

International Conference on BioProtection for Sustainable Agriculture 2023 (ICBPSA23)

Conference program

| Morning, Wednesday 26 July 2023 | | |
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| 7:15-7:45 | Registration | CTU Hi - Tech Building (gate B) |
| Opening Ceremony | | |
| 8:00-8:45 | Opening session (ATL - Meeting Room) | - CTU - French Embassy - CIRAD & ASEA |
| 8:45-9:00 | Group photo & Tea break | |
| Plenary session: General crop protection approaches linked to bioprotection <i>Moderators: Dr. Jean-Philippe Deguine, Dr. Le Van Vang</i> | | CTU Hi - Tech Building Meeting room |
| 9:00-9:25 | PLP1. Using insect natural enemies as biological control agents for crop protection in Vietnam | Dr. Tran Dang Hoa <i>Hue University of Agriculture and Forestry, Vietnam</i> |
| 9:25-9:50 | PLP2. Agriculture and human infectious disease risk: Some crop protection practices may be part of the problem, but Bioprotection is a One Health-smart solution | Dr. Alain Ratnadass <i>CIRAD, Réunion</i> |
| 9:50-10:15 | PLP3. From upland-paddy crop rotation to biological soil disinfestation using ethanol in Japan | Mr. Seiji Uematsu <i>Tokyo University of Agriculture and Technology, Tokyo, Japan</i> |
| 10:15-10:30 | Tea break | |
| 10:30-10:55 | PLP4. What place for Bioprotection in Agroecological Crop Protection? | Dr. Jean-Philippe Deguine <i>CIRAD, Vietnam</i> |
| 10:55-11:20 | PLP5. The importance of transdisciplinary collaboration and partnerships to improve | Dr. Alison Watson <i>CSIRO Health & Biosecurity, Singapore</i> |

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| | plant health and pest and disease management in Southeast Asia | |
| 11:20-11:45 | PLP6. Improving knowledge of the factors determining the protective efficacy of biocontrol against plant diseases for a better use in the field | Dr. Marc Bardin <i>INRAE, France</i> |
| 11:45- 12:45 | LUNCH | CTU Hi - Tech Building |
| Afternoon, Wednesday 26 July 2023 | | |
| Parallel sessions : | | |
| Session 1: Microbial agents for control of plant pathogens Session 2: Environmentally friendly methods for control of herbivorous insects | | The 4th Floor- Learning resource center (LRC) |
| Session 1: Microbial agents for control of plant pathogens Moderators: Dr. Tran Thi Thu Ha, Dr. Tuan Minh Tran | | Room 1-LRC |
| 13:00-13:25 | S1P1. Biological control <i>Phytophthora capsici</i> on black pepper by antagonistic bacteria <i>Pseudomonas putida</i> in Vietnam | Dr. Tran Thi Thu Ha <i>Hue University of Agriculture and Forestry, Vietnam</i> |
| 13:25-13:50 | S1P2. Inhibitory Properties of <i>Bacillus</i> sp. strain 55-7 Against Plant Pathogenic Fungi and Its Potential for Plant Growth Promotion in Organic Farming | Dr. Koonsirin Buraphan <i>King Mongkut's University of Technology Thonburi, Thailand</i> |
| 13:50-14:15 | S1P3. The Role of Plant Growth-Promoting Bacteria in Reducing Pathogenic Diseases on Crops | Dr. Nguyen Bao Quoc <i>Nong Lam University, Vietnam</i> |
| 14:15-14:40 | S1P4. Biocontrol potential of <i>Bacillus amyloliquefaciens</i> BR15 against bacterial leaf blight disease of rice caused by <i>Xanthomonas oryzae</i> pv. <i>oryzae</i> | Dr. Tran Vu Phen <i>Can Tho University, Vietnam</i> |
| 14:40-14:55 | Tea break | |
| 14:55-15:20 | S1P5. Plant Protection Research Institute: Research and development achievements in probiotics from benefit microorganisms for soil born diseases management | Dr. Nguyen Thi Chuc Quynh <i>Plant Protection Research Institute, Hanoi, Vietnam</i> |

