INTISARI

Peningkatan produksi padi terus dilakukan. Salah satu upayanya melalui program intensifikasi pertanian untuk memenuhi kebutuhan beras di dalam negeri, sehingga peningkatan produksi menjadi tujuan yang utama dan kehilangan produksi sekecil apapun khususnya akibat serangan organisme pengganggu tanaman menjadi hal yang menakutkan. Penelitian ini bertujuan untuk membandingkan tiga sistem tanam (Konvensional, *System of Rive Intensivication (SRI)*, dan Tapak Macan) terhadap dinamika populasi wereng batang padi cokelat (*Nilaparvata lugens*) dan penggerek batang padi kuning (*Scirpophaga incertulas*). Penelitian dilakukan di Moyudan, Sleman, D.I.Yogyakarta. Hasilnya adalah populasi wereng batang padi cokelat (*Nilaparvata lugens*) sangat rendah, hampir sama pada tiap sistem tanam. Sistem tanam tapak macan paling mampu mentolerir gejala serangan penggerek batang padi kuning (*Scirpophaga incertulas*) pada awal fase vegetatif namun pada fase generatif intensitasnya hampir sama antar metode tanam. Produksi gabah kering panen (GKP) yang tertinggi pada sistem SRI mencapai 8.05 ton/ha sedangkan konvensional hanya 6.68 ton/ha dan sistem tapak macan sebanyak 6.35 ton/ha.

Kata kunci : dinamika populasi, *Nilaparvata lugens* dan *Scirpophaga incertulas*, sistem tanam.

ABSTRACT

Rice production continuously increases. One of the strategis to increase the production is through the intensification program and at the same time reduces the yield loss. This research was aimed to compare of three different systems (Conventional , System of Rice Intensification (SRI), and *Tapak Macan* system) on population dynamic of the rice brown planthopper (*Nilaparvata lugens*) and the yellow rice stem borrer (*Scirpophaga incertulas*). This field research was conducted in Moyudan, Sleman, Special Province of Yogyakarta. The population of the rice brown planthopper (*Nilaparvata lugens*) was low and similar in three cropping system. *Tapak Macan* system was proven to be the most effective system to tolerate the damage due to the yellow rice stem borrer (*Scirpophaga incertulas*) during the vegetative stage. However, the difference was absent at the generative stage. Production of dry-unmilled rice by SRI system (8.05 ton/ha) was significantly higher compared to the conventional (6.68 ton/ha) and *Tapak Macan* system (6.35 ton/ha).

Key words : population dynamic, *Nilaparvata lugens* and *Scirpophaga incertulas*, cropping system