

INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh proporsi aplikasi pupuk organik dan anorganik pada pertumbuhan dan hasil tanaman kacang hijau (*Vigna radiata*), pertumbuhan gulma, serta biomassa yang dapat ditinggalkan pada lahan pasir pantai. Penelitian ini dilaksanakan di lahan pasir Pantai Samas, Bantul menggunakan metode Rancangan Acak Kelompok Lengkap (RAKL) dengan satu faktor yaitu kombinasi aplikasi pupuk organik dan anorganik dengan 3 blok ulangan. Variabel yang diamati meliputi pertumbuhan dan hasil kacang hijau, analisis pertumbuhan kacang hijau, analisis vegetasi dan bobot gulma, serta total bobot biomassa yang tertinggal. Data yang diperoleh dianalisis menggunakan analisis varian (Anova) dengan taraf 5 %, dilanjutkan dengan uji lanjut *Tukey's Honestly Significant Difference* (HSD) dengan tingkat kepercayaan 5 % apabila terdapat beda nyata antar perlakuan. Hasil penelitian menunjukkan bahwa aplikasi 25 % pupuk organik + 75 % pupuk anorganik memberikan hasil yang tinggi serta meninggalkan biomassa yang juga tinggi, sedangkan aplikasi 75 % pupuk organik + 25 % pupuk anorganik memberikan nilai bobot gulma tertinggi.

Kata kunci: kacang hijau, pupuk organik, pupuk anorganik, gulma.

ABSTRACT

The objectives of this study were to investigate the effect of the application of organic and inorganic fertilizer combination on the growth and yield of mung bean, weeds growth, and leftover biomass on the coastal area. This experiment was conducted on Samas Coastal Area, Bantul, arranged in Randomized Complete Block Design (RCBD) single factor with the application of organic and inorganic fertilizer combination with three blocks as replications. The observations were done on plant growth and yield, plant growth analysis, vegetation analysis of weeds, and weeds weight. The observed data were analyzed using analysis of variance (ANOVA) with the level of credibility at 5 %. The results were analysed with Tukey's Honestly Significant Difference (HSD) at 5 % level of confidence when the result was significantly different. The results showed that the application of 25 % organic fertilizer + 75 % inorganic fertilizer gave a high yield with highest number of leftover biomass, while the 75 % organic fertilizer + 25 % inorganic fertilizer combination gave the highest number weeds weight.

Keyword: mung bean, organic fertilizer, inorganic fertilizer, weeds