

ORGANIC FERTILIZER FROM TEMPE LIQUID WASTE WITH BIOACTIVATOR PEEL OF “RAJA” BANANA (*Moses textile*)

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ABSTRACT

The tempeh's liquid and the *Raja's* banana peel (*Moses textile*) that had organic content would not be used and would generally be disposed of immediately. The organic content in these two materials could be used in the process of producing organic liquid fertilizer as one alternative waste control. The study was to analyze the process of producing organic liquid fertilizer from tempeh liquid waste with the *Raja's* banana peel bioactivator (*Moses textile*)

This type of research was a genuine experiment with a posttest only with control group design. The object of research was tempeh liquid waste treated by 30 ml, 40 ml and 50 ml of *Raja's* banana peel-based bioapiary with 3 replications. The data analysis on this research was the test of Kruskal Wallis.

The addition of the *Raja's* plant-peel bioactivator had not yet up to standard organic liquid fertilizer used is the 2019 Agriculture Minister's Decision. The highest content of C on 30 ml bioactivated is 1,84%, N on 50 ml bioactivated by 0,17%, P on 50 ml bioactivated by 0,11%, K on 30 ml bioactivated is 0,13% and total geologic macro content (N, P, and K) on a 50 ml bioactivation of 0,36%. Tests of Kruskal Wallis showed no discrepancy in the C, N, P and K deposits on any given *Raja's* banana peel bioactivity on organic liquid fertilizer.

It is recommended to conduct a preliminary test first to determine the ratio of the right material requirements and to add levels of bioactivator of plantain peel and molasses.

Key words: *liquid waste of tempe, Raja's banana peel, liquid organic fertilizer*