Pengolahan limbah domestik Perpustakaan Universitas Indonesia menggunakan sistem lahan basah buatan dengan memanfaatkan tanaman canna indica = Research on University of Indoesia Library's domestic wastewater treatment using constructed wetland with utilization of canna indica / Ikhtiar Jauhari

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Abstrak

ABSTRAK
Penelitian pengolahan limbah domestik perpustakaan universitas indonesia menggunakan tanamaman Canna indica dalam sistem lahan basah buatan ini dilakukan dalam skala laboratorium menggunakan dua reaktor yang memiliki waktu detensi 1 hari dan 3 hari. Tujuan dari penelitian ini adalah mengetahui efisiensi pengolahan beradasarkan penurunan kadar pH, BOD, COD, dan TSS dan mengetahui pengaruh waktu detensi. Hasil penelitain menunjukkan reaktor dengan waktu detensi 1 hari nilai maksimum efisiensi removal COD adalah 90.22%. Nilai maksimum efisiensi removal BOD adalah 90.22% Nilai maksimum efisiensi removal TSS 90.91%.Pada reaktor dengan waktu detensi 3 hari nilai maksimum Efisiensi Efisiensi removal COD 91.51%. nilai maksimum Efisiensi efisiensi removal BOD 91.55%. Efisinesi efisiensi removal TSS lahan basah buatan adalah 92.66%.
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ABSTRACT
Research on University of Indoesia library's domestic wastewater treatment using Constructed wetland with Canna Indica was carried out in a laboratory scale. two reactors are designed with different hydraulic retention time, there are 1 and 3 days. This study aims to determine the efficiency of constructed wetland based on removal of pH, BOD, COD, and TSS. This study also aims to find effect of hydraulic retention time againts the efficiency of removal. The Result for reactors with 1 days retention time shows maximum removal efficiency of COD is 90.22%. maximum removal efficiency of BOD is 90.22% maximum removal efficiency is TSS 90.91%. The Result for reactors with 3 days retention time shows maximum removal efficiency of COD is 91.51%. maximum removal efficiency of BOD is 91.55% maximum removal efficiency is TSS 92.66%.