

## **INFLUENCES OF TRAFFIC POLLUTION ON SPATIAL DISTRIBUTION OF HEAVY METALS IN ROADSIDE SOILS**

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Soils on the roadside can receive pollutants from traffic sources including historical use of leaded petrol, tear and wear of tyres and other parts of vehicles, as well as paint of road marks. This study investigates the levels and spatial distribution of heavy metal pollution in roadside soils sampled from several locations in Galway and Dublin in Ireland. Results from a roadside sports ground showed clear influences of traffic pollution on soils adjacent to a busy road, and such pollution is reduced by the presence of a bush fence on another side. Based on the results from a park with a large green area, the spatial range of traffic pollution could reach about 30 meters inside the park, and the influences mainly demonstrated an exponential relationship with the distance away from the road. It was found that leaded paint can increase Pb concentrations of roadside soils in a couple of meters. Roadside barriers can alleviate the influences of heavy metal pollution from traffic on roadside soils.

Keywords: soil, heavy metals, traffic pollution