

ABSTRAK

KARAKTERISASI PENYEBAB PENYAKIT KARAT PADA DAUN KAMBOJA (*Plumeria* spp.) DI BANDAR LAMPUNG

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Tanaman kamboja merupakan satu dari beragam jenis tanaman dekoratif yang umum ditanam di pekarangan rumah. Fokus permasalahan tumbuhan kamboja ialah penyakit karat daun yang timbul akibat jamur *Coleosporium* spp. Tujuan studi ini mengidentifikasi dan mengevaluasi resistensi sejumlah jenis kamboja terhadap penyebab penyakit karat daun. Sampel daun kamboja dengan gejala karat daun diambil dari beberapa wilayah di Bandar Lampung. Identifikasi dilakukan secara morfologi dan molekuler menggunakan primer universal ITS. Uji ketahanan jenis kamboja terhadap penyebab karat daun dilaksanakan dengan rancangan acak lengkap (RAL). Sebagai perlakuan jenis kamboja yaitu *Plumeria rubra*, *Plumeria hybrid*, *Plumeria obtusa*, dan *Plumeria alba*. Dilakukan tiga kali pengulangan bagi tiap perlakuan, dan pengamatan terhadap masa inkubasi, keterjadian penyakit, dan keparahan penyakit. Data yang dihasilkan menggambarkan bahwa, baik secara morfologis ataupun molekuler, penyebab penyakit karat daun pada tanaman kamboja di Bandar Lampung adalah jamur *Coleosporium plumeriae*. Laporan ini merupakan laporan pertama keberadaan jamur *C. plumeriae* pada kamboja di Bandar Lampung. Berdasarkan data masa inkubasi, keterjadian penyakit, dan keparahan penyakit menunjukkan bahwa semua jenis kamboja yang diuji memiliki ketahanan yang sama terhadap penyebab penyakit karat daun.

Kata kunci: keterjadian penyakit, karat daun kamboja, *Coleosporium* spp.

ABSTRACT

CHARACTERIZATION OF THE CAUSES OF RUST DISEASE ON FRANCHIAPINA (*Plumeria* spp.) LEAVES IN BANDAR LAMPUNG

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Frangipani plants are one of the various types of decorative plants that are commonly planted in home gardens. The focus of the problem of frangipani plants is leaf rust disease caused by the fungus

Coleosporium spp. The purpose of this study was to identify and evaluate the resistance of several types of frangipani to the cause of leaf rust disease.

Samples of frangipani leaves with leaf rust symptoms were taken from several areas in Bandar Lampung. Identification was carried out morphologically and molecularly using ITS universal primers. The resistance test of frangipani types to the cause of leaf rust was carried out using a completely randomized design (CRD). The types of frangipani were *Plumeria rubra*, *Plumeria* hybrid, *Plumeria obtusa*, and *Plumeria alba*. Three repetitions were performed for each treatment, and observations were made on the incubation period, disease occurrence, and disease severity. The resulting data illustrate that, both morphologically and molecularly, the cause of leaf rust disease in frangipani plants in Bandar Lampung is the fungus *Coleosporium plumeriae*. This report is the first report on the presence of the fungus *C. plumeriae* in frangipani in Bandar Lampung. Based on data on the incubation period, disease occurrence, and disease severity, it shows that all types of frangipani tested have the same resistance to the cause of leaf rust disease.

Keywords: disease occurrence, frangipani leaf rust, *Coleosporium* spp.