ABSTRAK

SKRINING RESPON BEBERAPA SPESIES FUNGI PATOGEN TANAMAN TERHADAP EKSTRAK GINSENG JAWA (*Talinum paniculatum* Gaertn.) SEBAGAI BIOKONTROL

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Ginseng jawa (*Talinum paniculatum*) memiliki kandungan metabolit sekunder yang dapat dimanfaatkan sebagai biokontrol patogen. Beberapa patogen yang menyerang tanaman diantaranya *Pythium* sp., *Botrytis* sp., *Fusarium* sp., dan *Rhizopus stolonifer*. Tujuan dari penelitian ini yaitu untuk menguji interaksi antara beberapa spesies fungi patogen tanaman dengan ekstrak ginseng jawa sebagai biokontrol. Penelitian ini menggunakan rancangan acak lengkap (RAL) faktorial dengan 2 faktor. Faktor pertama yaitu patogen tanaman *Pythium* sp., *Botrytis* sp., *Fusarium* sp., dan *Rhizopus stolonifer*. Faktor kedua konsentrasi ekstrak akar ginseng jawa yaitu 0%, 5%, 10%, 20%, dan 40%. Hasil penelitian menunjukkan bahwa terdapat interaksi antara spesies fungi patogen dengan konsentrasi ekstrak ginseng jawa terhadap diameter koloni patogen pada pengamatan 1 sampai 7 HSI, sedangkan pada parameter daya hambat menunjukkan tidak terdapat interaksi antara spesies fungi patogen dengan konsentrasi ekstrak ginseng jawa pada I HSI, namun terdapat interaksi pada umur 5 HSI, dan terdapat pengaruh secara mandiri pada umur 2, 3, 4, 6, dan 7 HSI. Konsentrasi 20% ekstrak ginseng jawa dapat menghambat pertumbuhan *Pythium* sp., *Rhizopus stolonifer*, dan *Botrytis* sp., sedangkan konsentrasi 40% mampu menghambat pertumbuhan *Fusarium* sp.

Kata kunci : Ginseng jawa, *Pythium* sp., *Botrytis* sp., *Fusarium* sp., dan *Rhizopus stolonifer*

ABSTRACT

SCREENING THE RESPONSE OF SOME SPECIES OF PLANT PATHOGEN FUNGI TO JAVA GINSENG (*Talinum paniculatum* Gaertn.) EXTRACT AS BIOCONTROL

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Javanese ginseng (*Talinum paniculatum*) contains secondary metabolites that can be used as pathogen biocontrol. Some pathogens that attack plants include *Pythium* sp., *Botryti*s sp., *Fusarium* sp., and *Rhizopus stolonifer*. The aim of HSI research is to test the interaction between Javanese ginseng extract as a biocontrol and several species of plant pathogenic fungi. This study used a factorial completely randomized design (CRD) with 2 factors. The first factor is the plant pathogens *Pythium* sp., *Botrytis* sp., *Fusarium* sp., and *Rhizopus stolonifer*. The second factor is the concentration of Javanese ginseng root extract, namely 0%, 5%, 10%, 20% and 40%. The results showed that there was an interaction between pathogenic fungal species and the concentration of javanese ginseng extract on diameter of pathogen colonies at 1 to 7 HSI observations, while the inhibitory rate parameter showed that there was no interaction between pathogenic fungal species and the concentration of javanese ginseng extract at 1 HSI, but there was interaction at 5 HSI, and there was an independent influence at 2, 3, 4, 6, and 7 HSI. A 20% concentration of Javanese ginseng extract can inhibit the growth of *Pythium* sp., *Rhizopus stolonifer*, and *Botrytis* sp., while a 40% concentration can inhibit the growth of *Fusarium* sp.

Keywords: Javanese ginseng, *Pythium* sp., *Botrytis* sp., *Fusarium* sp., and *Rhizopus stolonifer*