

Buku Panduan

SEMINAR NASIONAL IX

PFI JOGLOSEMAR

Yogyakarta, 6 Oktober 2018



**“Peranan Fungisida dan Epidemiologi
dalam Pengelolaan Penyakit Tumbuhan”**

**Dalam Rangka Purna Tugas
Prof. Dr. Ir. Christanti Sumardiyono, S.U.
Prof. Dr. Ir. Bambang Hadisutrisno, DAA.**



Sesi 3 : 15.20 - 16.10

Moderator : Haryuni

Jam	Judul makalah	Pemakalah	Kode	Halaman
15.20 - 15.30	Penyakit-penyakit pada Tanaman Okra di Jember	<u>Suhartiningsih Dwi Nurcahvanti</u> dan Siti Subandiyah	L3	41
15.30 - 15.40	Exploration and Molecular Identification of Parasitic Fungi on Egg Mass of Guava Root Knot Nematode in Lampung	<u>I G. Swibawa</u> , Y. Fitriana, R. Suharjo, F.X. Susilo & J. Prasetyo	M29	42
15.40 - 15.50	Potensi dan Interval Aplikasi Khamir Asal Daun Tomat dan Alang-alang untuk Menekan Penyakit Embun Tepung pada Tanaman Tomat	<u>Noor Istifadah</u> , Nurul Ihsani, dan Sri Hartati	M31	43
15.50 - 16.00	Pengaruh Media Cair Organik Dalam Perbanyakan Blastospora Jamur Entomopatogenik (<i>Paecilomyces fumosoroseus</i>) dalam Bioreaktor	<u>Tri Maruto Aji</u>	M45	44
16.00 - 16.10	Resistensi Beberapa Varietas Bawang Merah terhadap <i>Fusarium oxysporum</i> f.sp. <i>cepae</i> dan Kehingan Hasilnya	<u>Kumala Sari</u> , Hadiwiyono, Susilo Hambeg Poromarto, Salim Widono	19	45
16.10-16.25	Diskusi			

Exploration and Molecular Identification of Parasitic Fungi on Egg Mass Of Guava Root Knot Nematode in Lampung

I G. Swibawa, Y. Fitriana, R. Suharjo, F.X. Susilo & J. Prasetyo
Plant Protection Department University of Lampung, Indonesia
Jln. Sumateri Brojonegoro No. 1. Bandar Lampung, Indonesia
E-mail: igswibawa@yahoo.com

ABSTRACT

Production of guava crystal in Lampung does not reach its optimum potential of 30 ton ha⁻¹ due to attacked by root-knot nematodes. Therefore, the natural enemies of the nematodes with potential for biological control should be investigated. The aims of this study were to explore and identify the fungi parasite of egg mass root-knot from guava plantation in Lampung. Surveys of parasitic fungi exploration were conducted at PT NTF crystal guava plantation East Lampung and on crystal guava plantation belonging to farmer in Tanggamus District Lampung. Laboratory process was conducted at Biotechnology Laboratory of University of Lampung. The study took place October 2016 and May 2018. Fungi was isolated from infected egg mass of root-knot nematodes and then grown on PSA media based. The ability of fungal infection was tested in-vitro. Five isolates of fungi were collected from the guava plantation and in-vitro test indicated that the infection rate of fungi on root-knot nematodes egg was more than 90%. Base on molecular identification, the fungi species was *Purpureocillium lilacinum*.

Keywords: *Purpureocillium lilacinum*, root-knot nematodes, guava