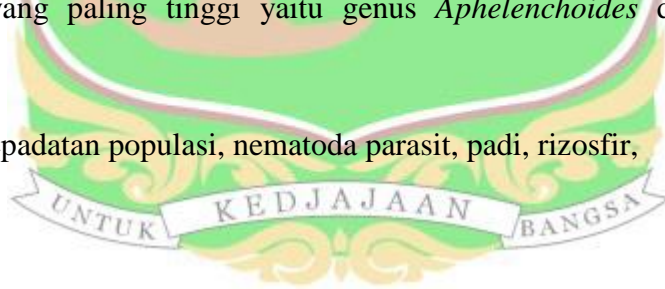


KEANEKARAGAMAN DAN KEPADATAN POPULASI GENUS NEMATODA PARASIT PADA RIZOSFIR TANAMAN PADI SAWAH (*Oryza sativa* L) DI KOTA PADANG SUMATERA BARAT

ABSTRAK

Nematoda merupakan salah satu organisme pengganggu tanaman padi. Keanekaragaman dan kepadatan populasi nematoda parasit perlu diketahui untuk mengurangi resiko kerusakan dan kerugian pada tanaman padi. Tujuan penelitian ini untuk mengetahui keanekaragaman dan kepadatan populasi nematoda parasit pada rizosfir tanaman padi sawah (*Oryza sativa* L) di Kota Padang Sumatera Barat. Metode penelitian menggunakan *Stratified Purposive Random Sampling*. Sampel tanah pada rizosfir tanaman padi diambil dari 3 Kecamatan yaitu: (1) Kecamatan Pauh (2) Kecamatan Kuranji (3) dan Kecamatan Koto Tengah. Hasil pengamatan menunjukkan bahwa nematoda parasit yang ditemukan pada rizosfir tanaman padi yaitu *Aphelenchoides*, *Ditylenchus*, *Meloidogyne*, *Pratylenchus*, *Helicotylenchus*, *Xiphinema*, dan *Trichodorus*. Indeks keanekaragaman (H') dan pemerataan (E) tertinggi terdapat di kelurahan pisang dengan nilai 1,75 dan 0,9. Indeks kesamaan komunitas nematoda parasit tergolong sama pada masing-masing kelurahan di Kota Padang dengan nilai $\geq 0,72$. Nematoda *Ditylenchus* paling dominan di setiap lokasi pengambilan sampel tanah dengan indeks nilai penting 0,79. Kepadatan populasi nematoda parasit paling tinggi pada Kelurahan Limau Manis 0,3961 individu/cm³. Frekuensi kehadiran nematoda parasit pada padi sawah yang paling tinggi yaitu genus *Aphelenchoides* dengan kategori absolut.

Kata kunci: kepadatan populasi, nematoda parasit, padi, rizosfir,



DIVERSITY AND POPULATION DENSITY GENUS OF PARASITIC NEMATODES IN THE RHIZOSPHERE RICE CROP (*Oryza sativa* L) IN PADANG CITY, WEST SUMATERA

ABSTRACT

The nematode is one of plant pests on rice crop. The diversity and population density of parasitic nematode is important to know for decreasing of damage risk and loss harvest. The purpose of this study was to know the diversity and population density of parasitic nematodes in the rhizosphere of rice field (*Oryza sativa* L.) in the city of Padang, the province of West Sumatera. The research method was Stratified Purposive Random Sampling. The Soil samples of the rhizosphere were taken from 3 rice crop subdistricts, Pauh subdistrict, Kuranji subdistricts, and Koto Tengah subdistricts. The result of observation showed that parasitic nematode found in the rhizosphere of Rice Field were *Aphelenchoides*, *Ditylenchus*, *Meloidogyne*, *Pratylenchus*, *Helicotylenchus*, *Xiphinema*, and *Trichodorus*. Pisang subdistrict was the highest diversity index ($H'=1.75$) and the high evenness ($E=0.9$) of parasitic nematode. The similarity index among the community of parasitic nematode from each subdistrict in Padang City was insignificantly different ($\geq 0,72$). *Ditylenchus* was the most dominant genus of parasitic nematode from each subdistrict with the index of critical value was 0.79. The highest value of the population density was in Kelurahan Limau Manis 0.3961 individual/cm³. The presence frequency of the parasitic nematode was genus *Aphelenchoides* with absolute category.

Keywords: Population density, parasitic nematode, rice, rhizosphere

