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THE EFFECT OF VARIATION IN AERATION RATE ON COMPOSTING QUALITY ON COMPOSTING ORGANIC WASTE IN RW 012 JUNGJANG VILLAGE OF ARJAWINANGUN DISTRICT CIREBON DISTRICT IN 2020

x + 86 Page + 15 Table + 5 Pictures + 6 Charts + 12 Attachment

Cirebon regency is one of the districts that has garbage problem. The population of Cirebon regency is 2,293,397 people. Data on garbage collection in Cirebon Regency is 4463882,900 (l/h). The problem of garbage management due to waste monthing in Cirebon regency every year increases, while the efforts and policies of cirebon regency government on waste management have not been optimal. Regulation governing Cirebon City Regional Regulation No. 4/2018 on Waste Management. The purpose of this study is to find out the Effect of Aeration Rate on Organic Waste Composting Process in RW 012 Jungjang Village, Arjawinangun District, Cirebon Regency. This type of research is experimental with post test with control design. The study was conducted using three different variations in aeration rates, with 6 repetitions for each treatment. One compost reactor requires 3 kg of organic waste while the required waste sample as much as 57 kg of organic waste is used as control. Analysis of statistical data conducted using Anova's One Way Test showed P value < 0.05 α then H0 rejected, meaning there is a difference in composting results using different variations in the rate of aeration. With the most effective C/N ratio resulting in a variation in the aeration rate of 1.2 L/min with a humidity check result of 48-80%, the result of depreciation percentage of 20% - 30% and C/N compost ratio examination of 13.61 – 14.86 in accordance with SNI 19-7030-2004. Advice for further research needs to be done further research using varied organic waste and carried out regular operational maintenance of the tool.

REFERENCE : 43 (1990-2018)

KEYWORD : Compost, Aeration Rates, Organic Waste.