



ICCESI

INTERNATIONAL CONFERENCE AND THE 10th CONGRESS
OF THE ENTOMOLOGICAL SOCIETY OF INDONESIA

KUTA, BALI - INDONESIA | 6-9 OCTOBER 2019



PROGRAM BOOK

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*Learning from the Past, Adapting for the Future:
Advancements in Ethnoentomology and
Entomological Sciences for Food Security and Health*

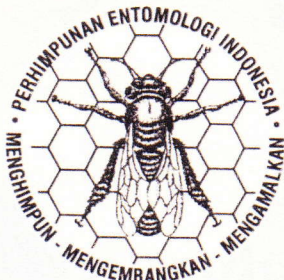
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Organized by Entomological Society Indonesian (ESI)
in collaboration with Udayana University, IPB University,
Entomological Society of Malaysia (ENTOMA)



UNIVERSITAS UDAYANA



IPB University
— Bogor Indonesia —



CONFERENCE PROGRAM ICCESI 2019

DATE	TIME	PROGRAMME
Sunday 06 October 2019	13.00-18.00	PEI Board Meeting & Technical Meeting for ICCESI
	19.00-21.00	Gala Dinner and Opening Remarks
	07.00-08.00	Registration
	08.00-08.30	Opening
	08.40-09.10	Keynote speech: Dr. Ir. Antarjo Dikin, M.Sc <i>The Role of Entomology in Agricultural Development in Indonesia</i>
	09.10-09.40	Keynote speech: Prof. Dr. Ary Hoffman <i>Frontier Research in Wolbachia-Insect Interaction</i>
	09.40-10.10	Keynote speech: Dr. Nicholas Cesard <i>Ethnoentomology: A new Frontier of Knowledge-Co-Production Across Society</i>
	10.10-10.30	Coffee break
	10.30-12.00	Invited speaker and discussion
	10.30-10.45	Prof. Dr. Jianguo Wang: <i>Diversity of Ambrosia beetle in Asia</i>
	10.45-11.00	Prof. Dr. Kazuyoshi Futai: <i>Insect and Plant Pathogen Interactions</i>
	11.00-11.15	Assoc. Prof. Dr. Abdul Hafiz Abdul Majid: <i>Molecular Marker in Entomology: Current and Future Application</i>
	11.15-11.30	Prof. Dr. Sadahiro Tatsuki: <i>Application of Insect Sex Pheromones for Crop Pest Management</i>
	11.30-11.45	Discussion
11.45-13.00	Lunch break	
Monday 07 October 2019	13.00-15.00	The 10 th Congress of the Entomological Society of Indonesia 1. Report on the responsibilities of ESI management 2. Organisational discussion 3. Formation and procedures for the selection of the Presidency (internal meeting)
	15.00-16.00	Coffee break
	16.00-18.05	1. Parallel session for Oral Presentation 2. Special Theme: Insect Biodiversity & Sustainable Landscape 3. Linnaean Games Competition
	18.05-19.00	Dinner
	19.00-21.05	1. Parallel session for Oral Presentation

D-08	<i>Eucalyptus pellita</i> and <i>Acacia crassicaarpa</i> in PT. Arara Abadi Forest Plantation in Riau: Termite Infestation and the Efficacy of Some Insecticides in Controlling the Most Destructive Species, <i>Microceroterme</i> sp	Saripah Ulpah , Fajar Sagitarianto, Budi Tjahjono
D-09	Tree-Infesting Termites Trees in the Seulawah Ecosystem, Aceh, Indonesia	Dalil Sutekad , Masykur Masykur, Rinaldi Idroes, Nazli Ismail, Samsul Muararif, Syaukani Syaukani
D-10	Different Responses Between Ants and Termites to the Existence of Natural Habitats in Oil Palm Plantation	Akhmad Rizali , Sri Karindah, Anna Windari, Bambang Tri Rahardjo, Nurindah, Bandung Sahari

Topic: Biological Control I
Session-3 (19.00-20.00)

