

ABSTRAK

Bahan organik dalam tanah dapat meningkatkan kemampuan tanah dalam mengikat air. Salah satu faktor ketersediaan air dalam tanah adalah kedalaman solum dan kemampuan tanah memegang air. Penelitian ini bertujuan untuk mengetahui pengaruh kedalaman pembenaman jerami terhadap kadar air massa tanah, pertumbuhan dan produksi kedelai. Penelitian ini menggunakan RAK (Rancangan Acak Kelompok) dengan 3 perlakuan yaitu K0 (kontrol), K1 (kedalaman 10 cm), K2 (kedalaman 20 cm), dan K3 (kedalaman 30 cm) dari permukaan tanah dan diulang sebanyak 6 ulangan. Bahan yang digunakan kedelai varietas rajabasa dan jerami. Variabel pengamatan meliputi: tinggi tanaman, luas daun, jumlah cabang, distribusi perakaran, bobot 100 biji, bobot kering tanaman, kadar air dan C/N rasio. Data yang diperoleh dianalisis dengan uji ANOVA, pada pengaruh nyata dilanjutkan dengan uji BNJD pada taraf 5%. Hasil sidik ragam menunjukkan bahwa perlakuan pembenaman jerami pada kedalaman berbeda, berpengaruh nyata terhadap tinggi tanaman umur 6, 8 MST; distribusi perakaran; bobot 100 biji; bobot kering tanaman dan kadar air massa tanah. Perlakuan yang diberi jerami pada kedalaman 10 cm menunjukkan peningkatan kadar air massa dan memberikan rata-rata hasil yang terbaik.

Kata kunci : Kedelai , jerami, kadar air massa

ABSTRACT

The organic material in the soil can increase the soil's ability to bind water. Factor the water availability in the soil is solum depth and water holding ability of soil. This research aims to determine the effect of the depth of immersion straw to soil water mass content, growth and production of soybean. This research was conducted using Random Group with 3 treatments, K0 (control), K1 (depth 10 cm), K2 (depth 20 cm), and K3 (depth 30 cm) from the ground and repeated 6 replications. Soybean seed varieties used Rajabasa and straw. Variable observations include: plant height, leaf area, number of branches, distribution rooting, weight of 100 seeds, plant dry weight, moisture content and C/N ratio. Data was analyzed with ANOVA, the real influence continued with Duncan test at 5% level. Results of analysis of variance showed that straw immersion in different depth, plant height significantly affected the age of 6,8 a week after planting; distribution rooting; weight of 100 seeds; plant dry weight and water content in the soil. The treatments were given hay at a depth of 10 cm showed increased water mass content and give the average the best results.

Keywords: Soybean, straw, water mass content