

SCHOOL ORGANIC WASTE PROCESSING WITH LUMBRICUS RUBELLUS VERMICOMPOSTING AND BIOACTIVE STARTER AMONG VOCATIONAL SCHOOL (SMK) STUDENTS IN DEPOK, SLEMAN

by Ciptono, Suhandoyo, Tri Harjana, Zosi Erwinda, Devi Ratnasari

ABSTRACT

Green movement in schools so far has produced quite a lot of plant waste, both from perennials, ornamental plants and shrubs. The solution to the utilization of waste has not been fully implemented, so a lot of useful potential is wasted. The facts in the field show that many forage wastes of school plants thrown away or stacked in temporary landfills (TPA). This community service activity (PPM) aims to introduce school forage waste decomposition methods to vocational students in Depok, Sleman sub-district with the help of earthworms (*Lumbricus rubellus*) whose results will be enriched with bioactive starters, so premium quality organic fertilizers are ready used to support the next agrifarming.

This PPM activity uses 2 methods, namely counseling and demonstration. (1). Extension about decomposition of school forage waste with the help of earthworms (*Lumbricus rubellus*), and (2). Demonstrations and simulations which include the practice of Vermicomposting followed by the treatment of bioactive starters to produce premium quality organic fertilizers. This activity was carried out in the Organic Waste Processing Laboratory of the Department of Biology Education FMIPA UNY. Assessment of the success of the program was carried out in the context of assessing participant's ability to understand and practice the vermicomposting method and treatment of bioactive starters. The evaluation methods used are: (1). Monitoring the competencies of participants, namely the ability of participants to understand the method in question, and (2). Direct observation of the ability of participants to apply at the practice site and at the school where the students are from.

The results of PPM activities are : 1). PPM was held on October 13, 2018. The invited Vocational Schools in the Depok - Sleman Sub-district consisted of 5 Vocational Schools, namely SMKN 1 Vocational School, SMKN 2 Vocational School, Diponegoro Vocational School, YPKK 3 Vocational School and Rini Vocational School. The last Vocational School cannot send its representative students because there is a final school examination. The number of participants present were 26 students with 4 teachers or companions. Internal implementers consist of 3 lecturers, 3 employees and 5 research students in vermomposting. The activity was held in the PPG 2 Biology Lab Room and in the Organic Waste Management Unit, Biology Garden Laboratory of FMIPA UNY. 2). The enthusiasm of the participants in the implementation of the PPM was quite high, as evident from the many curious questions about processing organic waste with vermicomposting. 3). Follow-up activities are expected for each participant to be a pioneer in processing organic waste in their respective schools, or even in the surrounding community. 4). Monitoring activities can be carried out by communication through mobile phone numbers of all participants or WhatApps Group.

Kata Kunci: *Vermicomposting, Lumbricus rubellus, bioactive starter, organic fertilizer, school*