

ABSTRAK

KEEFEKTIFAN BIONEMATISIDA NETAMAX-FP UNILA DALAM MENGENDALIKAN NEMATODA PARASIT TUMBUHAN PADA JAMBU KRISTAL MERAH

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Jambu kristal merupakan varietas baru dari jambu Muangthai Pak yang diperkenalkan di Indonesia oleh Misi Teknik Taiwan. Di Lampung jambu kristal terinfestasi nematoda parasit tumbuhan. Pengendalian yang banyak dilakukan adalah pengendalian menggunakan nematisida kimiawi sintetik. Penggunaan bahan ini memiliki banyak dampak buruk, diantaranya mencemari lingkungan dan berbahaya bagi kesehatan. Oleh karena itu, dikembangkan teknik pengendalian yaitu penggunaan jamur *Purpureocillium lilacinum*, dalam bentuk bionematisida. Penelitian ini bertujuan untuk mengetahui keefektifan bionematisida Netamax-FP Unila dalam mengendalikan populasi nematoda parasit tumbuhan pada tanaman jambu kristal merah di PT Great Giant Food. Percobaan dilaksanakan di lahan pertanaman jambu kristal PT Great Giant Food (GGF) Lampung Tengah, dari bulan September 2023 – Februari 2024. Pengambilan sampel tanah pada petak satuan percobaan dilakukan 2 kali yaitu 7 hari sebelum dan 60 hari sesudah aplikasi bionematisida. Ekstraksi dan identifikasi nematoda dilakukan di Laboratorium Ilmu Hama Tumbuhan, Fakultas Pertanian, Universitas Lampung. Selain populasi nematoda parasit tumbuhan, variabel yang diamati adalah pertumbuhan tanaman. Hasil penelitian menunjukkan aplikasi Netamax-FP Unila menurunkan populasi nematoda parasit tumbuhan. Populasi nematoda parasit tumbuhan pada tanaman yang diberi perlakuan bionematisida Netamax FP Unila lebih rendah daripada populasi nematoda parasit tumbuhan pada pertanaman yang diberi perlakuan biopestisida *Liquid Organic Biofertilizer* (LOB).

Kata kunci: biopestisida, bionematisida, *Netamax-FP Unila*.

ABSTRACT

EFFECTIVENESS OF NETAMAX-FP UNILA BIONEMATICIDE IN CONTROLLING PLANT-PARASITIC NEMATODES ON RED CRYSTAL GUAVA

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Crystal guava is a new variety of Muangthai Pak guava introduced in Indonesia by the Taiwan Technical Mission. In Lampung, crystal guava is infested with plant-parasitic nematodes. The common control method is the use of synthetic chemical nematicides. The use of these materials has many adverse impacts, including environmental pollution and risks to health. Therefore, a control technique has been developed using the fungus *Purpureocillium lilacinum* in the form of a bionematicide. This study aims to determine the effectiveness of the Netamax-FP Unila bionematicide in controlling the population of plant-parasitic nematodes on red crystal guava plants at PT Great Giant Food. The experiment was conducted on the crystal guava plantation land of PT Great Giant Food (GGF) in Central Lampung, from September 2023 to February 2024. Soil sampling from the experimental plots was carried out twice: 7 days before and 60 days after the bionematicide application. Nematode extraction and identification were performed at the Plant Pest Science Laboratory, Faculty of Agriculture, University of Lampung. In addition to the population of plant-parasitic nematodes, the observed variable was plant growth. The results showed that the application of Netamax-FP Unila reduced the population of plant-parasitic nematodes. The population of plant-parasitic nematodes on plants treated with the Netamax-FP Unila bionematicide was lower than that on plants treated with the biopesticide Liquid Organic Biofertilizer (LOB).

Keywords: biopesticide, bionematicide, Netamax-FP Unila.