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| 15:20-15:45 | S1P6. Bioactivity of rhizospheric bacteria against <i>Ralstonia solanacearum</i> causing wilt disease on <i>Solanacearum</i> plants | Dr. Vo Thi Ngoc Ha <i>Nong Lam University, Viet nam</i> |
| 15:45-16:10 | S1P7. Efficacy of <i>Bacillus subtilis</i> CaSUT007 and CaSUT008 on growth and disease resistance in cucumber plants | Dr. Le Thanh Toan <i>Can Tho University, Viet nam</i> |
| 16:10-16:35 | S1P8. Introduction <i>Bacillus subtilis</i> QST 713 & Bio-efficacy research on <i>Magnaporthe grisea</i> , <i>Ralstonia solanacearum</i> / <i>Fusarium solani</i> on Tomato; <i>Phytophthora capsici</i> on Chili by soil application. | Mr. Ronald Arabit, <i>Bayer SEA&P</i> Dr. Truong Phuoc Thien Hoang, <i>Research of Institute Biotechnology and Environment (RIBE)</i> |
| 16:35- 17:00 | S1P9. Effects of biofumigation on soil microorganisms | Dr. Le Phuoc Thanh <i>Can Tho University, Vietnam</i> |
| Session 2: Environmentally friendly methods for control of herbivorous insects Moderators: Dr. Ando Tetsu, Dr. Nguyen Duc Tung | | Room 2-LRC |
| 13:00-13:25 | S2P1. Biological Control of Insect Pests in Vietnam: The Role of Predatory Mites in Sustainable Agriculture | Dr. Nguyen Duc Tung <i>Vietnam National University of Agriculture, Hanoi</i> |
| 13:25-13:50 | S2P2. The invasion of Black Headed Caterpillar (<i>Opisina arenosella</i>) into Vietnam and its bio-controls | Dr Le Khac Hoang <i>Nong Lam University, Hochiminh City - Vietnam</i> |
| 13:50-14:15 | S2P3. Convenient diets for the development and reproduction of predator big-eyed bug <i>Geocoris ochropterus</i> Fieber (Hemiptera: Geocoridae) | Dr. Nguyen Ngoc Bao Chau <i>Ho Chi Minh City Open University, Vietnam</i> |
| 14:15-14:40 | S2P4. The appearance and biological characteristics of <i>Lasioseius</i> sp., a predator controlling Panicle rice mite (<i>Steneotarsonemus spinki</i> Smiley) in Thua Thien Hue Province | Dr. Tran Thi Hoang Dong <i>Hue University of Agriculture and Forestry, Vietnam</i> |
| 14:40-14:55 | Tea break | |
| 14:55-15:20 | S2P5. Recent Studies on the Biological Control of Insect Pests on Agricultural Crops in Viet Nam | Dr. Dao Thi Hang <i>Plant Protection Research Institute (PPRI), Ha Noi, Vietnam</i> |

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| 15:20-15:45 | S2P6. Female sex pheromone and its application for management of fall armyworm <i>Spodoptera frugiperda</i> (J.E. Smith) on maize crop in Vietnam | Dr. Tran Thi Thu Phuong <i>Vietnam National University of Agriculture, Hanoi</i> |
| 15:45-16:10 | S2P7. Effect of temperature on growth and pathogenicity of <i>Beauveria bassiana</i> BB1 isolated from black pepper soil against root mealybug <i>Formicococcus</i> sp. (Homoptera: Pseudococidae) in Đak lak province | Ms. Tran Thi Hue <i>Tay Nguyen University, Hue University, Vietnam</i> |
| 16:10-16:35 | S2P8. Effect of <i>Paenibacillus tylopili</i> on production pileups of <i>Tylopilus felleus</i> under In vivo | Dr. Tran Thanh Thy <i>Tan Tao University, Vietnam</i> |
| 16:35- 17:00 | S2P9. isolation and evaluation of the ability to degrade chitin and protein by extracellular enzymes of some strains of <i>Metarizium</i> | Ms Trương Thị Ngọc Han <i>LocTrois Group Vietnam</i> |
| 18:30-21:00 | Gala dinner | Nesta hotel |
| Morning, Thursday, 27 July 2023 | | |
| Plenary session: Fields of study or case studies with a generic application in bioprotection Moderators : Dr. Samunder Singh, Dr. Jean-Noël Aubertot | | CTU Hi - Tech Building Meeting room |
| 8:00-8:25 | PLP7. Lepidopteran sex pheromones: wonderland for an agricultural chemist | Dr. Tetsu Ando <i>Tokyo University of Agriculture and Technology, Japan</i> |
| 8:25- 8:50 | PLP8. Research and application of insect semiochemicals for sustainable insect pest management in the Mekong delta of Vietnam | Dr. Le Van Vang <i>Can Tho University, Vietnam</i> |
| 8:50-9:15 | PLP9. Startup in Induced Resistance for Plant Disease management | Dr. Kumrai Buensanteai <i>Suranaree University of Technology, Thailand</i> |
| 9:15-9:40 | PLP10. Harnessing biological control approaches to manage invasive species in Australia | Dr. Michelle Rafter <i>CSIRO, Australia</i> |
| 9:40-9:55 | Tea Break | |

