

论文

四川德阳地区农田生态系统重金属健康风险评价

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摘要:

环境健康风险评价是定量描述环境中污染物对人体产生健康危害的风险的重要方法。文中结合国内

外健康风险评价理论,利用美国环保总署健康风险评价模型,计算了四川德阳地区居民经呼吸(大气颗粒物)

、食入(粮食)、饮用(饮用水)和皮肤接触途径摄入重金属而引起的健康风险。研究结果显示:德阳地区所

有市县的非致癌风险指数都大于1,表明存在一定的风险。绵竹和旌阳区的风险最高,二者的非致癌风险指

数分别达到7.76和4.36。从不同暴露途径的贡献来看,主要是经食物暴露的贡献,各市县都达到了90%以

上。虽然计算结果存在一定的不确定性,但对研究区进行风险管理具有重要的参考价值。

关键词: [四川德阳](#); [健康风险评价](#); [重金属](#)

Environmental Health Risk Assessment of heavy metals in argo ecosystems of Deyang district, Sichuan Province.

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Abstract:

Environmental Health Risk Assessment is an important method for quantitatively

describing the relationship between the pollution and the human health. This paper adopts

the theories and the models for Health Risk Assessment recommended by the U.S. Environmental

Protection Agency. We calculate the heavy metals intake risk through inhalation, foods,

drinking water and skins. The results suggest that the non-carcinogenic risk index is more

than 1, which implies that they are the health risk for the residents in Deyang. The health

risk for people in Mianzhu and Jingyang is very high; the non-carcinogenic risk index for

these two areas are 7.76 and 4.36, respectively. Foods are a dominative factor for risk in

comparison to other ways. Although the results have some uncertainties, they are important

for the risk management in the study areas.

Keywords:

Key words: [Deyang district](#); [Health Risk Assessment](#); [heavy metals](#)

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