

KAJIAN ASPEK AGRONOMI FODDER JAGUNG (*Zea mays*) PADA PERBEDAAN VARIETAS DAN UMUR PANEN

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Abstrak. Jagung (*Zea mays*) merupakan salah satu tanaman cerealia yang mempunyai potensi untuk menjaga ketersediaan hijauan pakan ternak secara hidroponik *fodder*. Penelitian bertujuan untuk mengetahui aspek agronomi *fodder* jagung pada perbedaan varietas dan umur panen. Metode penelitian ini menggunakan metode eksperimental dengan rancangan acak lengkap pola faktorial (2x3). Perlakuan Faktor pertama berupa varietas jagung putih (Bima Putih) dan jagung kuning (Bima 16). Faktor kedua berupa umur panen 6, 8, 10 hari. Setiap kombinasi perlakuan direplikasi 4 kali. Kerapatan biji dalam media tanam 3,85 kg/m². Metode hidroponik menggunakan modifikasi sistem *deep water culture system*. Aspek agronomi yang diukur adalah tinggi tanaman, panjang daun, jumlah daun, dan lebar daun, sedangkan aspek produksi *fodder* meliputi biomassa segar dan konversi terhadap biji. Hasil anova dari data yang diperoleh menunjukkan adanya korelasi antara varietas dan umur panen terhadap pertumbuhan dan produksi segar *fodder* jagung. Pertumbuhan dan Produksi *fodder* jagung tertinggi dicapai pada varietas jagung putih yang dipanen umur 10 hari. Konversi produksi segar umur 10 hari yang dihasil jagung putih sebesar $5,48 \pm 0,28$ dan jagung kuning $4,87 \pm 0,11$. Hasil penelitian disimpulkan bahwa *fodder* jagung putih memiliki pertumbuhan dan produksi optimal yang dipanen pada umur 10 hari.

Kata Kunci: Hidroponik *fodder*, pertumbuhan, produksi, umur panen, varietas jagung

Abstrak. Corn (*Zea mays*) is one of the cereal plants that has the potential as a forage called hydroponic green fodder. The study was to determine the growth and corn fodder productivity from the effect of different varieties and harvest age. This research method uses an experimental method with a completely randomized design with a factorial pattern (2x3). The first factor was varieties of white corn (Bima Putih) and yellow corn (Bima 16). The second factor is the harvest age of 6, 8, 10 days. Each treatment combination was replicated 4 times. The density of seeds in the planting medium was 3.85 kg/m². The hydroponic method uses a modified deep water culture system. Parameters observed were growth which included plant height, leaf length, number of leaves, and leaf width, while fodder productivity included fresh biomass and conversion to seeds. The data obtained were analyzed by ANOVA and the significance test was continued by Duncan's Multiple Range Test. The results showed that there was a correlation between varieties and harvest age on the growth and corn fodder productivity. The highest growth and production of corn fodder was achieved in white corn varieties that were harvested at the age of 10 days. Conversion of fresh production at 10 days old produced by white corn was 5.48 ± 0.28 and yellow corn was 4.87 ± 0.11 . The results of the study concluded that white corn fodder had optimal growth and production which was harvested at the age of 10 days.

Keywords: Hydroponic fodder, growth, production, harvest age, corn varieties