PENGARUH SISTEM PERTANIAN MINA PADI ORGANIK DAN PADI KONVENSIONAL TERHADAP KEANEKARAGAMAN MUSUH ALAMI DI DESA MARGODADI, KECAMATAN SEYEGAN, KABUPATEN SLEMAN

(The Effect Of Organic Mina Paddy And Conventional Paddy Systems On The Diversity Of Natural Enemies In Margodadi Village, Seyegan District, Sleman Regency, Yogyakarta)

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ABSTRACT

An organic mina paddy field is one of the cultivation systems that can reduce the negative impact of conventional rice systems that use the application of inorganic pesticides and fertilizers. The application of inorganic pesticides and fertilizers in conventional paddy fields can decrease organisms such as natural enemies (predators and parasitoid). This study aims to determine the effect of conventional and organic mina paddy fields on the diversity of natural enemies. The study was conducted using a survey method on rice fields in conventional and organic mina paddy fields in Margodadi Village, Seyegan District, Sleman Regency, Yogyakarta. Natural enemies were collected by using sweep net, yellow trap and pitfall trap for 4 times in 35, 50, 70 and 125 days after rice planting. The results showed that the diversity of natural enemies (predators and parasitoid) in organic mina paddy fields (H '= 1.67) was higher than the conventional paddy fields (H' = 1.27), and the diversity index category of natural enemies of the two paddy fields systems was moderate. The abundance of natural enemies in organic mina paddy fields (D'=0.70) is also higher than the conventional paddy fields (D' = 0.52) and the abundance index category of the two paddy fields systems was high. Based on the diversity, abundance, and evenness index of natural enemies, it can be concluded that natural enemies in the organic mina paddy fields have a better potential to control pests than conventional paddy fields.

Key words: Biodiversity, Predators, Parasitoid, Mina Padi, Padi Conventional