

RINGKASAN

Kelengkeng merupakan buah yang banyak digemari konsumen karena memiliki kandungan gizi yang baik (286 kal, 45 mg kalsium dan 196 mg fosfor), tetapi produksi kelengkeng dataran rendah di Indonesia masih rendah, karena kurang tersedianya pasokan bibit berkualitas. Pertumbuhan tanaman di pembibitan memerlukan pasokan unsur hara yang cukup. Pupuk NPK merupakan pupuk yang umumnya mengandung lebih dari satu macam unsur hara tanaman (makro maupun mikro) terutama N, P, dan K. Penelitian ini bertujuan untuk mengetahui dosis pemberian pupuk NPK yang optimal pada pertumbuhan beberapa varietas bibit tanaman kelengkeng dataran rendah serta respon pertumbuhan terhadap beberapa varietas bibit kelengkeng dataran rendah.

Penelitian dilaksanakan selama bulan April sampai Agustus 2015 di *Screen House* Cilengko Farm, Desa Pandak, Kecamatan Baturaden Kabupaten Banyumas. Penelitian ini menggunakan rancangan Acak Kelompok Lengkap (RAKL), terdiri dari 2 faktor yaitu varietas bibit tanaman kelengkeng yang terdiri dari 4 varietas : Kristalin, Aroma durian, Diamond river dan Itoh. Faktor kedua yaitu pupuk NPK yang terdiri dari 3 taraf : 0 g/tanaman, 40 g/tanaman, 60 g/tanaman. Variabel yang diamati adalah pertambahan tinggi tanaman, pertambahan jumlah daun, pertambahan jumlah cabang, pertambahan luas daun dan kandungan klorofil.

Hasil penelitian menunjukkan bahwa: 1) Pemberian dosis pupuk NPK pada interaksinya berpengaruh terhadap variabel penambahan jumlah daun, kandungan klorofil dan penambahan jumlah cabang. Varietas Kristalin didapatkan dosis optimal 25,6 g/tanaman pada penambahan jumlah daun 115,8 helai. Pada variabel kandungan klorofil dosis pupuk optimal 28,2 g/tanaman pada kandungan 46,73 serta menunjukkan peningkatan respon pada penambahan jumlah cabang. Varietas Aroma durian menunjukkan penurunan pada penambahan jumlah daun dan jumlah cabang. Varietas Diamond river menunjukkan peningkatan pada ketiga variabel, sementara varietas Itoh menunjukkan penurunan pada penambahan jumlah daun. 2) Varietas Kristalin menunjukkan pertumbuhan terbaik pada variabel penambahan tinggi tanaman, jumlah daun serta luas daun. 3) Pemberian dosis pupuk NPK berpengaruh terhadap variabel penambahan jumlah daun dan penambahan luas daun. Dosis pupuk optimal masing-masing variabel yaitu 26,39 dan 19,07 g/tanaman.

SUMMARY

Longan is a fruit that favored consumers because it has a good nutrient content (286 cal, 45 mg calcium and 196 mg phosphorus), but the production of longan lowlands in Indonesia is still low, because lack of availability of quality seed supply. The growth of plants in the nursery requires a sufficient supply of nutrients. NPK fertilizer is a fertilizer which generally contain more than one kind of plant nutrients (macro and micro), especially N, P and K. NPK fertilizer is a fertilizer which generally contains more than one type of plant nutrient (macro and micro), especially N, P and K. This research aims is to determine the optimal dose of NPK fertilizer for the growth of several varieties of longan seeds lowlands and the growth response on some varieties of longan seeds lowlands.

Research was conducted from April to August 2015 in Screen House Cilengko Farm, Pandak village, Banyumas district, Baturaden regency. This study was done using Randomized Complete Design, which consists of two factors: the varieties of longan plant seeds consisting of four varieties: Kristalin, Aroma durian, Diamond river and Itoh. The second factor is the NPK fertilizer which consists of three levels: 0 g/plant, 40 g/plant, 60 g/plant. The variables measured were the increase of plant height, the increase of leaf numbers, the increase of branch numbers, the increase of leaf area and the chlorophyll content.

The results showed that: 1) By giving a dose of NPK fertilizer, the interaction showed an increase in the measured variables of leaf numbers, chlorophyll content and branch numbers. Kristalin varieties obtained by optimal dose of 25.6 g/plant on the increase of leaves number 115.8 sheets. In the chlorophyll content variable, the optimal fertilizer dose of 28.2 g/plant on the contents 46.73 and showed an increase in response to the number of branch. The Aroma durian varieties showed a decrease to the increase of leaf numbers and branch numbers. Diamond river varieties showed an increase to the three variables, meanwhile Itoh varieties showed a decrease to the number of leaves. 2) Kristalin varieties showed the best growth in the variable addition of plant height, leaf number and leaf area. 3) By giving a dose of NPK fertilizer it had the effect of increasing the number of leaves as well as increasing the area of the leaf. Optimal dose of fertilizer in each variable are 26.39 and 19.07 g/plant.