

**RESPON PERTUMBUHAN DAN HASIL TANAMAN BUNCIS  
(*Phaseolus vulgaris* L.) PADA KONSENTRASI *PHOTOSYNTHETIC*  
*BACTERIA* DAN WAKTU PEMANGKASAN PUCUK**

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**ABSTRAK**

Tanaman buncis (*Phaseolus vulgaris* L.) adalah tanaman sayuran buah yang tergolong dalam famili Leguminosae. Penelitian ini bertujuan untuk menentukan konsentrasi PSB dan waktu pemangkasan pucuk yang terbaik untuk pertumbuhan dan hasil tanaman buncis. Metode penelitian yang digunakan adalah percobaan lapangan faktorial dengan menggunakan Rancangan Acak Kelompok Lengkap (RAKL). Faktor pertama adalah konsentrasi PSB terdiri atas 3 taraf, yaitu: 10, 20, dan 30 ml/L. Faktor kedua adalah waktu pemangkasan pucuk terdiri atas 3 taraf, yaitu 21, 28, dan 35 HST. Data hasil penelitian dianalisis menggunakan *Analysis of Variance* (ANOVA) taraf 5% dan *Contras Orthogonal*, dilanjutkan *Duncan Multiple Range* (DMRT) taraf 5%. Hasil penelitian menunjukkan ada beda nyata antara perlakuan dan kontrol pada parameter tinggi tanaman, jumlah cabang, jumlah daun, bobot segar brangkasan, jumlah polong per tanaman, panjang polong, bobot per polong, bobot polong per tanaman, indeks panen, dan bobot polong per hektar. Terdapat interaksi pada parameter jumlah polong per tanaman. PSB 20 ml/L memberikan hasil terbaik pada tinggi tanaman 34 HST, umur mulai berbunga, bobot segar brangkasan per tanaman, jumlah polong per tanaman, panjang polong, bobot per polong, bobot polong per petak, dan bobot polong per hektar. Waktu pemangkasan pucuk umur 28 HST memberikan hasil terbaik pada umur mulai berbunga, bobot segar brangkasan per tanaman, jumlah polong per tanaman, panjang polong, bobot per polong, bobot polong per petak, dan bobot polong per hektar.

**Kata kunci:** Buncis, *Photosynthetic bacteria*, Waktu pemangkasan pucuk

**RESPONSE OF GROWTH AND YIELD OF COMMON BEANS  
(*Phaseolus vulgaris* L.) TO PHOTOSYNTHETIC BACTERIA  
CONCENTRATIONS AND PINCHING TIME**

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**ABSTRACT**

Common beans (*Phaseolus vulgaris* L.) are fruit vegetable crops belonging to the Leguminosae family. The objective of this research is to investigate the interaction between the application of *Photosynthetic Bacteria* (PSB) concentrations and pinching time, determine the optimal PSB concentration, and identify the best pinching time for enhancing the growth and yield of common beans. The research method used was a factorial field experiment with a Randomized Complete Block Design. The first factor is PSB concentration with three levels, namely 15, 20, and 25 ml/L. The second factor is pinching time with three levels, namely 21, 28, and 35 days after planting. Data were analyzed using Analysis of Variance (ANOVA) at a 5% significance level, followed by Contrast Orthogonal analysis and Duncan's Multiple Range Test (DMRT) at a 5% significance level. The results revealed significant differences between the treatments and the control in several parameters, including plant height, number of branches, number of leaves, fresh biomass weight, number of pods per plant, pod length, pod weight per plant, harvest index, and pod weight per hectare. A significant interaction was observed for the number of pods per plant. The treatment with a PSB concentration of 20 ml/L produced the best results in terms of plant height at 34 DAP, flowering time, fresh biomass weight per plant, number of pods per plant, pod length, weight per pod, unit pod weight, and pod weight per hectare. The treatment with shoot pruning at 28 days after planting gave the best results in terms of flowering time, fresh biomass weight per plant, number of pods per plant, pod length, weight per pod, unit pod weight, and pod weight per hectare.

**Keywords:** Common beans, *Photosynthetic bacteria*, Pinching time.