











The 9<sup>th</sup> International Conference on Integration of Science and Technology for Sustainable Development 2021 (9<sup>th</sup> ICIST 2021) through Webinar-zoom in November 19, 2021 at Faculty of Agricultural Technology, King Mongkut's Institute of Technology Ladkrabang (KMITL), Bangkok, Thailand

Conference theme "Soil, water and environmental conservation, biological diversity, food safety, food security, and sustainable agriculture"

#### Organized by

Association of Agricultural Technology in Southeast Asia (AATSEA),

Faculty of Agricultural Technology, King Mongkut's Institute of Technology Ladkrabang, KMITL (Thailand),

Rajamangala University of Technology Tawan-ok, Chantaburi Campus (Thailand),

Rambhai Barni Rajabhat University (Thailand),

Bengkulu University (Indonesia),

Society for Applied Biotechnology (India)

CAS Asian Agriculture Bio Engineering (PR China),

Bio-Agritech Co Ltd (Vietnam),

Shwe Kant Kaw, KKS (Myanmar),

Bio Hi-tech (Cambodia),

CGC organic coffee (Laos),

General Incorporated Association for the Promotion of Self-reliance in Asia (GIAPSA)

## **PROGRAM**

## 19 November 2021

Time	
7:00-8:00	Registration: Secretariat and Staff: Dr. Rungtawan Yomla, Dr. Jiaojiao Song, Dr. Pattama Nitthaisong
	Master of Ceremony (MC): Dr. Jackapan Wongpa, Dr. Wanlada
0.00.01.5	Klangnurak
8:00-8:15	Welcome Addresses & opening remarks
	Prof. Dr. Hiroyuki Konuma (Japan) Dr. Thongchai Putthongsiri Dean
	Dr. Kasem Soytong, President of AATSEA
8:15-8:20	AATSEA Awarding Announcement
	Theme song: IMAGINE (Mr. Sarayos, P.)
	Dlanamy and Vaynata Smalkans (Main conference mann)
	Plenary and Keynote Speakers (Main conference room)  Chaira: Dr. Kasam Saytang (Thailand), 25 minute each
08:30-08:55	Chairs: Dr. Kasem Soytong (Thailand). 25 minute each Prof. Dr. Hiroyuki Konuma (Japan): Sustainable Development and
00.30-00.33	Covid-19 Pandemic
08:55-09:20	<b>Dr. Ramon Lorenzo Luis Guinto (Philippines):</b> The Planetary Health Diet: advancing human nutrition and safeguarding the environment in the
09:20-9:45	anthropocene <b>Dr. Teodoro C. Mendoza</b> ( <b>Philippines</b> ): True, full, and fair costs
07.20 7.10	accounting of rice, the staple food of half the people of the world
09:45-10:10	Prof. Dr. Kampon Sriwatanakul (Thailand): Health Benefits of
10 10 10 27	Organic Agriculture
10:10-10:35	<b>Prof. Dr. Jin-Cheol Kim (Korea)</b> : Can we effectively control pine wood
10:35-11:00	nematode by plant resistance inducers? <b>Prof. T.S.S.K. Patro (India)</b> : Investigation on the Efficacy of Bio-
10.33 11.00	agents and Chitosan against Finger millet Blast Disease
11:00-11:25	Prof. Dr. Moammar Dayoub (Finland): Internet of thing (Iot) for smart
	agriculture in rural areas
11:25-12:50	<b>Prof. Ivan Tarakanov (Russia):</b> Agricultural Technologies of the Future:
11:50-12:15	Intelligent Plant Factory <b>Prof. Rajeev Bhat (Estonia, EU):</b> Circular bio-economy perspectives
	for sustainable management and effective valorization of food industrial
10 15 10 15	wastes and by-products
12:15-12:45	<b>Prof. Dr. Tapio Juokslahti (Finland):</b> Potato ( <i>Solanum tuberosum</i> ) in the South-East Asia Food Systems
12:45-13:00	Questions and Answer
	-

## RESEARCH FORUM ORAL PRESENTATIONS

	Session 1	ORGANIC AGRICULTURE AND RELATED FIELDS
		Chair persons:
		Prof. Nanik Setyowati (Indonesia),
		Dr. TSSK Patro (India),
		Dr. Teerawat Sarutayophat (Thailand),
		Dr. Lampan Khurpoon (Thailand),
		Dr. Bancha Wiangsamut(Thailand)
1	13:00 – 13:20	IS: Prof. Nanik Setyowati (Indonesia): Allelopathic Effect of
		Sorghum Root Extract and Its Potential Use as a Bioherbicide
2	13:20 -13:40	IS: Prof . Dr. Qamaruddin Charcha (Pakistan) -accepted
		invitation
3	13:40 – 14:00	IS: Pablito Malabanan Villegas (Philippines): A paradigm
		shift in the Promoting the Adoption of Organic Agriculture
4	14:00-14:20	IS: Dr. Somlit Vilaivong (Lao PDR): The organic coffee
		production in Lao PDR
5	14:20 – 14:40	IS: Thet Lwin Htay (Myanmar) Organic agriculture in
		Myanmar
6	14:40 – 15:00	Invited speaker: Dr. Lalitha Sundarum (India). Yield
		enhancement of Lycopersicon esculentum Mill. Using
		microbial consortium"
7	15:00 –15:20	IS: Prof. Yao Min Hong: Using the Oyster shell factory on
′	13.00 13.20	the Implementation of Circular economy in Taiwan Sugar
		Corporation
8	15:20 – 15:40	IS: Prof. Oksana Belous (Russia). Influence of exogenous
		growth-regulators on physiological and growth processes of
		dwarf mandarin cv. 'Miagava-Vase'.
9	15:40 – 16:00	IS:Chen Yi-sung: Weed and Pest Management on Paddy
		Rice Cultivation Based on Farmers Practices
10	16:00 -16:20	Nithyapriya S and Lalitha S (India): MASS PRODUCTION
		OF PSEUDOMONAS BIOFERTILIZER AND ITS LARGE
		SCALE APPLICATION IN ARACHIS HYPOGAEA
11	16:20-16:40	IS: Dr. Md. Asaduzzaman Sarker (Bangladesh)
12	16:40-17:00	Boun Oum Douangphrachanh (Laos): The situation of
		organic production in Lao PDR
13	17:00-17:20	IS: Invited speaker: Vojtech Nemec (Czech Republic)
		Practical experience in application of bioproducts for crop

