

KHAIRATUL MUHLISA NIM.18.03.111.00113.

Efektivitas Ekstrak Daun Pepaya (*Carica papaya* L.) dan Kersen (*Muntingia calabura* L.) terhadap Cendawan *Colletotrichum* sp. Penyebab Penyakit Antraknosa pada Buah Cabai (*Capsicum annuum* L.)

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ABSTRAK

Cabai merah (*Capsicum annuum* L.) merupakan tanaman hortikultura yang memiliki nilai ekonomi yang cukup tinggi, namun produktivitasnya tidak cukup optimal yang disebabkan serangan penyakit. Antraknosa merupakan penyakit utama tanaman cabai yang disebabkan oleh cendawan *Colletotrichum* sp.. Penelitian ini bertujuan untuk mengetahui efektivitas ekstrak daun pepaya (*Carica papaya* L.) dan kersen (*Muntingia calabura* L.) terhadap cendawan *Colletotrichum* sp. pada buah cabai merah. Percobaan dirancang dengan menggunakan Rancangan Acak Lengkap (RAL) non faktorial, yaitu: P0 (Kontrol), P1 (Ekstrak daun pepaya konsentrasi 2%), P2 (Ekstrak daun pepaya konsentrasi 4%), P3 (Ekstrak daun pepaya konsentrasi 6%), P4 (Ekstrak daun pepaya konsentrasi 8%), P5 (Ekstrak daun pepaya konsentrasi 10%), P6 (Ekstrak daun kersen konsentrasi 2%), P7 (Ekstrak daun kersen konsentrasi 4%), P8 (Ekstrak daun kersen konsentrasi 6%), P9 (Ekstrak daun kersen konsentrasi 8%), P10 (Ekstrak daun kersen konsentrasi 10%). Berdasarkan penelitian diketahui bahwa pengaplikasian dua ekstrak tersebut berpengaruh nyata pada hari kedua hingga keempat HSI, namun tidak berpengaruh nyata pada hari kelima dan keenam HSI terhadap persentase daya hambat *Colletotrichum* sp. jika dibandingkan antar konsentrasi. Namun jika dibandingkan antar ekstrak tidak memberikan pengaruh nyata. Sedangkan untuk pengujian persentase insidensi penyakit dan masa inkubasi ekstrak daun kersen memberikan hasil yang lebih baik dibandingkan ekstrak daun pepaya.

Kata Kunci: Ekstrak daun pepaya (*Carica papaya* L.), Ekstrak daun kersen (*Muntingia calabura* L.), *Colletotrichum* sp., Cabai merah (*Capsicum annuum* L.).

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The effectiveness of Papaya (*Carica papaya* L.) and Cherry (*Muntingia calabura* L.) Leaf Extracts against the Fungi *Colletotrichum* sp. Causes of Anthracnose on Chili (*Capsicum annuum* L.)

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ABSTRACT

Red chili (*Capsicum annuum* L.) is a horticultural crop that has high economic value, but its productivity is not optimal due to disease. Anthracnose is the main disease of chili plants caused by the fungus *Colletotrichum* sp.. This study aimed to determine the effectiveness of extracts of papaya (*Carica papaya* L.) and cherry (*Muntingia calabura* L.) leaves against the fungus *Colletotrichum* sp. on red chilies. The experiment was designed using a non-factorial completely randomized design (CRD), namely: P0 (Control), P1 (Papaya leaf extract concentration 2%), P2 (Papaya leaf extract concentration 4%), P3 (Papaya leaf extract concentration 6%), P4 (Papaya leaf extract concentration 8%), P5 (Papaya leaf extract concentration 10%), P6 (Cherry leaf extract concentration 2%), P7 (Cherry leaf extract concentration 4%), P8 (Cherry leaf extract concentration 6%), P9 (Cherry leaf extract concentration 8%), P10 (Cherry leaf extract concentration 10%). Based on the research, it was found that the application of the two extracts had a significant effect on the second to fourth day of DIC, but had no significant effect on the fifth and sixth day of DIC on the percentage of inhibition of *Collectrichum* sp. when compared between concentrations. However, when compared between extracts, it did not give a real effect. Meanwhile, to test the percentage of disease incidence and incubation period of cherry leaf extract gave better results than papaya leaf extract.

Kata Kunci: Papaya leaf extract (*Carica papaya* L.), Cherry leaf extract (*Muntingia calabura* L.), *Colletotrichum* sp., red chili (*Capsicum annuum* L.).