

ABSTRAK

PENGARUH KOMBINASI PUPUK NPK DENGAN POC KULIT NANAS DAN KULIT PISANG TERHADAP PERTUMBUHAN DAN KUALITAS BIBIT TANAMAN JAMBU BIJI 'KRISTAL'

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Budidaya jambu biji 'Kristal' di Indonesia memiliki potensi yang baik untuk dikembangkan, namun produksinya terkhusus di Lampung mengalami penurunan. Salah satu usaha yang dapat dilakukan untuk meningkatkan produksi buah jambu biji 'Kristal' ialah meningkatkan kualitas bibit dengan memenuhi kebutuhan unsur haranya. Penelitian ini bertujuan mengkaji pengaruh pemberian kombinasi pupuk NPK dengan POC kulit pisang dan kulit nanas terhadap pertumbuhan dan kualitas bibit tanaman jambu biji 'Kristal'. Penelitian dilakukan di Laboratorium Lapang Terpadu, Fakultas Pertanian, Universitas Lampung, menggunakan Rancangan Acak Kelompok (RAK) tunggal dengan 7 perlakuan, yaitu 100% NPK (K1), 50% NPK + 50% POC Kulit Pisang (K2), 50% NPK + 50% POC Kulit Nanas (K3), 75% NPK + 25% POC Kulit Pisang (K4), 75% NPK + 25% POC Kulit Nanas (K5), 100% POC Kulit Pisang (K6), dan 100% POC Kulit Nanas (K7). Homogenitas ragam diuji dengan Uji Bartlett dan aditivitas dengan Uji Tukey. Data yang homogen dan aditif dianalisis menggunakan ANOVA, apabila perlakuan signifikan dilanjutkan dengan Uji Duncan Multiple Range Test (DMRT). Hasil penelitian menunjukkan bahwa pemberian kombinasi pupuk NPK dengan POC kulit pisang dan kulit nanas hanya memberikan pengaruh nyata terhadap variabel luas daun dan tingkat kehijauan daun, sedangkan konsentrasi paling optimal ialah 50% NPK + 50% POC kulit pisang (K2), karena memberikan hasil terbaik dalam meningkatkan luas daun dan tingkat kehijauan daun, namun tidak berbeda nyata dengan perlakuan 50% NPK + 50% POC kulit nanas (K3)

Kata kunci : *Bibit jambu biji 'Kristal', POC kulit nanas, POC kulit pisang, pupuk NPK*

THE EFFECT OF COMBINING NPK FERTILIZER WITH PINEAPPLE PEEL AND BANANA PEEL LIQUID ORGANIC FERTILIZER ON THE GROWTH AND QUALITY OF ‘CRYSTAL’ GUAVA SEEDLINGS

ABSTRACT

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The cultivation of ‘Crystal’ guava in Indonesia has strong potential for development; however, its production, particularly in Lampung, has experienced a decline. One effort that can be undertaken to increase the production of ‘Crystal’ guava fruit is improving seedling quality by fulfilling their nutrient requirements. This study aimed to examine the effects of combining NPK fertilizer with liquid organic fertilizer (LOF) made from banana peels and pineapple peels on the growth and quality of ‘Crystal’ guava seedlings. The research was conducted at the Integrated Field Laboratory, Faculty of Agriculture, University of Lampung, using a single-factor Randomized Block Design (RBD) with 7 treatments: 100% NPK (K1), 50% NPK + 50% Banana Peel LOF (K2), 50% NPK + 50% Pineapple Peel LOF (K3), 75% NPK + 25% Banana Peel LOF (K4), 75% NPK + 25% Pineapple Peel LOF (K5), 100% Banana Peel LOF (K6), and 100% Pineapple Peel LOF (K7). Homogeneity of variance was tested using Bartlett’s Test, and additivity using Tukey’s Test. Homogeneous and additive data were analyzed using ANOVA, and if treatment effects were significant, the analysis was followed by Duncan’s Multiple Range Test

(DMRT). The results showed that the application of NPK fertilizer combined with banana peel and pineapple peel LOF significantly affected leaf area and leaf greenness, while the most optimal concentration was 50% NPK + 50% banana peel LOF (K2), as it provided the best improvement in leaf area and leaf greenness, although it was not significantly different from the 50% NPK + 50% pineapple peel LOF treatment (K3).

Keywords: ‘Crystal’ guava seedlings, pineapple peel LOF, banana peel LOF, NPK fertilizer