

## INTISARI

Kondisi lahan pertanian di Indonesia semakin menurun mulai dari produksi hingga kondisi lingkungan di sekitarnya. Ketergantungan petani dalam penggunaan bahan kimia untuk solusi lahan pertanian didasari oleh program revolusi hijau. Seiring berjalannya waktu muncul berbagai macam penyakit terutama dalam tanaman padi seperti hawar daun bakteri, hawar pelepah, busuk pelepah, blast, bercak daun cercospora, dan penyakit kerdil, sehingga muncul kesadaran akan produk pangan yang aman bagi kesehatan dan ramah lingkungan dan tuntutan untuk mengikuti gaya hidup yang sehat melalui pertanian organik. Penelitian ini dilakukan pada bulan Oktober 2018 sampai dengan Januari 2019 di Desa Gempol, Kecamatan Karanganyar, Kabupaten Klaten dan di Laboratorium Teknik Pengendalian, Departemen Hama dan Penyakit Tumbuhan, Fakultas Pertanian, Universitas Gadjah Mada, Yogyakarta. Varietas padi yang digunakan adalah varietas Rojolele yang ditanam secara organik dan non organik. Hasil penelitian menunjukkan bahwa jenis penyakit dan intensitas penyakitnya di lahan organik terdiri dari Hawar daun bakteri (HDB) sebesar 87,1%, Hawar pelepah (HP) sebanyak 74,3%, Busuk pelepah (BP) sebanyak 78,3%, Blast (B) sebanyak 91,8%, dan Cercospora (CR) sebanyak 91,4%. Pada lahan non organik terdiri dari Hawar daun bakteri (HDB) sebesar 81,3%, Hawar pelepah (HP) sebanyak 73,1%, Busuk pelepah (BP) sebanyak 64,7%, Blast (B) sebanyak 94,3%, dan Cercospora (CR) sebanyak 83,2%. Kehilangan hasil pada lahan sawah organik sebesar 2,05 ton/ha (36,73%) dan pada lahan sawah non organik sebesar 0,35 ton/ha (6,18%), sehingga kehilangan hasil pada lahan sawah organik lebih besar dibandingkan dengan lahan sawah non organik.

Kata kunci : intensitas penyakit, kehilangan hasil, non organik, organik

**ABSTRAC**

The condition of agricultural land in Indonesia has been continued to decline from production to surrounding environmental conditions. Farmers' dependence on the use of chemicals for the solution of their agricultural land is based on the green revolution program. Over time various diseases have been emerged, especially in rice plants such as bacterial leaf blight, sheath blight, sheath rot, blast, cercospora leaf spot, and stunting disease, resulting in an awareness of food products that are safe for health and eco-friendly and are required to follow the style of healthy life through organic farming system. This research was conducted in October 2018 until January 2019 at Gempol Village, Karanganom District, Klaten Regency and at the Control Engineering Laboratory, Department of Pest and Plant Disease, Faculty of Agriculture, Universitas Gadjah Mada, Yogyakarta. The rice variety used was Rojolele variety. The results showed that the major diseases and its intensity of the disease in organic land consisted of bacterial leaf blight (HDB) with disease intensity of 87.1%, sheath blight (HP) with disease intensity of 74.3%, sheath rot (BP) with disease intensity of 78.3%, blast (B) with disease intensity of 91.8%, and cercospora (CR) with disease intensity of 91.4%. In non-organic land consisted of bacterial leaf blight (HDB) with disease intensity of 81.3%, sheath blight (HP) with disease intensity of 73.1%, sheath rot (BP) with disease intensity of 64.7%, blast (B) with disease intensity of 94.3%, and Cercospora (CR) with disease intensity of 83.2%. Yield loss on organic paddy fields was 2.05 tons / ha (36.73%) and on non-organic paddy fields was 0.35 tons / ha (6.18%). It is concluded that yield losses on organic paddy fields were greater than on non-organic paddy fields.

**Keywords:** disease intensity, non-organic, organic, yield loss.