		production in Cambodia and ways how to make them work more effectively.
14	17:20-17:40	IS: NATHALA EMMANUEL and Dr.TSSK KIRAN PATRO (India): ORGANIC BEEKEEPING AND VALUE ADDITION OF BEES WAX AND HONEY FOR LIVELIHOOD OF RURAL WOMEN AND YOUTH IN ANDHRA PRADESH, INDIA
15	17:40-18:00	IS: <u>Younes REZAEE DANESH</u> , Aynur DILSIZ <sup>2</sup> , Çağlar SAGUN, Atilla POLAT, Emre KARMAZ (Iran): Community Structure of Arbuscular Mycorrhizal Fungal Species in Saline Soils of Turkey.
16	18:00-18:20	Prof. Vadim Fedorov (Russia): Organic farming, biopesticides, bio-Agrochemicals, Pharmacological products based on them: Necessity, Benefits, Opportunities, Application Prospects, proposed solutions.
17	18:20-18:40	Kasem Soytong (Thailand) Research investigation and application in organic agriculture for sustainable development goals (SDGs)

# Session 2. MICROBIAL TECHNOLOGY, BIODIVERSITY AND FOOD TECHNOLOGY

		Chair persons:
		Prof. Mohamad Chozin (Indonesia),
		Prof. Lalitha, S.(Inidia),
		Prof. Tatik Suteky (Indonesia),
		Dr. Nonglak Parinthawong (Thailand),
		Dr. Suprattra Poeaim(Thailand)
18	13:00-13:20	IS: Dr. Samantha C. Karunarathna (Sri Lanka): How to be a
		"fungi' not a dead guy.
19	13:20-13:40	IS: Lalitha S, Nithyapriya S (India): Phytostabilization of
		glyphosate contaminated soil using Plant Growth
		Promoting Rhizobacteria
20	13:40-14:00	Reny Herawati (Indonesia): Field Evaluation of Blast
		Resistance on Inbred Lines Rice Derived from Crossing
		Bengkulu Local Varieties
21	14:00-14:20	Nguyen T. Hoang*, Le T. Nhan, Nguyen T. M. Thu, Pham
		T. T. Tuyen, Ho B. T. Quyen, Pham N. D. Hoang
		(Vietnam): The trial of fresh straw mushroom (Volvariella
		volvacea) preservation in 9 days

22	14:20-14:40	Thitiporn Ditsawanon(Thailand): Protein hydrolysates from
		agricultural wastes for plant bacterial disease control
23	14:40-15:00	Boda Praveen (India): Evaluation of bacterial bio-agents
		against Alternaria alternata (Fr.) Keissler causing leaf
		blight in Little millet
24	15:00-15:20	Titi Thongkamgnam (Thailand): Antagonistic interaction
		between Trichoderma spp. and Azoxystrobin +
		difenoconazole for controlling Colletotrichum capsici the
		causal agent of anthracnose in Capsicum annuum L.
25	15:20-15:40	IS: Dr. Gopi Krishnan (India) EXPLORATION OF
		EARTHWORMCAST ASSOCIATED
		ACTINOBACTERIA FOR PLANT GROWTH
		PROMOTING PROPERTIES
26	15:40-16:00	Nguyen T. K. Dung*, Vo T. A. Dao, Tran T. Xuan, Duong
		Q. Bao, Ton T. Minh, Ho H. Dung (Vietnam):
		An Assessment of Sustainable Agro-Forestry Livelihood of
		K'Ho Cil Minority in Da Nhim Commune, Lac Duong
27	16:00-16:20	District, Lam Dong Province, Vietnam  Ton T. Minh*, Le V. Trung, Pham N. D. Hoang (Vietnam):
21	10.00-10.20	Implementing payment environmental services in
		Langbiang Biosphere Reserve, Vietnam
28	16:20-16:40	Naruemon Mongkontanawat (Thailand): Development and
		evaluation the formula of healthy mushroom beverage with
		high β-glucan from <i>Schizophyllum commune</i> Fr. In Thailand
29	16:40-17:00	Yupa Pootaeng-On (Thailand): Antifungal efficacy and
		phytochemical analysis of twig extract of Miliusa sessilis to
		control anthracnose disease in mango (Mangifera indica)
30	17:00-17:20	Pham V. Loc, Pham N. D. Hoang, Nguyen H. L. Nhi,
		Nguyen, T. M. Duyen, Nguyen, T. M, Thu, Nguyen, M.
		Thu, Nguyen, H. Dung, Ho B. T. Quyen (Vietnam):
		The correlation between mycelial growth and fruit body's yield of oyster mushrooms ( <i>Pleurotus</i> spp.) in the southern
		Vietnam
31	17:20-17:40	Sararat Monkhung (Thailand): In vitro antifungal activity of
		antagonistic bacteria to control Colletotrichum sp. causing
		anthracnose disease in mango (Mangifera indica)
32	17:40-18:00	Lam V. Nguyen*, Bui N. Trang, Dang H. Phu, Ho B.T.
		Quyen, Dinh M. Hiep, Nguyen T. Thang, Pham N.D.
		Hoang (Vietnam): Lovastatin compounds of oyster
22	10.00 10.20	mushrooms ( <i>Pleurotus</i> spp.) in the southern Vietnam
33	18:00-18:20	Okigbo, R. N. and Ugwu, C. S. (Nigeria):FUNGAL FLORA OF MECHANIC WORKSHOPS AND ITS
		BIOREMEDIATION
34	18:20-18:40	Ho B.T. Quyen, Huynh N.M. Thu, Cao N. K. Thoa, Co D.
		Trong, Dinh M. Hiep, Pham N.D. Hoang (Vietnam):

