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The removal of atrazine, simazine, and prometryn by granular activated carbon in aqueous solution

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ABSTRACT

The removal of typical s-triazine herbicides including atrazine, simazine, and prometryn by granular activated carbon were studied under different temperatures (5, 10, 15, 25, and 35°C) and different water (distilled water, tap water, and river water). The results showed that the adsorptions of s-triazine herbicides in different. The adsorption of s-triazine is the greatest in distilled water and that is smallest in natural water. Moreover, for the adsorption isotherm, Freundlich model fitted the adsorption of s-triazine herbicides better than Langmuir model and the adsorptions of prometryn is the greatest, then that of atrazine and that of simazine is smallest.

Keywords: Granular activated carbon; S-triazine herbicides; Temperature; NOM

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