

RINGKASAN

Penelitian ini dilaksanakan di Rumah Kaca Fakultas Pertanian Universitas Islam Sumatera Utara, Jln. Karya Wisata Gedung Johor, Kecamatan Medan Johor Kota Medan, Provinsi Sumatera Utara dengan ketinggian tempat 25 mdpl dengan topografi datar. Penelitian dimulai pada bulan Desember 2021 sampai dengan bulan April 2022. Penelitian bertujuan untuk mengetahui pengaruh pemberian pupuk NPK dan pemberian air terhadap pertumbuhan dan produksi tanaman padi gogo. Penelitian ini menggunakan Rancangan Acak Kelompok (RAK) faktorial dengan dua faktor perlakuan yang diuji. Faktor pertama, dosis pupuk NPK terdiri dari 3 taraf perlakuan yaitu : N_0 = kontrol, N_1 = 1,5 g/pot dan N_2 = 3 g/pot. Faktor kedua, Interval pemberian air terdiri dari 3 taraf perlakuan yaitu : A_1 = pemberian air satu hari sekali, A_2 = pemberian air 2 minggu sekali dan A_3 = 4 minggu sekali. Parameter yang diamati adalah tinggi tanaman, umur keluar malai, panjang malai, jumlah anakan produktif, bobot gabah per tanaman dan bobot gabah 1000 butir.

Hasil penelitian menunjukkan bahwa pemberian dosis pupuk NPK berpengaruh nyata terhadap parameter tinggi tanaman, jumlah anakan produktif dan bobot gabah / tan, namun berpengaruh tidak nyata terhadap waktu keluar malai, panjang malai dan bobot gabah 1000 butir. Perlakuan N_2 (3 g/pot) merupakan dosis terbaik, hal ini dapat dilihat dari pertumbuhan tinggi tanaman dan produksi yang dihasilkan, perlakuan N_2 memperoleh hasil yang tertinggi. Interval pemberian air berpengaruh nyata terhadap tinggi tanaman, waktu keluar malai, jumlah anakan produktif dan bobot gabah per tanaman, namun berpengaruh tidak nyata terhadap panjang malai dan bobot gabah 1000 butir. Interval pemberian air terbaik terdapat pada pemberian air dua minggu sekali (A_2). Interaksi berpengaruh nyata terhadap jumlah anakan produktif dan bobot gabah per tanaman namun berpengaruh tidak nyata terhadap tinggi tanaman, waktu keluar malai, panjang malai dan bobot gabah 1000 butir. Kombinasi perlakuan N_2A_1 merupakan kombinasi perlakuan terbaik.

Kata Kunci : Tanaman Padi Gogo, Pupuk NPK, Interval Pemberian Air

SUMMARY

This research was carried out at the Greenhouse of the Faculty of Agriculture, Islamic University of North Sumatra, Jln. Karya wisata, Medan Johor District, Medan City, North Sumatra Province with an altitude of 25 meters above sea level with a flat topography. The study began in December 2021 until April 2022. The aim of the study was to determine the effect of NPK fertilizer application and water application on the growth and production of upland rice plants. This study used a factorial Randomized Block Design (RBD) with two treatment factors being tested. The first factor, the dose of NPK fertilizer consisted of 3 treatment levels, namely: N0 = control, N1 = 1.5 g/pot and N2 = 3 g/pot. The second factor, the interval of giving water consisted of 3 levels of treatment, namely: A1 = giving water once a day, A2 = giving water every 2 weeks and A3 = once every 4 weeks. Parameters observed were plant height, panicle exit age, panicle length, number of productive tillers, weight of grain per plant and weight of 1000 grains.

The results showed that the dose of NPK fertilizer had a significant effect on the parameters of plant height, number of productive tillers and grain weight per plant, but had no significant effect on panicle release time, panicle length and grain weight of 1000 grains. The N2 treatment (3 g/pot) was the best dose, it could be seen from the plant height growth and the resulting production, the N2 treatment got the highest yield. The interval of water application had a significant effect on plant height, panicle exit time, number of productive tillers and grain weight per plant, but had no significant effect on panicle length and grain weight of 1000 grains. The best water supply interval is given once every two weeks (A2). The interaction had a significant effect on the number of productive tillers and grain weight per plant but had no significant effect on plant height, panicle exit time, panicle length and 1000 grain weight of grain. The treatment combination N2A1 was the best treatment combination.

Keywords: Upland Rice Plants, NPK Fertilizer, Water Supply Interval