POTENSI BEBERAPA KONSENTRASI EKSTRAK BUAH SIRIH HUTAN (*Piper aduncum*) UNTUK PENGENDALIAN JAMUR PATOGEN TULAR BENIH PADI (*Oryza sativa* L.)

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Abstrak

Jamur patogen tular benih padi menjadi salah satu penyebab turunnya kualitas dan kuantitas padi. Penggunaan ekstrak buah sirih hutan menjadi salah satu alternatif dalam pengendalian jamur tular benih padi yang ramah lingkungan. Penelitian ini bertujuan untuk mendapatkan konsentrasi ekstrak buah sirih hutan yang mampu dalam mengendalikan jamur tular benih padi. Penelitian terdiri dari 2 tahap yaitu di Laboratorium dan di Rumah Kaca dengan menggunakan Rancangan Acak Lengkap (RAL) dengan 7 perlakuan dan 4 ulangan. Perlakuan terdiri dari kontrol, ekstrak buah sirih hutan dengan konsentrasi 0,25%. 0,30%, 0,36%, 0,43%. 0,51% dan 0,60%. Data yang diperoleh dianalisis menggunakan sidik ragam dengan uji lanjut *Least Significance Different* (LSD) pada taraf 5%. Parameter yang diamati adalah persentase benih padi yang terserang jamur, karakteristik jamur patogen tular benih padi, persentase benih terserang masing-masing jamur, persentase benih berkecambah normal, persentase bibit muncul lapang, dan persentase bibit terserang jamur. Hasil penelitian menunjukkan bahwa semua konsentrasi mampu dalam menekan jamur tular benih padi. Konsentrasi 0,60% merupakan konsentrasi terbaik dalam menekan jamur patogen tular benih.

Kata kunci: bibit, berkecambah, karakteristik, persentase, RAL.

POTENTIAL OF SOME CONCENTRATIONS OF FOREST BETRA FRUIT (*Piper aduncum*) EXTRACT TO CONTROL SEED-BORNE PATHOGENIC FUNGUS ON RICE (*Oryza Sativa* L.)

Abstract

Rice seed-borne pathogenic fungi are one of the causes of the decline in rice quality and quantity. The use of forest betel fruit extract is one of the alternatives in controlling rice seed-borne fungi that is environmentally friendly. This study aims to obtain the most effective concentration of betel nut extract to control rice seed-borne fungi. The research consisted of 2 stages, namely in the laboratory and in the greenhouse using a completely randomized design (CRD) with 7 treatments and 4 replicates. Treatments consisted of control, forest betel fruit extract with concentrations of 0.25%. 0,30%, 0,36%, 0,43%. 0.51% and 0.60%. The data obtained were analyzed using variance analysis with Least Significance Different (LSD) further test at the 5% level. The parameters observed were the percentage of rice seeds attacked by fungi, the characteristics of rice seed-borne pathogenic fungi, the percentage of seeds attacked by each fungus, the percentage of normal germinated seeds, the percentage of seedlings emerged in the field, and the percentage of seedlings attacked by fungi. The results showed that all concentrations were able to suppress rice seed-borne fungi. The concentration of 0.60% is the best concentration in suppressing seed-borne pathogenic fungi.

Keywords: characteristics, germination, percentage, RAL, seedling