

## INTISARI

### **MONITORING PERILAKU MAKAN WBC PADA PADI DIINDUKSI *Bacillus* spp. DAN PADI KERDIL MENGGUNAKAN *ELECTRICAL PENETRATION GRAPH***

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Wereng Batang Cokelat (WBC) merupakan hama utama yang merusak tanaman padi dan sebagai vektor virus kerdil rumput (*Rice grassy stunt virus*) dan virus kerdil hampa (*Rice ragged stunt virus*). Penggunaan *Bacillus* spp. dapat menjadi alternatif untuk mengendalikan virus yang ditularkan WBC. Penelitian ini bertujuan untuk mengetahui preferensi WBC pada tanaman padi sehat dan terinfeksi virus kerdil padi serta pengaruh aplikasi *Bacillus* spp pada 3 varietas dan 3 galur padi terhadap pola makan WBC menggunakan *Electrical Penetration Graph* (EPG). Tanaman bergejala kerdil diperoleh di wilayah Klaten pada varietas Menthik Wangi umur 80 HST sedangkan aplikasi *Bacillus* spp. dilakukan sejak pesemaian kemudian diuji perilaku makan WBC pada bibit umur 14 hari. Satu ekor WBC diinvestasikan pada tanaman uji yang dihubungkan dengan EPG kemudian direkam aktivitas probing WBC selama 6 jam. Hasil penelitian menunjukkan bahwa aktivitas probing WBC pada tanaman padi varietas Menthik Wangi umur 80 HST yang terinfeksi virus kerdil lebih tinggi dibandingkan tanaman padi sehat. Selain itu, aplikasi *Bacillus* spp sejak di pesemaian dapat menghambat penghisapan cairan tanaman di jaringan floem pada 3 varietas dan 3 galur padi.

Kata kunci: *Bacillus* spp., EPG, wereng batang coklat, virus kerdil padi

## ABSTRACT

### **MONITORING OF BPH'S FEEDING BEHAVIOUR ON RICE INDUCED *Bacillus* spp. AND STUNT RICE USING *ELECTRICAL PENETRATION GRAPH***

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Brown Planthopper (*Nilaparvata lugens*) is the main pest of rice and also the vector of Rice Grassy Stunt Virus (RGSV) and Rice Ragged Stunt Virus (RRSV). Application of *Bacillus* spp. is an alternative management tactic for rice stunt virus that vectored by BPH. This study is aimed to see the effect of rice stunt viruses infection and *Bacillus* spp. application to BPH feeding behaviour monitored with Electrical Penetration Graph (EPG) on 3 rice varieties dan 3 rice lines. Rice infection plant Menthik Wangi discovered in Klaten at 80 days old plants, at the same time application of *Bacillus* spp was initiated from seedling followed by BPH feeding behaviour with EPG at 14 days old plants. BPH invested on plant conected to EPG then BPH feeding behaviour was recorded for 6 hours. The results showed that the infection stunt virus on Menthik Wangi varieties at 80 days old plant increase the BPH probing duration as compared to healthy plants. Additionally, *Bacillus* spp. application initiated from seedling can hold up lead BPH stylet unable to access phloem tissue on 3 varieties and 3 lines.

Keywords: *Bacillus* spp., EPG, brown planthopper, rice stunt viruses