



INTISARI

Setelah terjadi *outbreak* wereng batang cokelat ditemukan kejadian penyakit kerdil di lapangan. Penyakit kerdil padi disebabkan oleh virus *Rice grassy stunt virus* (RGSV) dan *Rice ragged stunt virus* (RRSV). Virus penyebab kerdil padi hanya dapat ditularkan serangga vektor Wereng Batang Cokelat (WBC) (*Nilaparvata lugens* Stal.). Tujuan penelitian ini untuk mengkaji hubungan wereng batang cokelat dengan virus penyebab kerdil dalam menginfeksi tanaman padi. Perlakuan penularan virus yang dilakukan meliputi periode akuisisi, periode inokulasi, jumlah, jenis kelamin, dan beberapa instar wereng batang cokelat serta masa retensinya. Hasil penelitian menunjukkan bahwa pertanaman padi di Kabupaten Klaten, diduga mengalami infeksi ganda virus kerdil padi. Hasil penularan virus menghasilkan masa inkubasi dan variasi gejala yang berbeda pada masing-masing perlakuan. Hasil penelitian menunjukkan WBC sudah mampu menularkan virus kerdil dengan masa akuisisi 3 jam dan masa inokulasi 30 menit, namun periode akuisisi yang paling efektif adalah 10 hari dengan periode inokulasi 24 jam. Satu ekor wereng batang cokelat betina lebih efektif menularkan virus kerdil dibandingkan wereng batang cokelat jantan. Wereng batang cokelat instar 3 merupakan fase paling efektif menularkan virus kerdil padi. Lama hidup wereng batang cokelat yang mengandung virus adalah 23 hari.

Kata kunci: RGSV, RRSV, infeksi ganda, Wereng Batang Cokelat



ABSTRACT

After an outbreak in brown planthopper, there is also a stunt virus on the field rice-stunt disease occurs because of rice grassy stunt virus (RGSV) and rice ragged stunt virus (RRSV). Virus causing rice-stunt disease is only transmitted from brown planthopper insects (*Nilaparvata lugens* Stal). The purpose of this research is to examine the relationship between brown planthopper and virus causing a stunt in rice infection. The spreading that have done are acquisition period, inoculation period, the amount, the gender, the instar of brown planthopper and its retention time. The research show that the rice plant in Klaten is suspected having double infection of rice stunt virus. The virus transmissions give different incubation period and different symptoms in every treatments. The research also shows that brown planthopper could transmit stunt virus in 3 hours for acquisition period and 30 minutes for inoculation period, but the most effective acquisition period is 10 days with 24 hours inoculation period. A female brown planthopper can transmit stunt virus better than a male brown planthopper. Instar 3 brown planthopper is the most effective phase in transmitting rice stunt virus. An adult brown planthopper that has virus can live for 23 days.

Keyword: RGSV, RRSV, double infections, brown planthopper