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| 9:55- 10:20 | PLP11. Invasion and biocontrol of <i>Bactrocera dorsalis</i> (Tephritidae) in Indian Ocean | Dr. Laura Moquet <i>CIRAD</i> |
| 10:20-10:45 | PLP12. Innovative non-chemical approaches for sustainable weed management | Dr. Samunder Singh <i>President, International Weed Science Society & Director Agronomy</i> |
| 10:45-11:10 | PLP13. Isolation and identification of allelochemicals for the developing sustainable agriculture | Dr. Hisashi Kato-Noguchi <i>Kagawa University, Japan</i> |
| 11:10-11:35 | PLP14. An overview of the national action plan for pesticide reduction in France. Development of bioprotection | Dr. Jean-Noël Aubertot <i>UMR AGIR, INRAE</i> |
| 11:35-12:00 | PLP15. Plasma membrane nanodomain: a new frontier in fighting plant diseases | Dr. Tuan Minh Tran <i>University of South Alabama, USA</i> |
| 12:00- 12:45 | LUNCH | CTU Hi - Tech Building |
| Afternoon, Thursday 27 July 2023 | | |
| <p style="text-align: center;">Parallel sessions :</p> <p>Session 1: Microbial agents for control of plant pathogens (Continued)</p> <p>Session 3: Non-living agents for control of plant pathogens and disease diagnosis</p> <p>Session 4: Weed science and allelochemicals for crop protection</p> | | The 4 th Floor- Learning resource center (LRC) |
| <p style="text-align: center;">Session 1: Microbial agents for control of plant pathogens (Continued)</p> <p style="text-align: center;"><i>Moderators: Dr. Marc Bardin, Dr. Ha Viet Cuong</i></p> | | Room 1- LRC |
| 13:00-13:25 | S1P10. Potentialities of mycoviruses found in lower eucaryotic organisms including fungi as well as plants and insects as biocontrol agents. | Dr. Hiromitsu Moriyama <i>Tokyo University of Agriculture and Technology, Japan</i> |
| 13:25-13:50 | S1P11. Identification and Characterization of a Hypovirulence-Associated Mycovirus in <i>Colletotrichum gloeosporioides</i> for Biological Management of Anthracnose Disease | Dr. Lakha Salaipeth <i>King Mongkut's University of Technology Thonburi, Thailand</i> |

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| 13:50-14:15 | S1P12. Potential utilization of plant viruses as agents for the control of plant diseases | Dr. Ha Viet Cuong <i>Vietnam National University of Agriculture</i> |
| 14:15-14:40 | S1P13. Deletion in the n-terminal region of the hc-pro of east asian passiflora virus to generate attenuated mutants for cross protection | Dr. Do Duy Hung <i>Plant Protection Research Institute, Vietnam</i> |
| 14:40-14:55 | Tea break | |
| 14:55-15:20 | S1P14. Efficacy of bacteriophages in controlling bacterial wilt caused by <i>Ralstonia solanacearum</i> Smith on plants in Viet Nam | Dr. Nguyen Thi Thu Nga <i>Can Tho University, Vietnam</i> |
| 15:20-15:45 | S1P15. Prospects for sustainable plant disease management in the Mekong Delta of Vietnam | Dr. Nguyen Dac Khoa <i>Can Tho University Vietnam</i> |
| 15:45-16:10 | S1P16. Isolation of endophytic bacteria from Pinto peanut (<i>Arachis pintoi</i>) in Can Tho province with antibacterial ability on <i>Erwinia</i> spp. | Ms. Nguyen Thanh Dung <i>Can Tho University, Vietnam</i> |
| 16:10-16:35 | S1P17. Biological management of rice blast diseases by endophytic fungi | Dr. Nguyen Thi Thanh Xuan <i>Tra Vinh University, Vietnam</i> |
| 16:35-17:00 | S1P18. Selection and application of <i>Trichoderma</i> and <i>Paecilomyces</i> fungal strains in the prevention of nematodes | Mr. Huynh Minh Chau <i>Loc Troi Group, Vietnam</i> |
| 17:00-17:25 | S1P19. Management of bacterial grain rot of rice by bacteriophages in the Mekong Delta of Vietnam | Dr. Doan Thi Kieu Tien <i>Can Tho University Vietnam</i> |
| Session 3: Non-living agents for control of plant pathogens and disease diagnosis Moderators: Dr Alison Watson, Dr. Kumrai Buensanteai | | Room 2 – LRC |
| 13:00-13:25 | S3P1. The role of Chitinase in plant nematode bioprotection | Dr. Nguyen Van Nam <i>Tay Nguyen University, Vietnam</i> |
| 13:25-13:50 | S3P2. Preparation, characterization and antifungal activity on <i>Puccinia arachidis</i> cause groundnut rust of salicylic acid/chitosan nanoparticle | Dr. Le Nghiem Anh Tuan <i>Vietnam Academy of Science and Technology</i> |
| 13:50-14:15 | S3P3. Pathogen identification and control of longan fruit rot in Ba Ria-Vung Tau Province of Vietnam using chitosan | Mr. Chu Trung Kiên <i>Vietnam Academy of Science and Technology</i> |

