

INTISARI

Tanaman jagung (*Zea mays* L.) sangat bermanfaat bagi kehidupan manusia ataupun sebagai pakan ternak. Penerapan pola tanam dengan keanekaragaman varietas dalam suatu lahan yang diharapkan mampu menekan populasi hama dan mengurangi intensitas kerusakan yang ditimbulkan oleh hama-hama penting. Keanekaragaman artropoda hama dengan campuran varietas pada pertanaman jagung belum banyak diteliti. Penelitian keragaman artropoda hama diperlukan sebagai langkah awal dalam pengelolaan hama terpadu. Penelitian ini bertujuan untuk mengetahui perbedaan keanekaragaman artropoda hama pada pertanaman jagung dengan penerapan satu dan campuran lima varietas serta hasil produksinya. Penelitian ini dilakukan di Cibuk Kidul, Margoluwih, Seyegan, Sleman, Yogyakarta dan di Laboratorium Hama Tanaman, Sub Laboratorium Avertebrata Hama, Departemen Hama dan Penyakit Tanaman, Fakultas Pertanian, Universitas Gadjah Mada, Yogyakarta. Analisis data artropoda yang digunakan adalah indeks kekayaan jenis, indeks pemerataan, indeks keanekaragaman, dan dominansi. Hasil penelitian ini menunjukkan bahwa keanekaragaman artropoda hama pertanaman satu dan campuran lima varietas tidak berbeda nyata dengan diperoleh indeks hasil masing-masing sebesar 2,94 dan 2,85. Hasil produksi yang didapatkan lebih rendah dengan penerapan campuran lima varietas dari pada satu varietas.

Kata kunci: hama, artropoda, keanekaragaman, jagung, campuran, varietas .

ABSTRACT

Maize (*Zea mays*) is very useful in human's life or as the livestock feed. The application of cropping pattern with the diversity of variety in a field which is expected to suppress the damage intensity by the major pest. The diversity of arthropods in the maize field with the mix variety has not been researched yet. The research of pest arthropods diversity is needed as the first step of integrated pest management. This research was aim to discover the differences of pest arthropods diversity at the maize field with the application of single and mixed of five varieties and the production result. This research was done at Cibuk Kidul, Margoluwih, Seyegan, Sleman, Yogyakarta and in the laboratory of Pest Crop, Sub Laboratory of Pest Invertebrates, Department of Pest and Plant Disease, Faculty of Agriculture, Universitas Gadjah Mada, Yogyakarta. The data analysis of Arthropods that was used were index of diversity, index of species wealth, fairness index, dominance with two treatments single and mixed five varieties. This result of research showed that the pest arthropods diversity at the single and mixed of five varieties cropping was unsignificantly different with result index 2,94 and 2,85 in each treatment. The result production with the application of of mixed of five varieties was lower than the result production in one variety.

Keyword: pest, arthropods, diversity, maize, mixed, variety.