Biological characteristics of commercial oyster mushrooms
( <i>Pleurotus</i> spp.) in southwestern Vietnam

	Session 3	PLANT, WATER AND SOIL SCIENCES
		Chair persons:
		Prof. Zainal Muktamar (Indonesia),
		Dr. Sutisa Chaikul (RBU)
		Dr. Rungtawan Yomla (Thailand),
		Dr. Anurug Poeaim (Thailand)
		Duanrung Benjamas (RBU)
35	13:00-13:20	IS: Prof. Zainal Muktamar (Indonesia): Soil Nitrate
		Availability Pattern as Influenced by Application of
		Vermicompost Supplemented with a Liquid Organic Fertilizer
36	13:20-13:40	Catur Herison (Indonesia): Reliability of Seedling Stage
		Selection for Aluminium Stress Tolerance In Hot Pepper
		(Capsicum annuum L)
37	13:40-14:00	Prof. Fahrurrozi Fahrurrozi (Indonesia): Use of Tithonia
		diversifolia leaves for liquid organic fertilizer
38	14:00-14:20	IS: Sigit Sudjatmiko (Indonesia): SWEET CORN ROOT
		DISTRIBUTION UNDER DIFFERENT FERTILIZER
		APPLICATIONS
39	14:20-14:40	Sefri Oktaviani (Thailand): Coffee cherry's pulp variety and
		pulping delay time leading to cascara tea products
40	14:40-15:00	G. Bharathi (India): Molecular Divergence Analysis for Pre-
		Harvest Sprouting Resistance in Rice (Oryza Sativa L.)
		genotypes
11	15,00 15,20	• • • • • • • • • • • • • • • • • • • •
41	15:00-15:20	Merakati Handajaningsih (Indonesia): Enhancing Soil
		Characteristics and Yield Response of Coffee Cultivated under Reduced Chemical Fertilizer in Ultisols with
		Application of Bio-organic Fertilizer Containing Plant Growth
		Promoting Microbes
42	15:20-15:40	Rathanon Lohsuwan (Thailand): Effects of Draw Solution
		Concentration and Operating Factors on Forward Osmosis
		for Lime juice Concentration
43	15:40-16:00	Mendoza, Bernadette C., Maluping, Lycka P., Ramos,
		Jemaine Catherine T., Polido, Kristinae P., Mancia, Abigail

		Faye V., Panganiban, Marian Jean T. and Reano, Consorcia E. (Philippines):Bacterial Count Determination and Phenotypic Detection of S. aureus and E. coli Strains in Selected Agro-ecologically and Conventionally Grown Salad Vegetables in Laguna and Quezon Provinces, Philippines
44	16:00-16:20	IS: Dr. Bancha Wiangsamut (Thailand): Effect of ethephon on fruit ripening and fruit components of durian cv. 'Monthong' after harvest
45	16:20-16:40	Varee Yoosumran (Thailand): Micropropagation of young inflorescence Curcuma hybrid In vitro
46	16:40-17:00	Marwanto Marwanto (Indonesia): Reducing the Use of Mineral Fertilizer and Enhancing Growth Performance of Green Onion by Application of Pelletized Organomineral Fertilizer
47	17:00-17:20	Prasanna Angel Deva (India): Understanding the response of antioxidant mechanisms to abiotic stress in the <i>Arabidopsis</i> Negev desert relative, <i>Anastatica hierochuntica</i>
48	17:20-17:40	Sandhya Rani (India): Crop Residue Management for Enhancing the Soil Health and Productivity in Red Sandy Loam Soils
49	17:40-18:00	Chamaiporn Anuwong (Thailand): Effect of Timing and Storage Temperature on Pollen Viability and Pollen Germination in Zephyranthes Hybrid
50	18:00-18:20	Colenares Rohilyn E., Dianna May Asis, John Rey S. Rieza, and Benedict S. Tuazon (Philippines): Metal Accumulation of Leguminous Crops In Mine Tailings of Camarines Norte, Philippines: Basis for Soil Remediation Strategies
51	18:20-18:40	Charanya Khaeksawad (Thailand): The effect of water deficit at different growth stage on yield and quality of sweet corn (Zea mays var saccharata Sturt.)

Session 4	ANIMAL AND FISHERY SCIENCES AND RELATED FIELDS
	Chair persons:
	Prof. Fahrurrozi (Indonesia),
	Dr. Ronachai Sitthigripong (KMITL, Thailand);
	Assist. Prof. Dr. Bhutharit Vittayaphattananurak Raksasiri (SU)
	Assoc. Prof. Dr. Pantipa Na Chiangmai (SU)
	Asst. Prof. Dr. Yardrung Suwannarat (RBU)

