

عنوان مقاله:

Adsorption and Desorption Behavior of Herbicide Metribuzin in Different Soils of Iran

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خلاصه مقاله:

In this study, the batch equilibrium method was used to conduct metribuzin adsorption/desorption experiments with eight soils from different regions of Iran. The results indicated that the organic carbon (OC) content, clay content, cation exchange capacity (CEC), and pH had a combined effect on the metribuzin adsorption on soil. Under the experimental conditions, the adsorption amount of metribuzin on soils was positively correlated with the content of soil organic carbon. Freundlich adsorption isotherm provided the best fit for all adsorption and desorption data. The values of Kf-ads, Freundlich adsorption capacity, ranged from 0.15 to Y. & L kg-1. Soil organic carbon content and pH were the main factors influencing adsorption. Adsorption was positively correlated with OC and negatively correlated with pH. Metribuzin desorption showed that almost all of the adsorbed metribuzin was desorbed in all soils, except soil I and A. .However, adsorption was not completely reversible

کلمات کلیدی: Hysteresis, Metribuzin, soil, Soil organic carbon, Soil pH

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