

Rafli Syufi Surya Andika. 200311100116. Pengaruh Komposisi Media Tanam Terhadap Pertumbuhan dan Kandungan Serat Tanaman Kailan (*Brassica oleraceae* L. Var. *Alboglabra*). Dibimbing Oleh: Ir. Sinar Suryawati, M.Si dan Dr. Ir. Hj. Siti Fatimah, M.Si

ABSTRAK

Tanaman kailan (*Brassica oleraceae* L. Var. *Alboglabra*) adalah tanaman yang memiliki umur pendek yaitu dapat dipanen saat berumur 35 HST dengan ciri tanaman masih muda dan belum berbunga serta memiliki nilai ekonomi yang tinggi karena mengandung gizi yang tinggi seperti vitamin B1 (Thiamin), vitamin B2 (Riboflamin), vitamin B3, carotene, niacin, dan serat pangan. Budidaya kailan umumnya menggunakan polybag dimana media tanam yang digunakan yaitu tanah tanpa campuran bahan lain. Penggunaan media tanam dengan kualitas yang baik merupakan salah satu faktor pendukung dalam pertumbuhan kailan. Tujuan penelitian ini untuk mengetahui respon pertumbuhan dan kandungan serat tanaman kailan akibat komposisi media tanam yang berbeda. Penelitian ini dimulai pada bulan Desember 2023 sampai Maret 2024 menggunakan Rancangan Acak Kelompok, *Analysis of Variance* dengan dan uji lanjut DMRT taraf 5% untuk mengetahui perlakuan terbaik. Perlakuan komposisi meliputi tanah tanpa pupuk, tanah + pupuk kotoran sapi (1:2), tanah pupuk kotoran kambing (1:2), tanah + pupuk kotoran sapi + kascing (1:1:1) serta tanah + pupuk kotoran kambing + kascing (1:1:1). Berdasarkan hasil penelitian dapat diketahui bahwa perlakuan media tanam berpengaruh nyata terhadap jumlah daun dan diameter batang pada umur 10 sampai 35 HST, serta tinggi tanaman, bobot basah total, bobot kering total dan panjang akar tanaman. Perlakuan dengan komposisi media tanam tanah + pupuk kotoran sapi + kascing (1:1:1) memperoleh hasil tertinggi pada setiap parameter pertumbuhan tanaman. Sedangkan perlakuan komposisi media tanam tanah + pupuk kotoran kambing (1:2) cenderung menghasilkan serat pangan tertinggi dibandingkan perlakuan lainnya pada umur 35 HST.

Kata Kunci : Kailan, Kascing, Pupuk Kotoran Sapi, kambing, kailan

Rafli Syufi Surya Andika. 200311100116. Effect of Planting Media Composition on the Growth and Fiber Content of Kailan Plants (*Brassica oleraceae* L. Var. *Alboglabra*). Supervised by: Ir. Sinar Suryawati, M.Si and Dr. Ir. Hj. Siti Fatimah, M.Si

ABSTRACT

Kailan plant (*Brassica oleraceae* L. Var. *Alboglabra*) is a short-lived plant that can be harvested at the age of 35 HST with the characteristics of a young and unflowered plant and has high economic value because it contains high nutrients such as vitamin B1 (Thiamin), vitamin B2 (Riboflamin), vitamin B3, carotene, niacin, and dietary fiber. Kailan cultivation generally uses polybags where the planting medium used is soil without a mixture of other materials. The use of good quality planting media is one of the supporting factors in the growth of kailan. The purpose of this study is to determine the growth response and fiber content of kailan plants due to the composition of different planting media. This study started from December 2023 to March 2024 using a Group Random Design, Analysis of Variance with and a 5% DMRT follow-up test to determine the best treatment. Composition treatments include soil without fertilizer, soil + cow manure fertilizer (1:2), goat manure fertilizer soil (1:2), soil + cow manure + kascing (1:1:1) and soil + goat manure + kascing (1:1:1). Based on the results of the study, it can be found that the treatment of planting media has a real effect on the number of leaves and stem diameter at the age of 10 to 35 HST, as well as plant height, total wet weight, total dry weight and plant root length. Treatment with the composition of soil planting medium + cow manure + cascing (1:1:1) obtained the highest results in each plant growth parameter. Meanwhile, the treatment of soil planting media + goat manure fertilizer (1:2) tended to produce the highest dietary fiber compared to other treatments at the age of 35 HST.

Keywords: Kailan, Kascing, Cow Manure, Goat