52	13:00-13:20	IS: Dr John Moreki and and Maphanyane, P. (Botswana): Assessment of
		awareness of broiler chicken welfare in Gaborone, Botswana
53	13:20-13:40	Jinda Klin-Ubon (Thailand): Effect of crude Vietnamese coriander ( <i>Persicaria odorata</i> ) extract supplementation in broiler diet on growth performance, carcass characteristics and meat quality
54	13:40-14:00	Kajit Mettamehtar (Thailand): Effect of genetic groups and age on milk chemical composition from buffaloes
55	14:00-14:20	Pattana Somniyam (Thailand): The Diversity of Terrestrial Earthworm in Agricultural Land and Adjacent areas, Uttaradit Province, Thailand
56	14:20-14:40	Ruangyote Pilajun (Thailand): Growth performance and nutrient digestibility of Thai native compared with Lowline Angus crossbred beef cattle fed with regional feedstuffs
57	14:40-15:00	Kajit Mettamehtar (Thailand): Milk fatty acid profile from different
		genetic and age of buffaloes.
58	15:00-15:20	Rigos, LM., EC. Atabay, EP Atabay, JPR. Apolinario (Philippines): Determination Of Pregnancy Associated - Glycoproteins (Pags) During And Post Pregnancy In Riverine Buffaloes (Bubalus bubalis Linn.)
59	15:20-15:40	Panneepa Sivapirunthep (Thailand): Yield Grading and Prediction of Semi- boneless Lean Percentage Using Carcass Traits of Fattening Culled Dairy Cattle in Thailand
60	15:40-16:00	Ruangyote Pilajun (Thailand): Growth performance and nutrient digestibility of Thai native compared with Lowline Angus crossbred beef cattle fed with regional feedstuffs
61	16:00-16:20	Manatsanun Nopparatmaitree (Thailand):Effect of feeding banana stalk to laying hens under free range rearing system in bamboo garden on physical quality and nutritive value of eggs, fatty acid profile and lipid quality index in yolk
62	16:20-16:40	Bhutharit Vittayaphattananurak Raksasiri (Thailand): The effect of synbiotic supplementation in Thai native black-feathered chicken (Pradu Hang Dam) diets on production performance, intestinal histomorphology and carcass quality
63	16:40-17:00	Kittichon U-Taynapun(Thailand): Species diversity, tetracycline resistance and virulence factor gene profile of pathogenic <i>Aeromonas</i> spp. isolated from Nile tilapia seed farms in southern Thailand
64	17:00-17:20	Paitoon Kaewhom(Thailand): Molecular Survey of <i>Theileria</i> spp. of Ruminant in Eastern border area of Thailand-Cambodia
65	17:20-17:40	Panneepa Sivapirunthep(Thailand): Rib Eye Area and Sizes of Fattening Culled Dairy Cattle Determination Using Plastic Grid and Geometric Methods
66	17:40-18:00	Teerajet Laohasatian(Thailand): Development of Loop-mediated Isothermal Amplification (LAMP) for rapid detection of Methicillin-resistance <i>Staphylococcus aureus</i> (MRSA) from dairy cattle

67	18:00-18:20	Manatsanun Nopparatmaitree (Thailand): Dietary of Probiotic (Micromix® 3B Dry) and Organic Acid (Semalex®) Supplementation on Productive Performances, Intestinal Morphology, Carcass Characteristics, Meat Quality and of Broiler Chickens	
68	18:20-18:40	Rustikawati Rustikawati(Indonesia): Evaluation on Salinity Tolerance of New Maize Hybrids at Early Growth and Their Performance in Coastal Field	
	Session 5	Entomology and related fields	
		Chair persons:	
		Prof Dwi Wahyuni Ganefianti (Indonesia)	
		Dr. Kamronwit Thipmanee(KMITL,Thailand)	
		Dr. Chongko Saetung (RMUTTO)	
		Dr. Gopi Krishnan (India)	
		Dr. N. Emmanuel (India)	
69	13:00-13:20	Agustin Zarkani (Indonesia): A First Record of Mealybug,	
		Planococcus bendovi Williams (Hemiptera: Planococcus) in	
		Southeast Asia	
70	13:20-13:40	Sorphia Kummin(Thailand): Adulticidal toxicity of trans-	
		anethole and geranial from natural essential oils against house	
		fly, Musca domestica (L.), Muscidae; Diptera	
71	13:40-14:00	Nitchakan Mekha (Thailand): Larvicidal and pupicidal	
		activities against Musca domestica L. of several combinations	
		of Cinnamomum verum, Cymbopogon citratus (Stapf.), and	
		Illicium verum Hook. f	
72	14:00-14:20	Khwunjira Chanasongcram(Thailand): Larvicidal and	
		ovicidal activities against Aedes aegypti (L.) of combinations	
		between plant essential oils and their major constituent	
73	14:20-14:40	Navasero M.M, W.N.De Panis, R.N. Candano, MV	
		Navasero and MP Montecalvo (Philippines):Predatory	
		efficiency of Euborellia species against fall armyworm,	
		Spodoptera frugiperda (J.E.Smith)(Lepidoptera:Noctuidae)	
74	14:40-15:00	Tanapoom Moungthipmalai (Thailand): Adulticidal activity	
		against housefly (Musca domestica L, Muscidae:Diptera) of	
		eucalyptol, limonene, and their combined formulations	
75	15:00-15:20	Cheepchanok Puwanard(Thailand): Ovicidal and adulticidal	
		activities of Cymbopogon citratus (DC.) Stapf and Illicium	
L		verum Hook. f. against Aedes aegypti (Linn.)	
76	15:20-15:40	Watcharaporn Takawirapat (Thailand): Repellency of six	
		plant essential oils against Periplaneta americana L. and	
L		Blattella germanica L.	
77	15:40-16:00	Sukritta Anutrakunchai (Thailand): Comparison of	
		Bioformulation substances to Bagrada hilaris controls	

