方公里，而此一地區汙染最嚴重的地方為汙染源西南方4 km處，但在1999年之等氟濃度調查則顯示汙染中心與汙染源相當接近，可能與氣象條件不同有關。

關鍵詞：相思樹；氟化物；等氟含量曲線。

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Investigating the Fluoride-polluted Areas by the Iso-fluoride Map Based on Acacias Leaves in Taiwan

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Abstract

The purpose in this study was investigated degree of fluoride concentration in plants that were variant from pollution source. From the fluoride content in acacias collected in large area in Ying ko, Taipei, the iso-fluoride maps were drawn by surfer software. The fluoride distribution in affected areas and in vegetation was analyzed to illustrate the relationship between pollution source and affected areas. The affected areas in Ying Ko area in 1997 according to the iso-fluoride map of acacias leaves was over $32 \times 64 \text{ km}^2$. The most severely affected area was at a distance of 4 km south western from ht suspect ceramic factory. The 1999 iso-fluoride map in Ying Ko area, however showed that the most severely affected area was very close to the pollution source. The difference between 1997 and 1999 was supposed to be caused by different meteorological factors.

Key words: Acacias; fluoride; iso-fluoride map.

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