

ABSTRAK

Tujuan penelitian ini adalah 1) untuk mengetahui pengaruh variasi dosis pupuk organik cair kombinasi limbah bonggol pisang (*Musa paradisiaca* L) dan urin sapi terhadap pertumbuhan tanaman caisin ") dan urin sapi terhadap pertumbuhan tanaman caisin (*Brassica juncea* L.). 2) untuk mengetahui pemanfaatan hasil sebagai sumber belajar biologi. Jenis penelitian ini adalah penelitian eksperimen dengan menggunakan rancangan acak lengkap (RAL). Penelitian ini terdapat 5 perlakuan yaitu, 4 perlakuan pemberian dosis pupuk organik cair kombinasi limbah bonggol pisang dan urin sapi. Setiap perlakuan diberikan masing-masing ulangan. Parameter yang diamati dalam penelitian ini adalah tinggi (cm), jumlah helai daun. Berdasarkan hasil penelitian dapat disimpulkan bahwa terdapat pengaruh nyata pemberian dosis pupuk organik cair limbah bonggol pisang dan urin sapi terhadap pertumbuhan tanaman caisin, meliputi tinggi tanaman dan jumlah daun, hasil penelitian berdasarkan pada analisis uji Kruskal Wallis yaitu $\chi^2_{hit} > \chi^2_{daf}$. Uji lanjut menunjukkan variasi dosis cair kombinasi limbah bonggol pisang dan urin sapi yang berpengaruh paling optimum terhadap pertumbuhan tanaman caisin adalah 60 ml. Hasil penelitian ini dapat dijadikan sebagai sumber belajar biologi dalam bentuk brosur.

Kata kunci : pupuk organik cair, limbah bonggol pisang, dan urin sapi.

ABSTRACT

The objectives of this study were 1) to determine the effect of various doses of liquid organic fertilizer combined with banana weevil waste (*Musa paradisiaca* L) and cow urine on the growth of caisin ") and cow urine on the growth of caisin (*Brassica juncea* L.). 2) to determine the use of the results as a source of learning biology. This type of research is an experimental study using a completely randomized design (CRD). This study consisted of 5 treatments, namely, 4 treatments of giving doses of liquid organic fertilizer a combination of banana weevil waste and cow urine. Each treatment was given each replicate. The parameters observed in this study were height (cm), number of leaves. Based on the results of the study it can be concluded that there is a significant effect of dosing liquid organic fertilizer from banana weevil and cow urine on the growth of caisin plants, including plant height and number of leaves. The results of the study are based on Kruskal Wallis test analysis, namely $\chi^2_{hit} > \chi^2_{daf}$. Further tests showed that the variation in the liquid dose of the combination of banana weevil waste and cow urine which had the optimum effect on the growth of caisin was 60 ml. The results of this research can be used as a source of learning biology in the form of brochures.

Keywords: liquid organic fertilizer, banana weevil waste, and cow urine.