78	16:00-16:20	Montecalvo, MP, MM Navasero, MV Navasero (Philippines): <i>Metarhizium rileyi</i> , an indigenous and potent entomopathogenic fungus against armyworms in the Philippines.
79	16:20-16:40	Navasero M.M, W.N.De Panis, R.N. Candano, MV Navasero and MP Montecalvo (Philippines):Predatory efficiency of Euborellia species against fall armyworm, Spodoptera frugiperda (J.E.Smith)(Lepidoptera:Noctuidae)
80	16:40-17:00	Dr.Donna Ria Josue-Canacan (Philippines ) Adoption of Integrated Pest Management (IPM) Technologies in Southern Philippines: Constraints and Motivations
81	17:00-17:20	Dr.Rose Josue (Philippines) Farmers as key implementors of S & T-based biological intervention have their coconut trees rapidly recover from Coconut Scale Insect (CSI) outbreak in Southern Philippines
82	17:20-17:40	Siraprapa Teangpa(Thailand): Ovicidal effect against Musca domestica (L.) of several combinations of plant essential oils and their major constituent
83	17:40-18:00	Sempurna Ginting (Indonesia): Insect diversity in forest and beach ecosystems in pelabuhan ratu, sukabumi, west java
84	18:00-18:20	Priyatiningsih Priyatiningsih (Indonesia): Identification and Biology of Fruit Fly Attacking Some Citrus Varieties in Bengkulu
85	18:20-18:40	Sempurna Ginting(Indonesia): Insect diversity in forest and beach ecosystems in pelabuhan ratu, sukabumi, west java

	Session 6	Agricultural Sciences and Biology
		Chair persons:
		Dr. Danilo Josue (Philippines),
		Dr. Teodoro C. Mendoza (Philippines),
		Prof. Dwatmadji (Indonesia),
		Dr. Kannikar Charoensuk (Neng ,)
		Dr. Komkhae Pilasombut (KMITL, Thailand);
86	13:00-13:20	IS: Prof. Dr. Teodoro C. Mendoza (Philippines):True Costs
		Accounting of Rice: the staple food of half the people of the
		World

87	13:20-13:40	IS:Prof. M. Chozin (Indonesia): IS: Mohammad Chozin: PROGRESS IN RICE BREEDING FOR INDONESIAN
		SWAMPLAND AREAS
88	13:40-14:00	Phumipat Sangkrabun(Thailand): Effect of Drying Methods
		during Priming on Quality and longevity of Rice Seeds
89	14:00-14:20	วาสนา แผลติตะ(Thailand): Effect of culture condition and plant
		growth regulator regeneration of Molineria latifolia
		(Drayand. Ex. W. T. Aiton) Herb ex. Kurz. By using tissue
		culture
90	14:20-14:40	Jisinee Vaiyanikorn (Thailand): Larvicidal and pupicidal
		activities against Aedes aegypti L. (Diptera: Culicidae) of
		several combinations of plant essential oils and their major
		constituent
91	14:40-15:00	Dwi Wahyuni Ganefianti (Indonesia): Growth and yield of
		chili pepper stem cuttings under different compositions of
		inorganic fertilizer applications
92	15:00-15:20	Mendoza, Bernadette C., Maluping, Lycka P., Ramos,
		Jemaine Catherine T., Polido, Kristinae P., Mancia, Abigail
		Faye V., Panganiban, Marian Jean T. and Reano, Consorcia
		E. (Philippines ): Heterotrophic and Coliform Counts, and <i>S</i> .
		aureus and E. coli Strains Phenotypically Identified from
		Soil and Fertilizer Samples in Selected Agro-Ecological and
		Conventional Farms in Luzon and Quezon Provinces,
		Philippines
93	15:20-15:40	Hesti Pujiwati (Indonesia): Effects of N and P dosages on
		crop growth, yield, and attack of pod borrer (etiela
0.4	15 10 16 00	zinchenella) of soybean c.v. detam-1 grown at swampy land
94	15:40-16:00	Edi Susilo (Indonesia): The Inhibition of Seed Germination
		Treated with Root Water Extract of Sorghum (Sorghum
05	16:00-16:20	bicolor, L.) Cultivated in Histosols  Retheren Lebauwen (Theiland), Effects of Draw Solution
95	10:00-10:20	Rathanon Lohsuwan (Thailand): Effects of Draw Solution Concentration and Operating Factors on Forward Osmosis
96	16:20-16:40	for Lime juice Concentration  Reny Herawati (Indonesia): Field Evaluation of Blast
90	10.20-10.40	Resistance on Inbred Lines Rice Derived from Crossing
		Bengkulu Local Varieties
97	16:40-17:00	Jinda Klin-Ubon(Thailand): Effect of crude Vietnamese
)	10.70 17.00	coriander ( <i>Persicaria odorata</i> ) extract supplementation in
		broiler diet on growth performance, carcass characteristics
		and meat quality
98	17:00-17:20	Thitiporn Ditsawanon (Thailand): Protein hydrolysates from
	17.00 17.20	agricultural wastes for plant bacterial disease control

99	17:20-17:40	Manigbas Norvie L. and Woon Goo Ha ( Philippines)
		Enhanced partnerships with farmers' associations, the key in
		sustaining rice productivity and income.
100	17:40-18:00	Bunny Soem (Cambodia): Influence of Organic Fertilizer on
		the growth of Arrowrrot
101	18:00-18:20	Prapasri Theprugsa (Thailand): Research and Development
		of the Restructured Shrimp Product
102	18:20-18:40	Chittraporn yeanpet(Thailand):Effect of Mucuna pruriens
		leaves in dairy cow feed on gas production, digestibility and
		rumen fermentation by using in vitro gas production
		technique

