Removal of 3,4-Dichlorophenoxyacetic Acid from Aqueous Solution

김태영[1,*], 정태광[1], 최슬아[1], 박가영[1], 김승재[1,2], 조성용[1]
[1]전남대학교 환경공학과; [2]전남대학교 환경연구소
(tykim001@chonnam.ac.kr*)

Adsorption of 3,4-dichlorophenoxyacetic acid (3,4-D) from aqueous solution onto a granular activated carbon (GAC), F-400, were studied at pH 3.5, 7.0 and 10.0. Adsorption equilibrium of 3,4-D onto GAC could be represented by Sips equation. Adsorption equilibrium capacity increased with decreasing pH of the solution. Kinetic parameters were measured in a batch adsorber to analyze the adsorption rates of 3,4-D. The internal diffusion coefficients were determined by comparing the experimental concentration curves with those predicted from surface diffusion model (SDM) and pore diffusion model (PDM).