

ABSTRAK

Pemanfaatan Limbah Lumpur (*Sludge*) *Wastewater Treatment Plant* PT.X sebagai bahan baku kompos

PT.X merupakan industri yang mengolah limbah dengan Instalasi Pengolahan Air Limbah (*Wastewater Treatment Plant*). Hasil samping dari *Wastewater Treatment Plant* berupa limbah lumpur (*Sludge*) yang belum dikelola dengan baik. Penelitian ini menggunakan limbah lumpur (*Sludge*) hasil *Wastewater Treatment Plant*, Kotoran kambing, Serbuk Gergaji. Kompos diproses secara aerobik komposter sederhana selama 28 hari & 35 hari dengan menambahkan aktivator EM4. Perbandingan lumpur : Kotoran kambing : Serbuk gergaji yaitu 1 : 1 : 1 & 2 : 1 : 1. Hasil kompos matang menunjukkan bahwa variasi dengan komposisi 2 : 1 : 1 lebih baik dibandingkan variasi 1:1:1 dengan memenuhi semua unsur makro, mikro dan unsur lain baku mutu SNI 19-7030-2004, tetapi untuk perbandingan 1:1:1 pH, C/N Rasio dan Kalium kurang memenuhi baku mutu SNI 19-7030-2004

Kata Kunci: Instalasi Pengolahan Air Limbah, limbah lumpur, Kompos

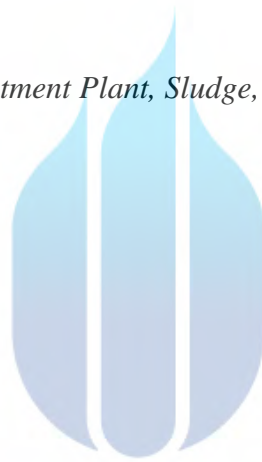


ABSTRACT

Utilization of Sludge Wastewater Treatment Plant PT.X as compost material

PT. X an industrial process waste with the Waste Water Treatment Plant. The result form the side of the Wastewater Treatment Plant sludge that has not been managed well. This study Wastewater Treatment Plant Sludge, Dirt goats, Sawdust. Aerobic compost processed in a simple composter for 28 days and 35 days by adding activator EM4. Comparison Sludge: Dirt goat: Sawdust is 1: 1: 1 and 2: 1: 1. Results showed that the mature compost variations in the composition 2: 1: 1 better than the variation of 1: 1: 1 to comply all the elements of the macro, micro and other elements quality standards of SNI 19-7030-2004, but for a ratio of 1: 1: 1 pH, C / N ratio and Potassium not comply the quality standard of SNI 19-7030-2004

Keyword: Wastewater Treatment Plant, Sludge, Compost



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