	Session 7	ENVIRONMENTAL SCIENCE, AGRICULTURAL EDUCATION
		AND DEVELOPMENT
		Chair persons:
		Prof. Dr. Pakkapong Poungsuk (Thailand),
		Dr. Adisak Singseewo (Thailand),
		Dr. Preeyanan Sittijinda (Thailamnd),
		Dr. Phattraporn Soytong (Thailand),
		Joselito Dar(Philippines)
103	13:00 – 13:20	IS: Dr Marie Fiesta (Philippines ) The role of Bangsamoro Women in environmental Preservation
104	13:20 – 13:40	IS: Dr. Pakkapong Poungsuk (Thailand): Agricultural Skills for the
		Promotion of Future Careers of Special Students at Phrae Panyanukul
		School, Phrae Province.
105	13:40– 14:00	Rigos,L M. (Philippines).Detection of Pregnancy Associated –
		Glycoprotein(PAGs)during early and mid-pregnancy in reverine buffaloes
106	14:00 -14:20	Patticha Kulsuwan (Thailand):The carbon footprint Assessment from
107		Electricity in Amnatcharoen Province of Northeastern Thailand
107		
	14.20 14.40	Savuth Sem MSc. (Cambodia) System of Rice Intensification (SRI) vs.
	14:20 – 14:40	Chemcal Intensive Rice Production: Which direction shall Cambodian
		rice agriculture be ?
108	14:40 – 15:00	Bhutharit Vittayaphattananurak (Thailand): Study on Economic Status and
	10	Acceptability of Farm Management Technology of Goat Farmers: A Case
		Study in the lower central region and the upper southern region of Thailand.
109	15:00 – 15:20	Garan, M.A., Salang, E.D, Tabal, E.P(Philippines) Soil erosion rate
		estimates using USLE of selected corn producing areas in Barangay Vitali,
		Zamboanga City, Philippines

110	15:20 –15:40	Dr.Professor Danilo Josue (Philippines)Learning Farm Center for Organic Agriculture Education
111	15:40 – 16:00	Isaac F.Sulonteh Magr (Liberia) Improving Production Practices to Increase yield Liberian Rice
112	16:00 – 16:20	Manigbas Norvie L. and Woon Goo Ha (Philippines) Enhanced partnerships with farmers' associations, the key in sustaining rice productivity and income.
113	16:20-16:40	Tabal, E.P., Mendoza, C.T., Paelmo, R.F., Garcia, J.N., Visco, R. (Philippines): Energy inputs and carbon emission equivalent of selected agroforestry systems in zamboanga city, Philippines
114	16:40-17:00	Bhutharit Vittayaphattananurak (Thailand): Study on Economic Status and Acceptability of Farm Management Technology of Goat Farmers: A Case study in the lower central region and the upper southern region of Thailand
115	17:00-17:20	Saduak, W. (Thailand): Promotion of Vegetable Gardening for Household Food Storage during Covid-19 Pandemic of Farmers in Praibueng District, Srisaket Province.
116	17:20-17:40	Kantika Youngmanee (Thailand): Composting of boiler-ash and biogas- sludge from the palm oil industry for use as plantlet growing media
117	17:40-18:00	Nuttanan Direksri (Thailand): Important of marketing mix factors on consumer purchase decision towards organic rice of a community enterprise
118	18:00-18:20	Satria Utama (Indonesia): Factors Affecting Farmers' Decision in Using Subsidized and Non-Subsidized Seeds in Hybrid Corn Farming in Seluma Regency, Bengkulu Province
119	18:20-18:40	Muhammad Farid (Indonesia): Identification of soil porosity using geophysical and geotechnical observation for agricultural application

Session 8 Advanced Research in Agricultural and Biological Sciences for Sustainable development goals (SDGs)

		Chair persons:
		James Kennard Jacob (Philippines),
		Dr. MD Asaduzzaman Sarker (Bangladesh) ,
		Prof. Somdej Kanokmadhakul (KKU,Thailand)
		Dr. Raphael Okigbo (Nigeria)
		Dr. Wanlada Klangnurak (KMIL,Thailand),
120	13:00-13:20	IS: James Kennard Jacob (Philippines): Exploring Endophytic
		Microfungi as Source of Biosynthetic Secondary Metabolites
121	13:20-13:40	Suteera Vatthanakul(Thailand): Effect of
		Carboxymethylcellulose and Xanthan Gum on the
		Physicochemical and Sensory Properties of Passion Fruit
		Topping Sauce
122	13:40-14:00	Pramote Pornsuriya (Thailand): Yield stability of new elite lines
		of yardlong bean (Vigna unguiculata (L.) Walp. ssp.
		sesquipedalis Verdc.)
123	14:00-14:20	IS:Nanik Setyowati (Indonesia): Allelopathy for Sustainable
		Weeds Management
124	14:20-14:40	IS: Dr. Nagia (Egypt) Improvement of wool dyeing quality and
		antimicrobial activity using nano forms of silver
125	14:40-15:00	Kannikar Charoensuk (Thailand): Effect of Processing of
		Mangosteen (Garcinia mangostana) Puree on Nutrition, fiber
		and mineral contents of Mangosteen drink
126	15:00-15:20	IS: Dr. Rujira Tongon (Thailand) Natural product nano-particles
		from Chaetomium for resistant of Durian Phytophthora rot
127	15:20-15:40	IS: Dr. Jiaojiao Song (China) The biodegradation natural product
		nano-particles derived from fungi to induce phytoalexin in plants
128	15:40-16:00	IS: Dr Somlit Vilavong (Laos):
129	16:00-16:20	Janejira Phakawan(Thailand): Antimicrobial Enhancement of
		Red Onion Crude Extract using Epsilon-polylysine
130	16:20-16:40	Suriya Kosinwattana(Thailand): Effect of Different Planting
		Materials Ratios on the Growth of Foliage Plants

131	16:40-17:00	Naruebet Meelua(Thailand): Technical Efficiency of Rice
		Production in Klong Suan Sub-District, Bang Bo District, Samut
		Prakan Province, Thailand
132	17:00-17:20	Okigbo, R. N. and Ugwu, C. S. (Nigeria):UNDERUTILIZED PLANTS OF AFRICA
133	17:20-17:40	Krittiya Khuenpet(Thailand): Development of Inulin Beads from
		Jerusalem
		Artichoke by spherification and reverse spherification techniques
134	17:40-18:00	Suriyasit Somnuek(Thailand): In vitro effect of Callistemon
		viminalis and Melaleuca cajuputi ethanolic extracts as botanical
		fungicide and insecticide
135	18:00-18:20	Rungrat Vareekate (Thailand): Rice disease immunity
136	18:20-18:40	Jeeranun Khermkhan (Thailand): Comparison of Cost and Return
		from Raw and Ripe Namdokmai Mango Planting of Large Plots
		in Bang Phli District, Samutprakarn Province

