RINGKASAN

Penelitian ini bertujuan untuk; 1) mengetahui pengaruh umur pindah semaian ke polibag terhadap hasil tanaman tembakau, 2) mengkaji jenis pupuk terbaik terhadap hasil tanaman tembakau, 3) mengetahui pengaruh interaksi antara umur pindah semaian ke polibag dengan berbagai macam jenis pupuk terhadap pertumbuhan dan hasil tanaman tembakau. Penelitian ini dilaksanakan dari bulan April-Juli 2017 di *Screen house*, laboratorium, dan lahan pertanian. Rancangan percobaan yang digunakan adalah Rancangan Acak Kelompok (RAK), dengan dua faktor. Faktor pertama adalah umur pindah semaian ke polibag yaitu 10 hari (S1); 15 hari (S2); 20 hari (kontrol) (S3) setelah berkecambah. Faktor kedua adalah jenis pupuk yang meliputi NPK (kontrol) (P1); NPK dan gandasil D (P2); NPK dan mikoriza (P3); NPK, gandasil D, dan mikoriza (P4). Variabel yang diamati pada saat tanaman umur 60 hari setelah pindah tanam meliputi: tinggi tanaman, jumlah daun, luas daun, diameter batang, bobot basah akar, bobot kering akar, bobot basah tajuk, bobot kering tajuk, bobot basah daun, bobot kering daun dan persentase tanaman mati di lapangan. Hasil penelitian menunjukkan bahwa 1) Umur pindah semaian terbaik adalah umur 10 hari, meningkatkan hasil dibanding umur 20 hari (kontrol) yaitu pada bobot basah akar (18,21%), bobot basah tajuk (6,98%) dan diameter batang (3,85%). 2) Jenis pupuk berpengaruh terhadap pertumbuhan dan hasil dari tanaman tembakau di lapangan. Jenis pupuk terbaik adalah NPK, gandasil D, dan mikoriza dibanding dengan menggunakan pupuk NPK (kontrol) meningkatkan capaian variabel dilapangan seperti tinggi tanaman (12,78%), jumlah daun (18,86%), bobot kering akar (63,64%), bobot kering tajuk (27,69%), bobot kering daun (28,45%), bobot basah tajuk (44,13%), bobot basah daun (48,72%), bobot basah akar (72,19%) dan menurunkan persentase tanaman mati di lapangan 29,63 %. 3) Terdapat interaksi pada variabel luas daun dan diameter batang. Rerata interaksi terbaik pada variabel diameter batang dicapai pada umur pindah semaian 10 hari dan jenis pupuk NPK, gandasil D, dan mikoriza meningkatkan 5,79% dibanding dengan pemupukan menggunakan kontrol dan pada variabel luas daun interaksi terbaik terdapat pada umur semaian 10 hari dengan kontrol.

Kata kunci: tembakau, umur pindah semaian, jenis pupuk.

SUMMARY

This research aimed to: 1) know the effect of transplanting age of seedlings to polybags on the growth and resilience of tobacco plant seed, 2) find out the best types of fertilizer on the growth and resilience of seeds of tobacco plants, 3) to know the effect of interaction between transplanting age of seedlings to polybags with various kinds of type fertilizer on the growth of tobacco seedlings and field survival. This research was conducted on April-July 2017 at Screen house, laboratory, and farmland. The experimental design used was Randomized completed Block Design (RBD) with two factors. First factor was transplating age of seedlings to polybags 10 days (S1); 15 days (S2); 20 days after germination (control) (S3). Second factor was type of fertilizer NPK (control) (P1); NPK and gandasil D (P2); NPK and mycorrhiza (P3); NPK, gandasil D, and mycorrhiza (P4). Observed variables at 60 days after palnting in the field were: plant height, leaf number, leaf area, stem diameter, root wet weight, root dry weight, canopy wet weight, dry weight of crown, leaf wet weight, leaf dry weight and percentage of dead plants. The results showed that 1) Transplanting of seedlings age affected the growth of tobacco plant seed in the field. The best of transplanting age was 10 days, increased suveral variabel compared with 20 days (control)such as root wet weight (18,21%), canopy wet weight (6,98%) and stem diameter (3,85%). 2) Type of fertilizer incrased the growth and resilience of tobacco plant in the fild. The best type of fertilizer was NPK, gandasil D, and mycorrhiza comapared with NPK only (control) affected variables such as plant height (12,78%), leaf number (18,86%), root dry weight 63,64%, dry weight of crown (27,69%), leaf dry weight (28,45%), canopy wet weight 44,13%, leaf wet weught (48,72%), root wet weight (72,19%) and percentage of dead plants (29,63%). 3) There was interaction in the leaf area and stem diameter variable. The best plant stem diameter were achieved 10 days transplanting age and fertilized NPK and gandasil D or NPK and mycorrhiza or NPK, gandasil D, and mycorrhiza increased up to 5,79% compareed with NPK only and leaf area the best plant was 10 days transplanting with control.

Keywords:tobacco, age move seedlings, type of fertilizer.