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Phytoremediation of industrial effluent containing azo dye by model up-flow constructed wetland

Abstract

This study assessed the treatment of azo dye Acid Orange 7 (AO7) containing wastewater by laboratory-scale up-flow constructed wetland (UFCW) with and without supplementary aeration. The supplementary aeration could effectively control the ratio of anaerobic and aerobic zones in the UFCW reactor. The results clearly show the supplementary aeration boosted the biodegradation of organic pollutants and mineralization of intermediate aromatic amines formed by AO7 degradation.

Keywords

Acid Orange 7; Supplementary aeration; Up-flow constructed wetland