## Session 9 Advanced Research in Biological Agriculture

		Chair persons:
		Prof. Sridhar Kandikere (India)
		Dr. Jatuporn Aroonkamonsri (RMUTTO)
		Dr. Jiaojiao Song (China)
		Dr. Wikanya Prathumyot (RBU)
		Dr. Somlit Vilavong (Lao PDR)
137	13:00-13:20	IS: Prof. Sridhar Kandikere (India):
138	13:20-13:40	Norden Lepcha (Bhutan): Macronutrients (NPK) and pH status
		in soil influenced by organic and conventional potato cultivation
		in West-Central Bhutan
139	13:40-14:00	Anuwat Lakyat(Thailand): Ectoparasite species attacking
		chicken in eastern area of Bangkok, Thailand
140	14:00-14:20	Harry Jay Cavite(Philippines): Supply chain structure and
		constraints of a rice production community enterprise: Evidence
		from rural Thailand
141	14:20-14:40	Karinporn Yodsenee(Thailand): In vitro Study of Antioxidant
		and Antimicrobial Activities of Soybean Tempeh and Split Gill
		Mushroom as Plant Based Protein
142	14:40-15:00	Pawat Seritrakul(Thailand): Mitochondrial DNA analysis
		revealed genetic diversity of captive-bred hog deer (Axis
		porcinus) population in Thailand

143	15:00-15:20	Natthapon Jaisue(Thailand): Distribution of Total and Available
		Sulfur under Durian Orchard Soils in the Eastern Thailand
144	15:20-15:40	Heejung Kim (South Korea): Developing an International
		Cooperation Training Program and Designing Sustainable
		Agriculture Systems under the Climate Crisis Era.
145	15:40-16:00	Napassawan Fungsoonnoen(Thailand): Survival of
		contaminated pathogenic bacteria in guava juice
146	16:00-16:20	Prapasri Theprugsa(Thailand): Research and Development of
		the healthy ready-to-eat strip Chinese sausage
147	16:20-16:40	Sarocha Phopaijit(Thailand): Effects of Chicken Manure and
		Chemical Fertilizer on Growth and Yield of Japonica Rice
148	16:40-17:00	Phatthira Sakamut (Thailand): Improvement of Threadfin bream
		(Nemipterus spp.) surimi gel properties by electron beam
		irradiation
149	17:00-17:20	Nantawan Inban(Thailand): Effects of Calcium Sources on
		Physiological Traits Related to Pod and Seed Yield of Peanut
150	17:20-17:40	Kittiya Showpanish(Thailand): Anti-Streptococcus suis
		Bacteriocin Produced by Lactic Acid Bacteria from Thai
		Fermented Vegetable Products
151	17:40-18:00	Suworanee Pancharoenn (Thailand): Effect of ingredients,
		storage temperature and time on texture properties and
		retrogradation rate of butter cake
152	18:00-18:20	
153	18:00-18:40	

Session 10 Advanced Development in Agricultural Sciences

		Chair persons:
		Prof. Ivan Tarakanov (Russia),
		Dr. Naruemon Mongkontanawat (RMUTTO),
		Dr. Nithya Priya (India)
		Dr. Rujira Tongon (Thailand)
		Prof. Vadim Fedorov (Russia)
154	13:00-13:20	IS: Prof. Ivan Tarakanov (Russia): Agricultural Technologies of
		the Future: Intelligent Plant Factory
155	13:20-13:40	IS: Dmitry Mikhaylov (Russia):
156	13:40-14:00	Racha Tepsorn(Thailand): Kinetic Reduction of Salmonella
		Typhimurium on Radish sprouts (Raphanus sativus L.)
157	14:00-14:20	Sujitra Jorjong (Thailand): Effect of Paclobutrazol on yield and
		quality of Mao laung (Antidesma thwaitesianum Müll. Arg.)
		Cultivars

158	14:20-14:40	Apisit Chittawanij(Thailand): Study of Biochar on Growth and
		Yield of Choy Sum (Brassica chinensis L.var parachinensis)
159	14:40-15:00	Darinthip Thiphinkong(Thailand): Effect of Seed Coating with
		Fluorescent Compound on Quality and Fluorescence of Cucumber
		seeds
160	15:00-15:20	Bandi Hermawan (Indonesia) : Soil-Controlling Irrigation System
		for Water Use Efficiency in Agricultural Dry Land
161	15:20-15:40	Racha Tepsorn(Thailand): Antimicrobial Susceptibility of Chili
		Extract against Foodborne Pathogens and Food Related Bacteria
162	15:40-16:00	Sarocha Thongmakha (Thailand): Application of nanoparticles
		derived from antagonist for controlling tomato wilt caued by
		Fusarium oxysporum f. sp. lycopersici
163	16:00-16:20	Nontawan rawangpai (Thailand):Application of nanoparticles
		derived from antagonist to control anthracnose of chilli.
164	16:20-16:40	Marlin Marlin (Indonesia): Acclimatization of Micropropagated
		Dendrobium sp with The Application of Organic Fertilizer
165	16:40-17:00	Theeraphol Senphan(Thailand): Extraction and antioxidant
		activities of broken Ganoderma lucidum spore
166	17:00-17:20	Tanthai Waiphanta(Thailand):Application of nanoparticle derived
		from active metabolites for contolling leaf blight of super sweet
		corn.
167	17:20-17:40	Pettida Malai (Thailand): Application of nanoparticles derived from
		antagonist to control brown leaf spot of rice
168	17:40-18:00	Aynur DILSIZ, Çağlar SAGUN, Younes REZAEE DANESH <sup>1,2</sup> ,
		Dilek KAYA ÖZDOĞAN (Turkey, Iran): Status of Arbuscular
		Mycorrhizal Fungi Populations in Some Pastures of Ankara
160	19.00 19.20	Region, Turkey
169	18:00-18:20	<u>Dilek KAYA ÖZDOĞAN</u> , Çağlar SAGUN, Atilla POLAT, Vecihe İNCIRKUŞ <sup>1</sup> , Emre KARMAZ (Turkey): Genetic
		Characterization of <i>Rhizobium</i> Bacteria Isolated From Bean
		Nodules and Its Effect on Soil Quality
170	18:20-18:40	Gökhan UÇAR, Çağlar SAGUN, Younes REZAEE DANESH
		(Turkey, Iran): Effect of Funneliformis mosseae Fungal Species
		on Root Growth of Lettuce Under Salt Stress Condition

