ABSTRAK

UJI ZAT PENGATUR TUMBUH TERHADAP PEMATAHAN DORMANSI RIMPANG JAHE MERAH (*Zingiber officinale* Klon. Rubrum)

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Jahe merah dikenal sebagai bahan konsumsi yang dapat meningkatkan imun tubuh. Permintaan jahe merah konsumsi di pasar meningkat semenjak pandemi covid-19 berlangsung. Perbanyakan menggunakan rimpang sebagai bahan bibit dilakukan pada proses budidaya jahe merah. Masa dormansi rimpang yang berlangsung selama 2 bulan menjadi salah satu alasan sulitnya menjaga ketersediaan rimpang jahe merah sebagai bibit bermutu dan siap tanam pada waktu yang dibutuhkan. Dormansi rimpang yang diakibatkan ketidaksesuaian kondisi lingkungan saat panen menjadikan komposisi hormon inhibitor dalam rimpang lebih dominan dibanding hormon *promotor*. Pemberian zat pengatur tumbuh secara eksogen merupakan salah satu upaya dalam mematahkan dormansi pada rimpang jahe merah. Penelitian ini bertujuan untuk menemukan zat pengatur tumbuh yang paling baik dalam mematahkan dormansi rimpang jahe merah. Penelitian ini dilaksanakan pada bulan Juli sampai Agustus 2021 di Kabupaten Garut, menggunakan Rancangan Acak Kelompok (RAk) zat pengatur tumbuh dengan 7 perlakuan diantaranya : A = Air (kontrol), B = NAA 150 ppm, C = BAP 100 ppm, D = Atonik 40 % + Air kelapa 60 %, E = Etephon 300 ppm, F = Air kelapa 50 %, G = Ekstrak bawang merah 50 %, dan 4 ulangan. Hasil penelitian menunjukkan aplikasi zat pengatur tumbuh berpengaruh terhadap umur tanaman bertunas tetapi tidak berpengaruh terhadap jumlah tunas, rata – rata tinggi tunas, jumlah akar serabut dan berat kering rimpang. Ekstrak bawang merah 50% memberikan hasil umur tanaman bertunas selama 19,50 hari.

Kata kunci : dormansi, zat pengatur tumbuh, jahe merah.

ABSTRACT

THE PLANT GROWTH REGULATOR TEST AGAINST THE BREAKDOWN DORMANCY OF RED GINGER RHIZOMES (*Zingiber officinale* Clon. Rubrum)

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Red ginger is known as a consumption ingredient that can increase the body's immunity. The demand for red ginger consumption in the market has increased since the covid-19 pandemic took place. The propagation of using rhizomes as seedlings is done in the process of cultivating red ginger. The period of rhizome dormancy that lasts for 2 months is one of the reasons for the difficulty of maintaining the availability of red ginger rhizomes as quality seeds and ready to plant at the time needed. Rhizome dormancy caused by nonconformity of environmental conditions during harvest makes the composition of inhibitor hormones in rhizomes more dominant than promoter hormones. Giving exogenously plant growth regulator is one of the efforts in breaking dormancy in red ginger rhizomes. The study aims to find the plant growth regulator that are best at breaking the dormancy of red ginger rhizomes. This study was conducted in July to August 2021 in Garut Regency, using a Randomized Block Design (RBD) of plant growth regulator with 7 treatments including: A = Water (control), B = NAA 150 ppm, C = BAP 100 ppm, D = Atonic 40 % + Coconut water 60%, E = Etephon 300 ppm, F = Coconut water 50%, G = Onion extract 50%, and 4 repeats. The results showed the application of plant growth regulator had an effect on the age of sprouting plants but had no effect on the number of shoots, average shoot height, number of fiber roots and dry weight of rhizomes. 50% onion extract gives the yield of the life of the sprouting plant for 19.50 days.

Keywords: dormancy, plant growth regulator, red ginger.