

**PENGARUH PEMBERIAN ABU JANJANG KELAPA SAWIT
TERHADAP KETERSEDIAAN DAN SERAPAN K SERTA
PERTUMBUHAN TANAMAN MELON (*Cucumis melo*, L) PADA
GAMBUT**

Abstrak

Penelitian mengenai studi pengaruh pemberian abu janjang kelapa sawit terhadap ketersediaan dan serapan K serta pertumbuhan tanaman melon (*Cucumis melo*, L) pada gambut telah dilaksanakan di Rumah Kaca dan laboratorium Tanah Fakultas Pertanian, Universitas Andalas, Padang serta di Life and Environmental Science Laboratory, Prefectural University of Hiroshima, Japan, berlangsung dari bulan Oktober 2015 sampai bulan Januari 2016. Tujuan penelitian ini adalah untuk mengetahui pengaruh pemberian beberapa dosis abu janjang kelapa sawit terhadap beberapa sifat kimia tanah gambut dan serapan K serta pertumbuhan tanaman melon. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) yang terdiri dari 5 perlakuan dan 3 ulangan yaitu abu janjang kelapa sawit dengan takaran 0, 450, 900, 1350, dan 1800 kg/ha. Data hasil penelitian dianalisis secara statistik dengan uji F, dan dilanjutkan dengan uji Duncan's New Multiple Range (DNMRT) pada taraf 5%. Hasil penelitian menunjukkan bahwa pemberian amelioran abu janjang kelapa sawit pada takaran 1800 kg/ha mampu meningkatkan pH, K-dd, Na-dd, dan kejenuhan basa tanah yaitu masing-masing sebesar 0,43 unit, 1,38 cmol/kg, 0,87 cmol/kg, dan 4,08 %, serta meningkatkan tinggi tanaman, berat kering batang dan daun, berat kering akar, serapan K batang dan daun, dan serapan K akar masing-masing sebesar 53 cm, 19,71 g, 0,89 g, 55,66 mg dan 3,14 mg secara berturut-turut dibandingkan dengan tanpa perlakuan.

Kata Kunci : Abu janjang kelapa sawit, gambut, melon, serapan K

**EFFECT OF PALM BUNCH ASH APPLICATION TO AVAILABILITY,
POTASSIUM ABSORPTION AND GROWTH OF MELON PLANT
(*Cucumis melo*, L) IN PEAT SOIL**

Abstract

The research about effect of palm bunch ash application to availability, potassium absorption, and growth of melon plant (*Cucumis melo*, L) in peat soil had did in greenhouse and Soil Laboratory Agriculture Faculty, Andalas University, Padang and in Life and Enviromental Science Laboratory, Prefectural University Of Hiroshima, Japan, during October 2015 until January 2016. The purpose of this research was to determine effect of several doses of palm bunch ash to several chemical properties peat soil and potassium absorption and growth of melon plant. This research use a completely randomized design (CRD), which consist of 5 treatments and 3 replications namely palm bunch ash with a dose of 0, 450, 900, 1350, and 1800 kg/ha. Data of result research were statistically analyzed by F test, and it continued with Duncan's New Multiple Range (DNMRT) at 5% level. The result showed that application of palm bunch ash ameliorant dose 1800 kg/ha is able to increase pH, K-dd, Na-dd, and soil base saturation, respectively by 0.43 units, 1.38 cmol/kg, 0,87 cmol/kg, and 4.08%, and increased plant height, stem and leaf dry weight, root dry weight, potassium absorption of stem and leaf, and potassium absorption of root respectively by 53 cm, 19.71 g, 0,89 g, 55,66 mg and 3,14 mg compared with no treatments.

Keywords: palm bunch ash, peat soil, melon, potassium (K) absorption

