

RINGKASAN

Penelitian ini bertujuan untuk 1) menguji kemampuan jamur entomopatogen *Fusarium cf. solani* dalam membunuh hama walang sangit. 2) menguji pengaruh perlakuan jamur entomopatogen *F. cf. solani* terhadap intensitas serangan hama walang sangit. Penelitian dilaksanakan Laboratorium perlindungan tanaman Fakultas Pertanian Universitas Jenderal Soedirman dan di Desa Notog, Kecamatan Patikraja, Kabupaten Banyumas (23 mdpl). Penelitian ini dilakukan pada bulan Februari hingga Mei 2016.

Penelitian ini menggunakan Rancangan Acak Kelompok Lengkap (RAKL). Penelitian ini terdiri dari tiga perlakuan yaitu tidak disemprot atau kontrol (B_0), penyemprotan satu kali pada minggu ketujuh (B_1), penyemprotan dua kali pada minggu ketujuh dan tujuh hari kemudian (B_2). Percobaan diulang sebanyak sembilan kali.

Hasil penelitian menunjukkan bahwa jamur entomopatogen *F. cf. solani* mampu membunuh dan menekan intensitas serangan hama walang sangit sebesar 77,37 % dengan konsentrasi $3,45 \times 10^6$ spora/ml. Beberapa spesies hama lain seperti ulat, belalang, dan wereng batang coklat terinfeksi oleh jamur *F. cf. solani*. Hasil pengujian di laboratorium yaitu *F. cf. solani* dengan konsentrasi $3,45 \times 10^6$ dapat membunuh walang sangit.

SUMMARY

The goals of research were to 1) Examine the ability of entomopathogenic fungi *Fusarium cf. solani* to infect rice bug 2) Examine effect of the entomopathogenic fungi *F. cf. solani* on attack intensity of the pest. The research was conducted at Plant Protection Laboratory Faculty of Agriculture University of Jeneral Soedirman and rice field at Notog Village, Patikraja, Banyumas Regency (23 mdpl). The research was conducted on February until May 2016.

The research used experimental design, in completely randomized block design (CRBD). The experiment consisted of three treatments, that was control (B_0), spraying of *F. cf. solani* one time at filled stage early (B_1), spraying of *F. cf. solani* two times at filled stage early and seven dayafter. The experiment was repeated nine times.

The research showed that *F. cf. solani*_was able to infect the insect (rice bug). Mortality of the insect reached up to 77, 37 % due to be $3,45 \times 10^6$ spora/ml of *F. cf. solani*. Some of other species such as caterpillars, grasshoppers, and brown plant-hopper, also infected by fungi. Based on the laboratory test, *F. cf. solani* also infected rice bug.