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Study on Reducing Leachate Production by Saw Powder Adding

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ABSTRACT

In order to study the effect of saw powder on leachate production, degradation of rubbish, COD and NH₃-N concentration of leachate, three cylinder reactors for anaerobic landfill disposal were built to simulate the operation of landfill. In this experiment, leachate quantity, settling height of rubbish layer, COD and NH₃-N concentration were monitored. The results come from experiment data analyses indicate that saw powder has strong effect on reducing leachate quantity and accelerating degradation of rubbish. In 60 days, saw powder mixed in rubbish layer can reduce 1200-1300mL leachate every liter rubbish, moreover, rubbish layer with saw powder mixed in settled more leachate than rubbish layer with no saw powder mixed in for 5cm. The experimental results indicate that saw powder can reduce COD concentration of leachate and adsorb NH₃-N, too.

KEYWORDS

Leachate, Saw Powder, Reduction, Landfill, Degradation

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