No	Title	Author
D-11	Insecticidal Activity of Entomopathogenic Fungal Cultures Irradiated with Ultra Violet C Against Larvae of <i>Spodoptera litura</i>	Siti Herlinda , Sangkut Oktareni, Suparman SHK, Erise Anggraini, Elfita Elfita; Arum Setiawan, Marieska Verawaty; Hasbi Hasbi, Benyamin Lakitan
D-12	Effectivity of Entomopathogenic Fungus <i>Beauveria bassiana</i> (Balsamo) Villermin and Essential Oil Based Botanical Pesticides for Controlling <i>Helopeltis antonii</i> Signoret (Hemiptera: Miridae) on Cashew Seedlings	Molide Rizal, T.E. Wahyono , Wiratno
D-13	Cross Resistance of Thiophanate-Methyl Tolerance <i>Metarhizium flavoviride</i> to Some Fungicides In Vitro	Yuyun Fitriana , Devita Ovi Wulandara, Purnomo, Radix Suharjo
D-14	Characteristic Insecticide Formulation Using Surfactant Based on Palm Oil and Its Application for <i>Spodoptera litura</i>	Eka Nur'azmi Yunira, Ani Suryani, Dadang Dadang , Silvester Tursiloadi

Topic: Biological Control II
Session-4 (20.05-21.05)

No	Title
D-15	Population of Corn Stem Borer <i>O. furnacalis</i> in Endophytic <i>Beauveria bassiana</i>
D-16	Pathogenicity of <i>Metarhizium</i> sp on Rice Grain Combined with Vapour Protein Powder
D-17	Detection of <i>Oryctes rhinoceros</i> N (OrNV) from <i>Oryctes rhinoceros</i> b Oil Palm Plantations of East Coast Peninsular Malaysia
D-18	The Impact of Temperature Treatment on Fitness and Pathogenicity of <i>Bacillus thuringiensis</i> Isolates from South Sumatra Against Diamondback Moth <i>Plutella maculipennis</i> (Lepidoptera: Plutellidae)
D-19	The Efficacy of Entomopathogenic Fungal Spores as a Potential Biological Control Tool Against Aedes Mosquito Larvae

ROOM

Topic: Fruit Flies I
Session-1 (16.00-17.00)

No	Title
E-01	Present Status of Fruit fly <i>Bactrocera carambolae</i> Drew & Hancock (Diptera: Tephritidae) in Bali Island, Indonesia
E-02	Diversity of Fruit Flies (<i>Bactrocera</i> sp) (Diptera: Tephritidae) on Some Mangrove Varieties in Jatibarang, Indramayu-Waluyo, Java, Indonesia
E-03	Biodiversity of Fruit Flies (Diptera: Tephritidae) from Different Ecosystems in Sleman, Yogyakarta

Abstract ID: D-13

**CROSS RESISTANCE OF THIOPHANATE-METHYL TOLERANCE
Metarhizium flavoviride TO SOME FUNGICIDES IN VITRO**

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In the previous study, we found an isolate of *M. flavoviride* that was still able to grow at the medium contains thiophanate-methyl up to 4 times of doses. The tolerance of the *M. flavoviride* to thiophanate-methyl led to hypothesis that this fungus was also tolerance to the other fungicides. This study was performed to investigate the growth capability of thiophanate-methyl tolerance *M. flavoviride* on the medium contains 8 different fungicides at 2 different levels of doses as well as its pathogenicity after grown on fungicide-containing medium. Investigation on its pathogenicity was performed by applying the fungus to *Sitophilus oryzae*. The thiophanate-methyl tolerance *M. flavoviride* was able to grow on the medium contains mancozeb, ziram, and propineb at 1 time of dose but not for the other fungicides namely tricyclazole, isoprothiolane, difenoconazole, benomyl, and carbendazim. Fungal production was still observed on the medium contains mancozeb (1.23×10^8 conidia/mL), ziram (0.97×10^8 conidia/mL), and propineb (0.04×10^8 conidia/mL), however it was significantly lower than control (1.55×10^8 conidia/mL). Viability of the conidia was detected on the medium contains mancozeb and ziram, but not on propineb. Conidia viability on mancozeb (41%) was not significantly different than control (57%), meanwhile conidia viability on ziram (29.1%) was significantly lower than control. Mortality of the *S. oryzae* caused by the fungus after cultivated on the medium contains mancozeb (26.9%) and propineb (19.68%) was not significantly different than control (33.82%), however it was significantly lower when it grew on mancozeb containing-medium (5.36%).

Keyword: fungicide, *Metarhizium flavoviride*, pathogenicity, *Sitophilus oryzae*, tolerance