Sugarcane-Bagasse Trichokompos Optimalization using Trichoderma sp. (LBKURCC1 and LBKURCC2) and Pseudomonas szutzeri (LBKURCC54 dan LBKURCC59)

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Abstract	Sugarcane (Saccharum officinarum) is a plant that is widely used as raw material for making sugar and can be enjoyed directly by extracting the juice. While the pulp has not been utilized and is often disposed of as waste. This study aims to make compost using Trichoderma (LBKURCC1 and LBKURCC2) and Pseudomonas (LBKURCC54 and LBKURCC59) as bioactivators. The composting process is done by mixing bagasse and chicken manure with a ratio of 2: 1 and adding isolate fungus Trichoderma sp. and Pseudomonas stutzeri bacteria as activator with several combinations on compost media with 5 treatment. Compost treatment includes P0 (control), P1 (J1_J2_B1), P2 (J1_J2_B2), P3 (J1_B1_B2), P4 (J2_B1_B2) and P5 (J1_J2_B1), P3 (J1_J2_B1_B2). The process of composting bagasse is done in a poly bag. Analyzed of compost quality was determined based on parameters of temperature, water content and the levels of C/N ratio observed for 18 days. In this study, the use of Trichoderma (LBKURCC1 and LBKURCC2) and Pseudomonas (LBKURCC54 and LBKURCC59) as bioactivators in a mixture of compost material gave a significant difference to control at the C/N ratio with a value of P> 0.05. The highest C/N ratio is from P5 (28.43) and the lowest is from P2 (5.17).
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