

Intisari

Nematoda parasit tanaman merupakan OPT yang tersebar luas dan mengganggu lahan pertanian hortikultura. Penanaman komoditas hortikultura dengan sistem polikultur memungkinkan terjadinya peningkatan kelimpahan dan keragaman nematoda parasit tanaman. Penelitian ini bertujuan untuk mengetahui keragaman dan kelimpahan genus nematoda parasit tanaman pada lahan hortikultura polikultur. Sampel akar dan tanah diambil dari lahan pertanian polikultur di daerah Dukun, Magelang dengan komoditas cabai-kubis, cabai-singkong, pisang-bawang daun, terong-jagung, dan cabai-tomat). Sampel uji dianalisis di Laboratorium Ilmu Hama Tanaman, Fakultas Pertanian UGM menggunakan metode *Whitehead Tray*. Keragaman dan kelimpahan nematoda dianalisa menggunakan indeks keragaman Shannon-Wiener (H'), Indeks Dominansi (C), dan Indeks Nilai Penting (INP). Hasil penelitian menunjukkan bahwa terdapat keragaman jenis nematoda parasit tanaman pada sampel yang diuji. Jenis nematoda parasit tanaman yang ditemukan ialah *Meloidogyne* spp., *Tylenchulus* sp., *Helicotylenchus* sp., *Rotylenchulus* sp., *Ditylenchus* sp., *Criconemoides* sp., *Pratylenchus* sp., dan *Hoplolaimus* sp. Kelimpahan jenis nematoda parasit tertinggi adalah *Meloidogyne* spp., dengan nilai INP 137,6 % .

Kata kunci : Nematoda, Polikultur, Kelimpahan, Keragaman, *Meloidogyne* spp.,

Abstract

Plant parasitic nematodes are widespread pest that interfere in horticultural crop areas. Planting of horticultural commodities within polyculture system allows an increase of the abundance and diversity of plant parasitic nematodes. The study aims to learn and identify the diversity and abundance of Plant Parasitic Nematodes genus on horticultural commodity within polyculture planting system. Soil and root samples from polyculture system crop area in Dukun, Magelang the commodities are chili-cabbage, chili-cassava, banana-spring onion, eggplant-corn, and chili-tomat. Samples were analyzed using Whitehead Tray method in Plant Pest Science Laboratory, Faculty of Agriculture UGM . Diversity and abundance of Plant Parasitic Nematodes were analyzed by using diversity index by Shannon-Wiener (H'), Dominance Index by Simpson (C), and important value Index. Studies have shown there are diversity of Plant Parasitic Nematodes from analyzed samples. The diversity of Plant Parasitic Nematodes are Meloidogyne spp., Tylenchulus sp., Helicotylenchus sp., Rotylenchulus sp. Ditylenchus sp., Criconemoides sp., Pratylenchus sp., and Hoplolaimus sp. The highest Plant Parasitic Nematodes abundance is Meloidogyne spp., with INP 137,6 %.

Keywords : *Nematode, Polyculture system, Abundance, Diversity, Meloidogyne spp.,*