## **Session 11 Advanced Development of Biological Technology**

		Chair persons:
		Prof. Bandi Hermawan (Indonesia),
		Dr Hoang ND Pham (Vietnam),
		Dr. Wichai Supalucksana (Thailand),
		Dr. Virapol Jamsawat, (Thailand),
		Dr. Pornpan Sukhumpinij (RBU)
171	13:00-13:20	IS: Dr Hoang ND Pham (Vietnam): Ectomycorrhizal commmunities of pine forest in south Vietnam and applying foe reforestation.
172	13:20-13:40 fix	IS: Dr. Hoang Quoc Chinth, Vu Xuan Tao (Vietnam): Potential of <i>Trichoderma</i> asperellum as a bio-control agent against citrus diseases caused by <i>Penicillium digitatum</i> and <i>Colletotrichum gloeosporioides</i> .
173	13:40-14:00	Suteera Vatthanakul(Thailand): Effects of Hydrocolloid Addition on the Quality of Cookies Substituted Wheat Flour with Sinin Rice Flour
174	14:00-14:20	Cruz, M. K. R. and Paelmo, RF (Philippines). Effect Of Biostimulants On Arize Bigante And NSIC Rc222 Growth And Development at Calauan, Laguna, Philippines
175	14:20-14:40	Jawanchanok Preesong(Thailand): Changes in soil properties affected by rice stubble burning in Bangkok soil series
176	14:40-15:00	Ariefa Primair Yani (Indonesia): IDENTIFICATION OF SOIL INSECT DIVERSITY IN THE TURTLE CONSERVATION AREA, BENGKULU UNIVERSITY
177	15:00-15:20	Chirasak Phoemchalard(Thailand): The effects of sous-vide cooking on the physicochemical, microbiological, and carbon footprint of buffalo meat at various temperatures and times
178	15:20-15:40	Cabalse, ELH and Roselyn Furoc-Paelmo RF (Philippines) Enhancing Productivity Efficacy Of Fungicide Application At Different Growth Stages Of Two Rice (Oryza Sativa L.) Varieties Cultivated In Calauan, Laguna, Philippines
179	15:40-16:00	Bootsrapa Leelawat (Thailand): Development of Soft Cookie from Pregelatinized Banana Flour and Germinated Brown Rice
180	16:00-16:20	Unnop Tassanaudom(Thailand): Combination of Humectants with Potassium Sorbate and Sodium Benzoate to Inhibit Curvularia clavata Contamination in Thai Fermented Fish Spicy Dip (Nam Phrik Pla Ra)
181	16:20-16:40	Onanong Bunserm(Thailand): Antibacterial and anti-biofilm formation activities of high heat tolerant herbal extracts against white feces syndrome-associated <i>Vibrio parahaemolyticus</i>

182	16:40-17:00	Atra Romeida (Thailand): In vitro shoot proliferation of
		Mangosteen's micro shoots using combination of 6-
		Benzylaminopurine and 1-Naphthaleneacetic concentrations.
183	17:00-17:20	Thitaree Lengnuy(Thailand):Application of nanoparticles
		derived from antagonist to control leaf spot of salad
184	17:20-17:40	Wijittra Pachpong (Thailand):Appliacation of different raw
		materials for organic oyster mushroom cultivation
185	17:40-18:00	Pheaktra Phal (Cambodia): Biological control of Durian rot
		caused by Pythium using Trichoderma hamatum
186	18:00-18:20	Arunrussamee Sangsila (Thailand): Isolation and
		characterization of actinomycetes with antibacterial and plant
		growth-promoting activities from maoberry cultivated soil in
		Northeast Thailand
187	18:20-18:40	Solmaz NAJAFI, Mehmet ÜLKER, Fevzi ALTUNER, Erol
		ORAL, Burak ÖZDEMİR (Turkey): Karyological Analysis on
		Tir Wheat Ecotypes In Van Region, Turkey

Total 10 + 187 papers = 197 papers from 30 countries

Control IT room – Akkarat

## 19:00 CLOSING CEREMONY

#### **BEST PAPER AWARDS**

Conclusion Remarks: Prof. Dr. Hiroyuki Konuma (Japan) Closing Address and Future Remark: Dr. Kasem Soytong,

The ICIST Theme Song "IMAGINE"

## NOTES:

AATSEA award 2021 Prof. TSSK Patro (India) Dr. Lalitha, S. (India)

Award for emerging leaders of young generations Dr. Ramon Lorenzo Luis Guinto (Philippines

#### Chair persons

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Assoc. Prof. Dr. Pantipa Na Chiangmai ชำนาญด้านปรับปรุงพันธุ์พืช

1 Asst. Prof. Dr. Pornpan Sukhumpinij = Agri Sci, Plant, Plant Tissue Culture

2. Asst. Prof. Dr. Wikanya Prathumyot = Agri Sci, Organic Agri, Plant 3. Asst. Prof. Dr. Yardrung Suwannarat = Food Tech, Microbial Tech, Fishery products, Biotechnology

- 4. Asst. Prof. Dr. Sutisa Chaikul = Soil
- 5. Asst. Prof. Duanrung Benjamas = Food Tech, Microbial Tech, Water