

INTISARI

Kehadiran gulma pada padi sawah dapat menyebabkan kehilangan hasil panen mencapai 87 %. Sistem budidaya padi berpengaruh terhadap kelimpahan dan keanekaragaman gulma, sehingga identifikasi jenis gulma pada lahan padi sawah menjadi penting karena dapat membantu menentukan strategi pengendalian gulma yang tepat. Penelitian ini bertujuan untuk mengetahui keanekaragaman gulma, kelimpahan gulma dan strategi pengendalian gulma pada lahan padi organik dan konvensional. Penelitian dilakukan dengan metode survei di Desa Kebonagung, Kecamatan Imogiri, Bantul, Yogyakarta di lima petak lahan padi organik dan konvensional. Pengambilan sampel gulma dilakukan secara *purposive* menggunakan metode kuadrat di lima plot pengamatan berukuran 50 cm x 50 cm. Sampel gulma diambil sebanyak tiga kali dimulai saat padi memasuki fase generatif. Hasil penelitian menunjukkan bahwa kelimpahan dan keanekaragaman gulma pada lahan padi organik dan konvensional tidak berbeda nyata. Pada lahan padi organik didominasi oleh gulma jenis *Sphenoclea zeylanica* dan *Leptochloa chinensis* L., sedangkan pada lahan padi konvensional didominasi oleh gulma jenis *Sphenoclea zeylanica*, *Leptochloa chinensis* L., *Ludwigia adscendin* L. dan *Pistia stratiotes* L. Perbedaan jenis gulma yang mendominasi pada lahan organik dan konvensional disebabkan karena sistem budidaya terutama teknik pengairan. Sehingga strategi pengendalian pada padi organik dan padi konvensional dapat dilakukan dengan pengelolaan teknik air irigasi.

Kata Kunci: Biodiversitas, Kekayaan, Sistem budidaya padi, *Sphenoclea zeylanica*, *Leptochloa chinensis*, *Ludwigia adscendin*, *Pistia stratiotes*

ABSTRACT

*The presence of weeds in rice field can cause crop losses until 87%. The rice cultivation system effect on the abundance and diversity of weeds, so the identification of weed species in rice fields is important because to determine weed control strategies. This study aims to identify weed diversity, weed abundance, and weed control strategies in organic and conventional rice fields. The field survey was conducted in Kebonagung Village, Imogiri District, Bantul, Yogyakarta in five plots of organic and conventional rice fields. Weed sampling was collected purposively using the quadratic method in five observation plots (50 cm x 50 cm). Weed samples were taken three times starting from the generative phase. The results showed that abundance and weed diversity in organic and conventional rice fields were not significantly different. Organic paddy fields we are dominated by weeds of *Sphenoclea zeylanica* and *Leptochloa chinensis* L., whereas in conventional paddy fields we are dominated by *Sphenoclea zeylanica*, *Leptochloa chinensis* L., *Ludwigia adscendin* L. and *Pistia stratiotes* L. The different types of weeds dominated in organic and conventional rice field are caused by cultivation systems, especially irrigation techniques. So that the control strategy in the organic and conventional rice field can be done by the management of irrigation water techniques.*

*Keywords: Biodiversity, Rice cultivation system, Richness, *Sphenoclea zeylanica*, *Leptochloa chinensis*, *Ludwigia adscendin*, *Pistia stratiotes**