

**PENGARUH BEBERAPA DOSIS PUPUK BOKASHI
KOTORAN AYAM TERHADAP PERTUMBUHAN DAN
HASIL TANAMAN SAWI PAGODA (*Brassica narinosa* L.)**

SKRIPSI

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PADANG
2026**

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Abstrak

Sawi pagoda (*Brassica narinosa* L.) merupakan tanaman sayuran kaya gizi dengan harga jual relatif tinggi, namun produksinya di Indonesia masih rendah akibat terbatasnya budidaya dan ketersediaan komoditas ini di pasar. Salah satu kendalanya adalah rendahnya ketersediaan hara pada tanah Ultisol yang berstruktur padat, beraerasi buruk, dan miskin unsur hara makro, sehingga menghambat pertumbuhan dan hasil tanaman serta memerlukan perbaikan kesuburan tanah melalui pemberian pupuk organik bokashi kotoran ayam. Penelitian ini bertujuan untuk mendapatkan dosis bokashi kotoran ayam yang efektif terhadap pertumbuhan dan hasil tanaman sawi pagoda. Penelitian dilaksanakan di Rumah Kawat dan Laboratorium Fisiologi Tumbuhan, Fakultas Pertanian, Universitas Andalas, Padang, pada Februari hingga April 2026, menggunakan Rancangan Acak Lengkap (RAL) dengan 5 taraf dosis (0, 7,5, 15, 22,5, dan 30 ton/ha) yang diulang 4 kali. Data dianalisis dengan uji F dan uji lanjut DNMRT pada taraf nyata 5%. Hasil menunjukkan bahwa pemberian beberapa dosis pupuk bokashi kotoran ayam mampu meningkatkan tinggi tanaman, jumlah daun, diameter tajuk, bobot segar tanaman, dan bobot segar tajuk, tetapi belum mampu meningkatkan lebar daun terlebar, luas daun, bobot segar akar, volume akar, bobot kering akar, dan rasio tajuk akar. Dosis 15 ton/ha (37,5 g/polybag) ditetapkan sebagai dosis efektif karena mampu meningkatkan pertumbuhan dan hasil sawi pagoda dengan respon yang tidak berbeda nyata dari dosis yang lebih tinggi.

Kata kunci: bahan organik, sayuran, ultisol, unsur hara



THE EFFECT OF SEVERAL DOSES OF CHICKEN MANURE BOKASHI FERTILIZER ON THE GROWTH AND YIELD OF PAGODA MUSTARD (*Brassica narinosa* L.)

Abstract

Pagoda mustard (*Brassica narinosa* L.) is a nutrient-rich vegetable crop with a relatively high market value; however, its production in Indonesia remains low due to limited cultivation and the restricted availability of this commodity in the market. One of the constraints is the low nutrient availability in Ultisol soils, which are characterized by compact structure, poor aeration, and deficiency in macronutrients, thereby hindering plant growth and yield and requiring soil fertility improvement through the application of chicken manure bokashi organic fertilizer. This study aimed to determine the effective dose of chicken manure bokashi for the growth and yield of pagoda mustard. The research was conducted at the Screen House and the Plant Physiology Laboratory, Faculty of Agriculture, Universitas Andalas, Padang, from February to April 2026, using a Completely Randomized Design (CRD) with 5 dose levels (0, 7.5, 15, 22.5, and 30 tons/ha), each replicated 4 times. Data were analyzed using the F test and further tested with DNMRT at the 5% significance level. The results showed that the application of several doses of chicken manure bokashi fertilizer was able to increase plant height, number of leaves, canopy diameter, plant fresh weight, and canopy fresh weight, but had not yet been able to increase the widest leaf width, leaf area, root fresh weight, root volume, root dry weight, and root-to-canopy ratio. A dose of 15 tons/ha (37.5 g/polybag) was determined as the effective dose, as it was able to increase the growth and yield of pagoda mustard with a response not significantly different from higher doses.s

Keywords: nutrients, organic matter, ultisol, vegetable

