

INTISARI

Gulma adalah salah satu penyebab penurunan hasil kacang hijau. Keberadaan gulma juga dapat mengurangi keuntungan panen karena mempersulit prosesnya, menurunkan kualitas hasil panen, dan menghasilkan senyawa alelopat yang menghambat pertumbuhan tanaman budidaya. Penelitian ini bertujuan mengetahui pengaruh waktu penyiangan terhadap dominasi gulma, pertumbuhan dan hasil tanaman kacang hijau. Penelitian ini dilaksanakan di Kebun Percobaan Banguntapan Universitas Gadjah Mada, Fakultas Pertanian, Kabupaten Bantul, Daerah Istimewa Yogyakarta pada tanggal 14 Februari 2020 hingga 4 Mei 2020 dari awal penanaman sampai panen kacang hijau. Penelitian menggunakan Rancangan Acak Kelompok Lengkap (RAKL) dengan 3 blok sebagai ulangan. Hasil penelitian menunjukkan bahwa perlakuan P4 (6 MST dikendalikan, setelah itu dibiarkan) pada umur 4 minggu setelah tanam, perlakuan P5 (8 minggu setelah tanam dikendalikan, setelah itu dibiarkan) pada umur 6 minggu setelah tanam, dan P5 (8 minggu setelah tanam dikendalikan, setelah itu dibiarkan) pada umur 10 minggu setelah tanam memberikan hasil yang meningkat secara signifikan dan berbeda nyata terhadap tinggi tanaman. Perlakuan P6 (2 minggu setelah tanam dibiarkan, setelah itu dikendalikan) memberikan hasil yang meningkat secara signifikan dan berbeda nyata terhadap berat kering tajuk pada umur 4 minggu setelah tanam dan 6 minggu setelah tanam. Perlakuan P6 (2 minggu setelah tanam dibiarkan, setelah itu dikendalikan) memberikan hasil yang meningkat secara signifikan dan berbeda nyata terhadap berat kering polong, yang menyebabkan pertumbuhan tanaman meningkat secara signifikan. Sedangkan perlakuan yang diberikan tidak memberikan pengaruh yang berbeda nyata terhadap jumlah daun, luas daun, indeks luas daun, berat segar, dan kering daun, berat segar tajuk, panjang akar, berat segar akar dan berat kering akar, jumlah polong per tanaman, berat 100 biji, berat segar polong, berat biji per polong, berat kering biji, indeks panen, dan produktivitas. Dominasi gulma awal penelitian dan dominasi gulma akhir penelitian adalah *Dactyloctenium aegyptium* berjenis rumputan dengan nilai SDR 27,12% dan *Paspalum conjugatum* berjenis rumputan dengan nilai SDR 13,10%. Karena tanaman kacang hijau dapat beradaptasi dengan gulma jenis rumputan.

Kata kunci : Dominansi Gulma, Hasil Tanaman, Kacang Hijau, Pertumbuhan Tanaman, Waktu Penyiangan.

ABSTRACT

Weeds are one of the causes that decreased mungbean yields. The presence of weeds may also reduced the profit of harvest decreasing the quality, and resulting in the creation of allelopathic compounds that inhibit the growth of cultivated plants. This study aims to determine the effect of weeding time on weed dominancy, growth, and the yield of mungbeans. This research was conducted at the Universitas Gadjah Mada Banguntapan Experimental Garden, Faculty of Agriculture, Bantul Regency, Special Province of Yogyakarta on February 14, 2020 to May 4, 2020 from the early cultivating process, up until the events of harvest. This research used a completely randomized block design (RAKL) with three blocks as replications. The results showed that the P4 treatment (6 weeks after planting was controlled, after that was left alone) at the age of 4 weeks after planting, the P5 treatment (8 weeks after planting was controlled, after that it was left) at the age of 6 weeks after planting, and P5 (8 weeks after planting was controlled, after that it was left) at the age of 10 weeks after planting gave a significant increase in yields and significantly different from plant height. Treatment P6 (2 weeks after planting was allowed to be controlled, after which it was controlled) gave significantly increased yields and was significantly different from shoot dry weight at 4 weeks after planting and 6 weeks after planting. Treatment P6 (2 weeks after planting was allowed to be controlled, after which it was controlled) gave significantly increased yields and was significantly different from pod dry weight, which caused plant growth to increase significantly. While the treatment given did not have a significant effect on the number of leaves, leaf area, leaf area index, leaf fresh weight and dry weight, shoot fresh weight, root length, root fresh weight and root dry weight, number of pods per plant, weight of 100. seeds, pod fresh weight, seed weight per pod, seed dry weight, harvest index, and productivity. The dominance of weeds at the beginning of the study and the dominance of weeds at the end of the study were *Dactylotaenium aegyptum*, a grass type with an SDR value of 27.12% and *Paspalum conjugatum*, a grass type with an SDR value of 13.10%. Because green bean plants can adapt to grass type weeds.

Keywords: crop yields, mung beans, plant growth, weed dominancy, weeding time.