

RINGKASAN

Mentimun merupakan tanaman hortikultura yang kaya manfaat dan banyak digemari masyarakat, namun produksinya belum mampu memenuhi kebutuhan yang terus meningkat. Salah satu upaya untuk meningkatkan produksi mentimun adalah dengan pemberian Giberelin, namun Giberelin sintetis yang umum digunakan petani memiliki harga yang mahal. Oleh karena itu, diperlukan alternatif sumber Giberelin alami yang lebih ekonomis dan ramah lingkungan, salah satunya dari ekstrak taoge dan rebung.

Penelitian ini bertujuan untuk: (1) mengetahui pengaruh sumber Giberelin alami dari ekstrak taoge, rebung, dan kombinasi keduanya terhadap pertumbuhan dan hasil tanaman mentimun; (2) mengetahui konsentrasi yang paling efektif terhadap pertumbuhan dan hasil tanaman mentimun; (3) mengetahui interaksi antara sumber Giberelin dan konsentrasi ekstrak terhadap pertumbuhan dan hasil tanaman mentimun. Penelitian dilaksanakan di lahan penelitian Desa Tumiyang, Kecamatan Pekuncen, Kabupaten Banyumas menggunakan Rancangan Acak Kelompok (RAK) Faktorial dengan 10 perlakuan dan 4 ulangan.

Hasil penelitian menunjukkan bahwa pemberian Giberelin alami tidak berpengaruh nyata terhadap pertumbuhan vegetatif tanaman meliputi tinggi tanaman, jumlah daun, dan luas daun. Namun, berpengaruh nyata terhadap umur berbunga, jumlah bunga, panjang buah, diameter buah dan bobot buah mentimun. Perlakuan ekstrak rebung 75 ml/L merupakan perlakuan yang memberikan respon terbaik dalam hasil tanaman mentimun.

Kata kunci: Giberelin alami, ekstrak taoge, ekstrak rebung, mentimun

SUMMARY

Cucumber is a horticultural crop that is rich in benefits and widely consumed, however its production has not been able to meet the growing demand. One effort to increase cucumber production is through the application of gibberellin, however synthetic gibberellin commonly used by farmers is relatively expensive. Therefore, an alternative natural source of gibberellin that is more economical and environmentally friendly is needed, one of which can be derived from bean sprout and bamboo shoot extracts.

This study aimed to: (1) determine the effect of natural gibberellin sources from bean sprout extract, bamboo shoot extract, and their combination on the growth and yield of cucumber plants; (2) determine the most effective concentration on the growth and yield of cucumber plants; (3) determine the interaction between gibberellin sources and extract concentration on the growth and yield of cucumber plants. The study was conducted at the research field of Tumiyang Village, Pekuncen District, Banyumas Regency using a Factorial Randomized Block Design (RBD) with 10 treatments and 4 replications.

The results indicated that the application of natural gibberellin did not significantly affect the vegetative growth of cucumber plants, including plant height, number of leaves, and leaf area. However, it had a significant effect on flowering time, number of flowers, fruit length, fruit diameter, and fruit weight. Among the treatments, bamboo shoot extract at a concentration of 75 ml/L produced the best response in terms of cucumber yield.

Keywords: natural gibberellin, bean sprout extract, bamboo shoot extract, cucumber