

**PENGARUH PUPUK KANDANG DAN DOLOMIT TERHADAP
PERTUMBUHAN DAN PRODUKSI PADI (*Oryza sativa* L.)**

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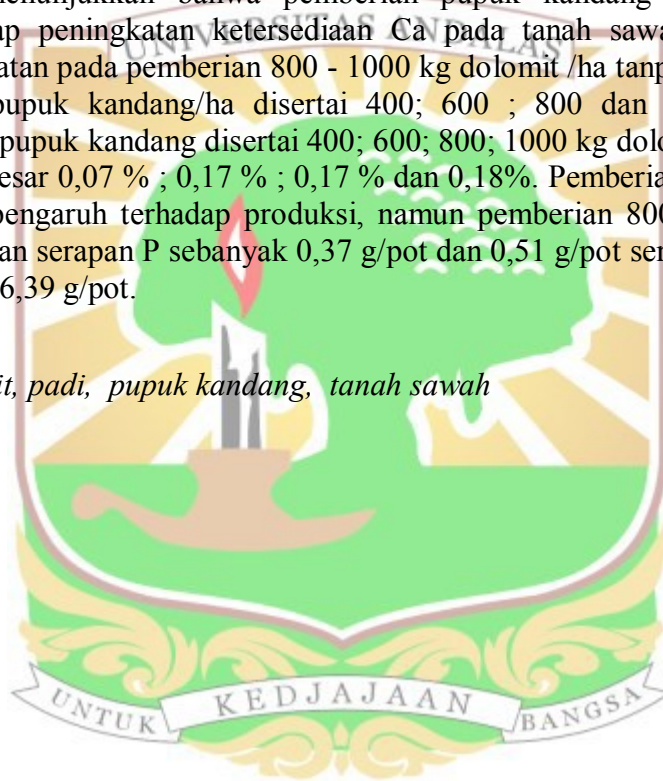
**PROGRAM STUDI AGROEKOTEKNOLOGI
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PENGARUH PUPUK KANDANG DAN DOLOMIT TERHADAP PERTUMBUHAN DAN PRODUKSI PADI (*Oryza sativa* L.)

ABSTRAK

Penelitian pengaruh pupuk kandang dan dolomit terhadap pertumbuhan dan produksi padi (*Oryza sativa* L.) dilaksanakan di rumah kawat dan laboratorium Kimia Tanah Fakultas Pertanian Universitas Andalas, pada bulan Juni sampai Desember 2015. Penelitian menggunakan Rancangan Acak Lengkap (RAL) faktorial dengan 3 ulangan. Faktor A adalah dosis pupuk kandang (0 dan 5 ton/ha) dan faktor B adalah dosis dolomit (0; 200; 400; 600; 800, dan 1000 kg/ha). Tujuan penelitian adalah untuk mengetahui pengaruh interaksi pupuk kandang dan dolomit, terhadap ketersediaan unsur Ca dan Mg serta produksi padi sawah. Hasil penelitian menunjukkan bahwa pemberian pupuk kandang dan dolomit belum berinteraksi terhadap peningkatan ketersediaan Ca pada tanah sawah. Ketersediaan Mg mengalami peningkatan pada pemberian 800 - 1000 kg dolomit /ha tanpa pupuk kandang dan pemberian 5 ton pupuk kandang/ha disertai 400; 600 ; 800 dan 1000 kg dolomit/ha. Pemberian 5 ton/ha pupuk kandang disertai 400; 600; 800; 1000 kg dolomit/ha meningkatkan N berturut-turut sebesar 0,07 % ; 0,17 % ; 0,17 % dan 0,18%. Pemberian pupuk kandang dan dolomit belum berpengaruh terhadap produksi, namun pemberian 800-1000 kg dolomit/ha mampu meningkatkan serapan P sebanyak 0,37 g/pot dan 0,51 g/pot serta serapan N tanaman sebesar 5,99 g/pot ; 6,39 g/pot.

Kata kunci : *dolomit, padi, pupuk kandang, tanah sawah*



EFFECT OF MANURE AND DOLOMITE ON THE GROWTH AND PRODUCTION OF RICE (*Oryza sativa L.*)

ABSTRACT

A research on the effect of manure and dolomite on the growth and production of rice (*Oryza sativa L.*) was conducted in wirehouse and Soil Chemistry Laboratory, Faculty of Agriculture, University of Andalas, from June to December 2015. The research was in form of pot experiment having 2 factors (manure, dolomite) with 3 replications. Factor A was dose of manure (0 and 5 ton/ha) and factor B was dose of dolomite (0; 200; 400; 600; 800 and 1000 kg/ha). The experimental units were allocated in Completely Randomized Design (CRD). The aim of this research was to find out the effect of manure and dolomite on the availability of Ca, Mg and rice production. The results showed that there was no interaction effect between manure and dolomite on availability of Ca in paddy soil. The availability of Mg increased under application of 800 – 1000 kg dolomite/ha without manure application and 400; 600; 800; and 1000 kg dolomite/ha with 5 ton manure/ha. The application of 5 ton manure/ha combined with 400; 600; 800; 1000 kg dolomite/ha increased the N-total of soil respectively by 0.07%, 0.17%, 0.17% and 0.18%. Manure and dolomite application did not affect rice production yet, but the application of 800 and 1000 kg dolomite/ha was able to increase the uptake of P by 0.37 g/pot and 0.51 g/pot and N by 5.99 g/pot; 6.39 g/pot, respectively.

Keywords: *dolomite, manure, paddy soil, rice*

