Iksanadi Prabowo. 0415009951. Pengaruh Konsentrasi Ga_3 Dan Media Tanam Terhadap Pertumbuhan Benih Tanaman Durian (*Durio zibethinus* Murray) di bawah bimbingan Ir. Ari Handriatni, MP, Anwar Fauzan, S.TP.,MP.

ABSTRAK

Penguasaan teknik budidaya tanaman durian merupakan faktor penting untuk mendukung upaya meningkatkan kualitas buah durian. Salah satu tahapan dalam budidaya adalah menyediakan bibit durian batang bawah sebagai bahan grafting. Penelitian ini bertujuan untuk mengetahui pengaruh Konsentrasi GA_3 dan macam media tanam terhadap pertumbuhan benih tanaman durian dan interaksinya. Penelitian dilakukan di Dinas Pertanian dan Pangan, Kecamatan Buaran, Kota Pekalongan. Penelitian ini menggunakan Rancangan Acak Kelompok (RAK) yang terdiri atas 2 faktor dengan ulangan 3 kali. Faktor ke 1 Konsentrasi GA_3 (tanpa GA_3, 100 ppm, 200 ppm dan 300 ppm), faktor ke 2 macam media tanam M1(Arang sekam : Tanah : Pupuk kandang Ayam), M2(Pasir : Tanah : Pupuk Kandang Ayam), M3(Cocopeat : Tanah : Pupuk kandang Ayam). Variabel yang diamati meliputi kecepatan berkecambah, presentase berkecambah, tinggi tanaman, diameter batang, jumlah daun, luas daun, bobot basah tanaman, bobot kering tanaman, panjang akar, jumlah akar sekunder. Data dianalisis dengan uji F dan apabila hasilnya berbeda nyata dilakukan dengan uji BNT. Untuk mengetahui antar perlakuan konsentrasi zat pengatur tumbuh diuji menggunakan regresi, sedangkan macam media tanam dilanjutkan uji kontras orthogonal. Hasil penelitian menunjukkan bahwa Konsentrasi GA_3 berbeda sangat nyata terhadap semua variable terkecuali presentase berkecambah. Konsentrasi GA_3 200 ppm (K2) memberikan hasil optimum pada pertumbuhan benih tanaman durian. Perlakuan macam media tanam berbeda sangat nyata terhadap variable tinggi tanaman, diameter batang, jumlah daun, bobot basah tanaman. Interaksi Konsentrasi GA_3 dengan macam media tanam berbeda sangat nyata pada variable jumlah daun, panjang akar, jumlah akar sekunder. Interksi terbaik adalah Konsentrasi GA_3 200 ppm dengan macam media tanam M1.

Kata kunci: *durian, konsentrasi GA_3, macam media tanam*

Iksanadi Prabowo. 0415009951. Effect of Ga3 Concentration and Planting Media on the Growth of Durian (Durio zibethinus Murray) Seeds under the guidance of Ir. Ari Handriatni, MP, Anwar Fauzan, S.TP., MP

ABSTRACT

Mastery of durian plant cultivation techniques is an important factor to support efforts to improve durian fruit quality. One of the stages in cultivation is to provide durian rootstock seeds as grafting material. This study aims to determine the effect of GA_3 concentration and the variety of growing media on durian seed growth and its interactions. The research was conducted at the Department of Agriculture and Food, Buaran District, Pekalongan City. This study used a randomized block design (RBD) consisting of 2 factors with 3 replications. 1st factor Concentration of GA_3 (without GA_3, 100 ppm, 200 ppm and 300 ppm), 2nd factor for planting media M1 (Husk charcoal: Soil: Chicken manure), M2 (Sand: Soil: Chicken Manure), M3 (Cocopeat: Soil: Chicken manure). The variables observed included germination speed, germination percentage, plant height, stem diameter, number of leaves, leaf area, plant wet weight, plant dry weight, root length, number of secondary roots. The data were analyzed by using the F test and if the results were significantly different, it was done by using the LSD test. To find out between treatments, the concentration of growth regulators was tested using regression, while the types of growing media were continued with orthogonal contrast tests. The results showed that the concentration of GA_3 was very significantly different for all variables except the percentage of germination. The concentration of 200 ppm GA_3 (K2) gave optimum results on the growth of durian seeds. The treatment of different types of planting media was very significantly different on the variables of plant height, stem diameter, number of leaves, plant wet weight. The interaction of GA_3 concentration with different planting media was very significant in the variable number of leaves, root length, number of secondary roots. The best interaction is the concentration of 200 ppm GA_3 with a variety of planting media M1

Key words: durian, GA_3 concentration, kinds of media plant