

RINGKASAN

Permintaan buah stroberi yang meningkat setiap tahun, menuntut upaya peningkatan produksi buah tersebut. Salah satu upaya peningkatan produksi adalah budidaya tanaman dengan menerapkan pupuk cair guna memenuhi kebutuhan nutrisi tanaman. Jenis pupuk cair yang diterapkan adalah nutrisi AB Mix dan ekstrak rumput laut. Penelitian ini bertujuan untuk: 1) mempelajari pengaruh konsentrasi larutan nutrisi AB Mix terhadap pertumbuhan dan hasil tanaman stroberi, 2) mempelajari pengaruh konsentrasi larutan ekstrak rumput laut terhadap pertumbuhan dan hasil tanaman stroberi, 3) mempelajari interaksi konsentrasi nutrisi AB Mix dan ekstrak rumput laut dalam mendukung pertumbuhan dan produksi tanaman stroberi.

Penelitian dilaksanakan bulan Agustus-Oktober 2020 di Desa Pasir Kulon, Karanglewes Kabupaten Banyumas dengan ketinggian 100 m dpl dan Laboratorium Agronomi dan Hortikultura, Fakultas Pertanian, Universitas Jenderal Soedirman. Rancangan percobaan yang digunakan yaitu Rancangan Acak Kelompok (RAK) faktorial. Faktor pertama adalah konsentrasi nutrisi AB Mix yaitu $K_1 = 1.000$ ppm, $K_2 = 1.250$ ppm, $K_3 = 1.500$ ppm. Faktor kedua adalah ekstrak rumput laut, $E_1 = 0$ ml/liter, $E_2 = 0,5$ ml/liter, $E_3 = 1,0$ ml/liter. Kombinasi perlakuan antara 2 faktor didapatkan 9 perlakuan. Setiap perlakuan diulang 3 kali. Variabel yang diamati: jumlah daun, tinggi tanaman, kandungan klorofil, jumlah bunga, saat muncul bunga, jumlah buah, umur perkembangan buah, bobot buah dan diameter buah. Data yang diperoleh dianalisis menggunakan uji F pada taraf kesalahan 5% dan dilanjutkan uji DMRT taraf kesalahan 5%.

Hasil penelitian menunjukkan larutan nutrisi AB Mix dengan konsentrasi 1.250 ppm memberikan pertumbuhan dan hasil yang optimal. Larutan ekstrak rumput laut pada konsentrasi 1,0 ml/liter juga memberikan pertumbuhan dan hasil yang optimal. Namun demikian, tidak terdapat interaksi antara pemberian larutan nutrisi AB Mix dan ekstrak rumput laut terhadap pertumbuhan dan hasil tanaman stroberi.

SUMMARY

Demand of strawberry fruit increase every year, push the effort in the fruit production. Application of liquid fertilizer is one way in fulfilling nutrition of plants in promoting the strawberry yield. This research aimed to 1) study the effect of AB Mix nutrient concentration on the growth and yield of strawberry plants, 2) study the effect of seaweed extracts concentration on the growth and yield of strawberry plants, 3) study the interaction of AB Mix nutrient and seaweed extract concentration in supporting the growth and yield of strawberry plants.

The research was conducted from August to October 2020 in Pasir Kulon Village, Karanglewas, Banyumas district with an altitude of 100 m above sea level and the Laboratory of Agronomy and Horticulture, Faculty of Agriculture, Jenderal Soedirman University. The experimental design used was a randomized block design (RBD) with a factorial pattern. The first factor was the AB Mix nutrient concentration of $K_1 = 1.000$ ppm, $K_2 = 1.250$ ppm, $K_3 = 1.500$ ppm. The second factor was seaweed extract of $E_1 = 0$ ml/liter, $E_2 = 0,5$ ml/liter, $E_3 = 1,0$ ml/liter. The combination of treatment between 2 factors obtained 9 treatments. Each treatment was repeated three times. The observed variables were number of leaves, plant height, chlorophyll content, number of flowers, when flower appear, number of fruits, age of fruit development, fruit weight, and fruit diameter. The data obtained were analyzed using the F test at an error level of 5% and then it was further tested using a DMRT at an error level of 5%.

Concentration 1.250 ppm of AB Mix gave optimal result in growth and yield of strawberry plants. Also, concentration liquid seaweed extract 1,0 ml/liter gave optimal result in growth and yield of strawberry plants. However, there was no interaction between giving AB Mix nutrition and seaweed extract on the growth and yield of strawberry plants.