September

Composting of Oil Palm Empty Fruit Bunch and Decanter Cake Slurry with the Addition of Palm Oil Mill Effluent

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Formation of compost from oil palm empty fruit bunches (EFB) and decanter cake slurry by adding palm oil mill effluent (POME) with regular turning operation was investigated. The addition of decanter cake slurry has hastened the composting process of the EFB. The C/N ratio after 51 days for the mature compost with the decanter cake slurry was 18.65 while for the matured compost without the decanter cake slurry remained high at 28.96. The compost formed from the addition of decanter cake to EFB and POME had 46.4 per cent nitrogen, 17.9 per cent phosphorus, 17.7 per cent potassium and 23.1 per cent calcium more than that without decanter cake. The use of compost produced from EFB, POME and decanter cake slurry could solve more environmental problems and enhance economic benefits in the oil palm industry.

Keywords: Empty fruit bunches, palm oil mill decanter cake slurry, palm oil mill effluent, waste management.

