

ABSTRAK

EVALUASI KEEFEKTIFAN EKSTRAK DAUN TANAMAN DALAM PENGENDALIAN ANTRAKNOSA BUAH PEPAYA BERDASARKAN NILAI AUDPC (*Area Under Disease Progress Curve*)

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Penyakit antraknosa merupakan penyakit penting pada buah pepaya yang disebabkan oleh *Colletotrichum gloeosporioides*. Pengendalian penyakit tanaman menggunakan fungisida nabati berasal dari bahan-bahan alami, seperti daun mangga, daun pepaya, daun mengkudu, dan rimpang lengkuas dapat menghambat *C. gloeosporioides*. Penelitian ini bertujuan untuk mengetahui keefektifan ekstrak daun mangga, daun pepaya, daun mengkudu, daun sirih, dan rimpang lengkuas berdasarkan nilai AUDPC dalam mengendalikan penyakit antraknosa *C. gloeosporioides*. Percobaan dilakukan dalam dua tahap yaitu uji *in vitro* dan uji *in vivo*. Rancangan percobaan yang digunakan uji *in vitro* disusun dalam Rancangan Acak Lengkap dengan 6 perlakuan 5 ulangan. dan uji *in vivo* disusun dalam Rancangan Acak Kelompok dengan 6 perlakuan 5 kelompok. Data yang diperoleh diuji lanjut menggunakan uji BNT pada taraf 5%. Konsentrasi yang digunakan masing masing ekstrak yaitu 60%. Hasil penelitian menunjukkan bahwa ekstrak daun sirih memiliki pengaruh yang paling efektif dalam menghambat pertumbuhan *C. gloeosporioides* dibandingkan dengan perlakuan ekstrak daun mangga, daun mengkudu, daun pepaya, dan rimpang lengkuas.

Kata kunci : daun mangga, daun pepaya, daun mengkudu, rimpang lengkuas, pepaya, antraknosa.

ABSTRACT

EVALUATION OF THE EFFECTIVENESS OF PLANT LEAF EXTRACT IN THE CONTROL OF PAPAYA ANTHRACNOSIS BASED ON AUDPC VALUE (*Area Under Disease Progress Curve*)

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Anthracnose is an important disease in papaya caused by *Colletotrichum gloeosporioides*. Control of plant diseases using plant-based fungicides derived from natural ingredients, such as mango leaves, papaya leaves, noni leaves, and galangal rhizome can inhibit *C. gloeosporioides*. This study aims to determine the effectiveness of mango leaf extract, papaya leaf, noni leaf, betel leaf, and galangal rhizome based on the AUDPC value in controlling the anthracnose disease *C. gloeosporioides*. The experiment was carried out in two stages, namely in vitro test and in vivo test. The experimental design used in vitro test was arranged in a completely randomized design with 6 treatments and 5 replications. and in vivo tests were arranged in a Randomized Block Design with 6 treatments and 5 groups. The data obtained were further tested using the BNT test at the 5% level. The concentration used for each extract is 60%. The results showed that betel leaf extract had the most effective effect in inhibiting the growth of *C. gloeosporioides* compared to mango leaf extract, noni leaf extract, papaya leaf, and galangal rhizome.

Key words: mango leaves, papaya leaves, noni leaves, galangal rhizome, papaya, Anthracnose.