

ANALYSIS OF N, P, K CONTENT OF LIQUID ORGANIK FERTILIZER (POC) IN THE USE OF LIQUID WASTE TOFU WITH VARIATIONS OF TOMATO (*Solanum lycopersicum*)

Galuh Yunitasari¹, Hurip Jayadi², Handoyo³, Beny Suyanto⁴

Indonesian Ministry of Health
Health Polytechnic of the Ministry of Health Surabaya
Sanitation Study Program Campus III Diploma Program
Magetan Department of Environmental Health
Email : galuhyunitasari83@gmail.com

ABSTRACT

Utilization of tofu liquid waste can be used as a new alternative that is used as fertilizer because in the tofu liquid waste it has the availability of nutrients needed by plants with the addition of Tomato Mole. The purpose of this study was to determine the quality of liquid organic fertilizer using tofu liquid waste as raw material with the addition of variations of the Tomato MOL bioactivator (*Solanum lycopersicum*).

this type of research is using experimental research with post test only design. with the treatment of tomato MOL variations (15 ml, 20 ml, 25 ml) carried out 3 repetitions in each treatment during the fermentation time 14 days. Data collection techniques using pre-experimental methods and documentation. result analysis technique with table analysis.

Recapitulation of the N,P,K content in liquid organic fertilizer using 1 liter of tofu liquid waste as raw material with the addition of 15 ml (1.5%), 20 ml (2%) and 25 ml (2.5%). In the 15 ml (1.5%) variation the N,P,K content of (0.385%) was produced, the 20 ml variation (2%) resulted in the N,P,K content of (0.471%), and at the 25 ml variation (2,5%) the resulting N,P,K content of (0.577%) of the three variations is still below the quality standard, namely PERMENTAN RI NO. 261/KPTS/ SR.310/ M/4/2019 which is 2-6%.

In this study, it is necessary to conduct further research by reviewing the length of fermentation time in order to obtain optimal results of the N, P, K content, laboratory examination of the MOL content of tomatoes before the research process is carried out in order to determine the levels of N, P, K in the MOL of tomatoes.

Keywords : Liquid organik fertilizer, Utilization of Tofu Liquid wast, Tomato MOL