

Pengaruh Refugia Bunga Telekan (*Tagetes erecta*) dan Bunga Kertas (*Zinnia elegans*) pada Populasi Artropoda dan Hasil Tanaman Padi

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Abstract	<p>This study aimed to determine the effect of refugia (<i>Tagetes erecta</i> and <i>Zinnia elegans</i>) plants on the relative abundance and diversity of Arthropod's dominance in the rice plant area and on rice yield. The Arthropods were observed by the visual control method at each rice growth stage. Observations were made during 15 minutes in five plots of rice area and one refugium block at three different times (08.00–10.00, 12.00–14.00, and 15.00–17.00). The morphological features were identified and recorded to identify the species level and grouped according to their ecological niches. The relative abundance and Shannon Diversity Index were calculated. The rice plants' growth data and yield components were analyzed by ANOVA followed by DMRT if there were any significant differences among the treatments. Relative abundance of dominant arthropods on rice land planted with <i>Zinnia elegans</i> was <i>Solenopsis geminata</i> (11.07%), <i>Leptocorisa oratorius</i> (38.37%), and <i>Hypolimnas bolina</i> (0.17%) with species diversity index values of 3.25%; 2.94%, and 2.56%, respectively. In contrast, the relative abundance of arthropods in rice land planted with <i>Tagetes erecta</i> were <i>Cardiochiles philippinensis</i> (8.84%), <i>Oxya chinensis</i> (25.45%), and <i>Scirpophaga incertulas</i> (0.34%) with moderate diversity index values. The <i>Tagetes erecta</i> gave an equivalent result of rice yield with the control, namely 8,10 t/ha and 7,60 t/ha, respectively, while the <i>Zinnia elegans</i> offers rice yield of 6,30 t/ha. Keywords: arthropod diversity, paddy yield, <i>Tagetes erecta</i> L, <i>Zinnia elegans</i></p>
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