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| 14:15-14:40 | S3P4. Potential of Silica Nanoparticles in Plant Protection and Mitigating Climate Change Impact | Dr Nguyen The Cuong <i>Cuu Long Delta Rice Research Institute, Cantho, Vietnam</i> |
| 14:40-14:55 | Tea break | |
| 14:55-15:20 | S3.P5 Antifungal potential of aqueous garlic extract and carapa oil as biopesticides for the control of tomato late blight (<i>Solanum lycopersicum</i> L.) | Dr. Gadji Andre <i>Food Crops Research Station of CNRA, Côte d'Ivoire</i> |
| 15:20-15:45 | S4.P6. Biological properties of aerated compost tea versus non-aerated compost tea derived from coir pith compost | Dr. Sasithorn Kusuwanwichid <i>Mongkut University of Technology Thonburi, Thailand</i> |
| 15:45-16:10 | S3P7. Efficacy of elicitors calcium chloride and salicylic acid in controlling anthracnose and several important diseases in scallion plants in field conditions | Mr. Nguyen Quoc Thai <i>Cuu Long University, Vietnam</i> |
| 16:10-16:35 | S3P8. Resistance evaluation and genetics inheritance of <i>Pita</i> controlling blast disease in F3 population from MTL859/OM7347 | Mr. Nguyen Khanh Duy, <i>Can Tho University, Vietnam</i> |
| 16:35-17:00 | S3P9. Determination for the causing factor of the stem end rot disease in pomelo (<i>Citrus maxima</i>) in Ben Tre province | Dr. Nguyen Quoc Khuong <i>Can Tho University, Vietnam</i> |
| Session 4: Weed science and allelochemicals for crop protection Moderators: Dr. Hisashi Kato-Noguchi, Dr Ho Le Thi | | Room 3 – LRC |
| 13:00-13:25 | S4P1. Determination of published allelochemicals in rice varieties with cloud-based metabolomics platform | Dr. Ho Le Thi <i>Cantho University, Vietnam</i> |
| 13:25-13:50 | S4.P2. Plants containing allelochemicals in the Mekong Delta, Vietnam | Ms. Phan Thi Thu Hien <i>Ha Noi Pedagogical University 2, Vietnam</i> |
| 13:50-14:15 | S4.P3. Synergistic effect of volatiles from newly wounded leaf sheathes of mangrove palm (<i>Nypa fruticans</i>) on the aggregate attraction of the lesser coconut weevil (<i>Diocalandra frumenti</i>) inhabiting Mekong Delta of Vietnam | Dr. Le Van Vang <i>Can Tho University, Vietnam</i> |

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| 14:15-14:40 | S4.P4. Chemical composition, antioxidant activity, cholinesterase inhibitor and in vitro insecticidal potentiality of essential oils of <i>Lippia multiflora</i> Moldenke and <i>Eucalyptus globulus</i> Labill. on the main carpophagous pests of cotton plant in Côte d'Ivoire | Dr. Koffi Christophe Kobenan <i>National Centre of Agronomic Research (CNRA), Côte d'Ivoire</i> |
| 14:40-14:55 | Tea break | |
| 14:55-15:20 | S4.P5. Towards Agroecological Crop Protection of rice in Cambodia | Dr. Jean-Noël Aubertot <i>UMR AGIR, INRAE</i> |
| 15:20-15:45 | S4.P6 Effects of different densities of artificially infected weedy rice on yield and yield components of the common rice variety OM5451 | Dr. Nguyen The Cuong <i>Cuu Long DeltaRice Research Institute (CLRRI), Vietnam</i> |
| 15:45-16:10 | S4.P7 Biological control of <i>Hiptage benghalensis</i> (Malpighiaceae) in Réunion (France). Research of natural enemies in Vietnam | Ms. Lam Thi Xuan Mai <i>Can Tho University, Vietnam</i> |
| 16:10-16:35 | S4P8 Phytotoxicity of meoh extracts from <i>Cosmos bipinnatus</i> and <i>Cosmos sulphureus</i> on selected test plant species | Ms. Trang Nguyen Thi Thuy <i>Can Tho University, Vietnam</i> |
| 16:35- 17:00 | S4P9. Assessing the Effects of Water Management Practices on Rice Yield and Accumulation of Arsenic and Cadmium in Rice | Dr. Huu-Phat Nguyen <i>Vietnam National University, Ho Chi Minh City, Vietnam</i> |
| Friday , 28 July 2023 Research Institution visit and Field trip | | |
| 7:00- 17:00 | Departure: College of Agriculture (CTU) Visit places: 1. Southern Horticultural Research Institute (SOFRI) 2. Field Visit in Tien Giang Province 3. Southern Regional Plant Protection Center (SRPPC) | Coordinator Dr Pham Kim Son |