

**Kelimpahan Hama Dan Penyakit Pada Tanaman Padi (*Oryza sativa*  
L.) Varietas Diah Suci Dengan Berbagai Variasi Pemupukan Dan  
Tipe Tanam Jajar Legowo**

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**ABSTRAK**

Kelimpahan hama dan penyakit dipengaruhi antara lain oleh kesuburan dan kerapatan tanaman. Tanaman yang subur dan rapat menyebabkan hama menyukai sehingga serangan hama dan penyakit lebih banyak. Serangan hama dan penyakit akan berpengaruh terhadap produksi padi. Penelitian ini bertujuan untuk mengidentifikasi pengaruh variasi pemupukan dan tipe tanam jajar legowo terhadap kelimpahan hama dan penyakit pada padi varietas Diah Suci. Penelitian dilaksanakan di Desa Sentono, Kecamatan Karangdowo, Kabupaten Klaten, Provinsi Jawa Tengah. Menggunakan rancangan *Split plot* dengan dua faktor yaitu variasi pemupukan dan tipe tanam jajar legowo. Faktor pertama variasi pemupukan sebagai main plot terdiri atas: P1 = pupuk anorganik dosis rekomendasi (pupuk urea 100 kg/ha, phonska 400 kg/ha, KCL 100 kg/ha), P2 = 50% pupuk anorganik dosis rekomendasi + 10 ton/ha pupuk organik produk BATAN, P3 = 50% pupuk anorganik dosis rekomendasi + 10 ton/ha pupuk organik produk Fakultas Pertanian. Faktor kedua tipe tanam jajar legowo sebagai sub plot terdiri atas: J1 = 2:1, J2 = 3:1, J3 = 4:1. Pengamatan kelimpahan hama dan penyakit dilakukan mulai 15 hari setelah tanam sampai menjelang panen. Hasil pengamatan diperoleh bahwa terdapat interaksi antara pemupukan 50% anorganik + 10 ton organik produk UPN dengan tipe tanam jajar legowo 3:1 dan 4:1 dalam hal kelimpahan dan kerusakan akibat hama dan penyakit lebih tinggi. Substitusi menggunakan pupuk dosis 50% anorganik + 10 ton organik produk BATAN dapat menekan kelimpahan dan kerusakan hama dan penyakit. Tipe tanam jajar legowo 2:1 dapat menekan kelimpahan dan kerusakan oleh hama dan penyakit.

*Kata kunci:* kelimpahan, penyakit, pemupukan, tipe tanam jajar legowo.

**The Abundance of Pests and Diseases in Diah Suci Rice (*Oryza sativa* L.)  
Variety on Various Fertilizations and “Jajar Legowo” Planting System**

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**ABSTRACT**

The abundance of pests and diseases are influenced by soil fertility and plant density. Vigorous plants in narrow spacing led to pests and diseases infestation. Pests and diseases will have an effect on Production of rice. This study aimed to identify the effect of various type of fertilization and “jajar legowo” planting system on the abundance of pests and diseases in Diah Suci rice variety. The research was conducted in the village of Sentono, District of Karangdowo, Klaten regency, Central Java province. Split plot design with two factors: variations in fertilization and jajar legowo planting system was used. The first factor (variations of fertilizer) as the main plot consists of: P1 = inorganic fertilizer in dose recommendation (urea 100 kg / ha, Phonska 400 kg / ha, KCL 100 kg / ha), P2 = 50% inorganic fertilizer in dose recommendation + 10 ton / ha organic fertilizer products of BATAN, P3 = 50% inorganic fertilizer in dose recommendation + 10 ton / ha of organic fertilizer products of Faculty of Agriculture. The second factor is the jajar legowo planting system as sub plot consisted of: J1 = 2: 1, J2 = 3: 1, J3 = 4: 1. Observations on the abundance of pests and diseases was carried out starting from 15 days after planting up to harvesting. The observation shows that there is interaction between inorganic fertilization 50% + 10 tonnes of organic products of Faculty of Agriculture and jajar legowo planting system 3: 1 and 4: 1 in terms of higher abundance of pests and damage caused by pests and diseases. Substitution using inorganic fertilizer in dose of 50% + 10 tonnes of organic products of BATAN can suppress the abundance and damage caused by pests and diseases. Jajar legowo planting system 2: 1 may suppress the abundance and damage caused by pests and diseases.

*Keywords:* abundance, pests, diseases, fertilization, jajar legowo planting system.

