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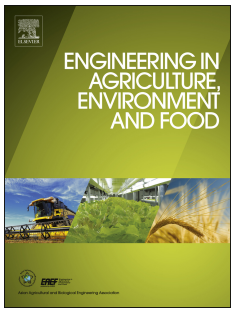

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Cattle Manure Composting in a Packed-Bed Reactor with Forced Aeration Strategy

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Abstract

The aim of this study was to determine the appropriate strategy for cattle manure composting with forced aeration. The composting of cattle manure was conducted using an 18.8 L reactor with three different amounts of total air supplied (1080, 3240 and 10800 L/kg dry mass) during 360 h of composting using continuous and on/off sequencing (20 min/h) aeration methods and three turning patterns (no turning, full turning and turning with position change). The degradation of organic matter in three-stage systems (the compost was turned every 120 h over the 360 h period) was significantly affected by total air supply volume and was large in the case of on/off

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