INTISARI

KERAGAMAN ARTROPODA PADA PERTANAMAN PADI BERBEDA VARIETAS DAN PERBAIKAN LAYANAN EKOSISTEM

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Varietas unggul merupakan teknologi untuk meningkatkan produktivitas padi. Budidaya padi mendapat gangguan dari berbagai herbivora, karena varietas padi mengundang kedatangan artropoda pada setiap fase pertumbuhan. Tujuan penelitian ini adalah untuk mengetahui penggunaan varietas unggul (IR-64, Mekongga, Situ Bagendit, Ciherang) dan varietas Campuran dengan tanaman refugia terhadap keragaman artropoda, dan hasil produksi tanaman padi. Penelitian dilakukan di desa Wijirejo, Pandak, Bantul Yogyakarta, bulan Juli – September 2019. Pengamatan artropoda dilakukan pada sore hari pukul 16.00-18.00 sore, dengan interval dua minggu sekali dari fase vegetatif, fase generatif dan fase pemasakan. Kajian artropoda dilakukan menggunakan perangkap *sweep net*, *pitfall* dan *yellow sticky*, menggunakan tanaman refugia *Zinnia elegans, Cosmos caudatus, Gomphrena globosae* dan *Tagetes erecta.* Artropoda dikumpulkan dan diidentifikasi hingga tingkat famili. Analisis yang digunakan adalah indeks Shannon-Wienner untuk keragaman, analisis indeks *evenness* untuk kemerataan artropoda, analisis indeks Simpson untuk mengetahui dominansi artropoda dan analisis menggunakan segitiga fiktorial untuk melihat kestabilan eksositem pertanaman menggunakan perangkap yang berbeda. Hasil penelitian mendapatkan rerata Indeks keragaman (Shannon-Wienner) 1,97-2,82 kategori sedang, rerata indeks kemerataan (e') 0,61-0,71 kategori sedang dan rerata indeks dominansi (D) 0,10-0,22 kategori rendah. Kestabilan ekosistem pertanaman padi berdasarkan fungsi dan struktur artropoda pada perangkap *sweep net* tidak stabil, *pitfall,* dan *yellow sticky trap* termasuk kategori stabil dengan posisi titik koordinat berada pada titik musuh alami. Kajian terkait keragaman artropoda diperlukan dua musim tanam secara berkala untuk mengetahui tingkat keragaman serangga pada pertaman padi.

ABSTRACT

DIVERSITY OF ARTHROPODS IN RICE PLANTS OF DIFFERENT VARIETIES AND IMPROVEMENT OF ECOSYSTEM SERVICES

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The high-yielding rice varieties is one of technology to increase rice productivity. Rice productivity has an important role in the economy in various countries. Production decreases, it will have a negative impact on the economy for rice-producing countries. Varieties rice plant have invited the arrival of arthropod in phase to growth in rice field. The purpose of study was to see the improved varieties (IR-64, Mekongga, Situ Bagendit, Ciherang) and Mixed varieties with refugia plants for arthropod diversity and productivity rice yields. The study was conducted in the village of Wijirejo, Pandak, Bantul Yogyakarta, July - September 2019. The Observations were conducted in the evening between at 16.00-18.00 p.m. with intervals of twice from the vegetative phase, the generative phase and tillering phase. The arthropod study was carried out used sweeping net, pitfall and yellow sticky, used refuge was Zinnia elegans, Cosmos caudatus, Gomphrena globosae and Tagetes erecta. Arthropods were collected and identified to family level. The analysis used the Shannon-Wienner index for diversity, the evenness index analysis for arthropod evenness, the Simpson index analysis to see the dominance of arthropods and the analysis used the fictorial triangle to see the stability of the crop ecosystem using different. The results showed that the mean diversity index (Shannon-Wienner) was 1.97-2.82 in the moderate category, the mean index (e ') was 0.61-0.71 in the moderate category and the mean dominance index (D) was 0.10-0. 22 low category. The stability of the rice planting ecosystem based on the function and structure of the arthropods in unstable sweep net, pitfall, and yellow sticky traps is categorized as stable with the position of the coordinate points at the natural enemy point. Study related to the diversity of arthropods need two seasons period to seeing the level of diversity in rice plant.