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| Thesis Title         | Performance Study of Piggery Wastewater Treatment by Anaerobic Upflow Filter  |
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### Abstract

The study of anaerobic upflow filter performance treated piggery wastewater 13.5 litres support void volume and 1 metre high was operated at 2.1-33.1 g. COD/sq.m.d. of surface organic loading rate and hydraulic retention time 6-96 hr. The removal efficiencies of TCOD and FCOD were in the range of 52.1-89.2 % and 55.5-82.0 % respectively. The removal efficiencies and wet density of biofilm were decreased by increasing of surface organic loading rate while the mass of biofilm were increased. The volume of biogas obtained ranged from 1.8-8.1 litres increased by boosting organic removal rate. The reactor could received shock loading at double organic load for 6 hours, after that the system reached steady state again within 6 days.