

Monday - December 05, 2022

Chitlada

Open Ceremony

9:00	-	9:05	MC welcome attendees and president	MC		
9:05	-	9:10	MC invite Dr. Chanya Maneechote, the president of weed science society of Thailand have a welcome speech	Dr. Chanya		
9:10	-	9:20	Opening Remarks	Dr. Nilda Roma-Burgos		
9:20	-	9:30	Report speech and opening remarks	Dr. Samunder Singh		
9:30	-	9:45	Opening Ceremony Touch the LED screen	<ul style="list-style-type: none"> - Mr. Panya Pooksoon, Director, Plant Protection Research and Development Office - Dr. Chanya Maneechote, President of Weed Science Society - Dr. Samunder Singh, President of International Weed Science Society (2020-2024) - Dr. Nilda Roma-Burgos, President of International Weed Science Society (2016-2020) - Dr. Luis Avila, Chair Scientific Committee of International Weed Science Society - Dr. Do Soon Kim, Vice President of International Weed Science Society (2020-2024) 		
09:45	-	10:00	Thank you sponsor	<ul style="list-style-type: none"> Syngenta Corteva Agriscience Thai Agrottrade Adama (Thailand) BASF (Thailand) Bayer AG Global HRAC T.J.C. Chemical Co., Ltd. Agricultural Research Development Agency (Public Organization) Moghu Research Center Ltd. Chia Tai Company Limited Thai Crop Protection Association Baka Sotus Thai Agro Business Association (TABA) Siam Yamaha Motor Robotics Co., Ltd. 		
Keynote Speaker				Chair: Dr. Baruch Rubin		
10:00	-	10:15	Tackling global crop production challenges for sustainable food and nutrition security	Keynote Speaker: Dr. Martin Kropff		
10:15	-	10:30				
10:30	-	10:45			Question and Answers	
Panel - Sponsors				Chair: Dr. Carol Mallory-Smith		
10:45	-	11:00	Weed management: A necessary evolution	Renaud Deval		
11:00	-	11:15	HRAC Global works to promote worldwide sustainable stewardship of weed management	Caio Vitagliano Santi Rossi, Roland Beffa, and Gael Le Goupil		
11:15	-	11:30	Question and Answers			
11:30	-	11:45	Group Picture	Chitlada		
11:45	-	12:00	Lunch and Exhibition visit	Sala Thai, 5th floor Foyer Area		
12:00	-	12:15				
12:15	-	12:30				
12:30	-	12:45				
12:45	-	13:00				
13:00	-	13:15				
13:15	-	13:30				
Chitlada						
Keynote Speaker				Chair: Dr. Muthukumar Bagavathiannan		
13:30	-	13:45	Advances in weed robotics for site specific weed management	Keynote Speaker Dr. Steve Fennimore		
13:45	-	14:00				
14:00	-	14:15	Questions and Answers			
Concurrent Sessions						
		Chitlada - Session #1	Thai Boromphimarn 1 and 2 - Session #2	Thai Boromphimarn 3 - Session #3	Thai Boromphimarn 4 - Session #4	
		New Technology For Weed Management	Weed Biology and Ecology	Invasive and Parasitic Plants Species	Non-Chemical weed control	
		<i>Chair: Dr. Muthukumar Bagavathiannan</i>	<i>Chair: Dr. Michaela Kolářová</i>	<i>Chair: Dr. Bernal Valverde</i>	<i>Chair: Sabine Andert</i>	
14:15	-	14:30	Novlect™ 120 EC – A post-emergence herbicide for broad-spectrum weed control in direct-seeded rice in India	Distribution Characteristics of Echinochloa Species in Chinese Rice Fields: A Case Survey on 73 Sites	Phenotypic variation among populations of the invasive weed Parthenium hysterophorus L. (Asteraceae) as a tool to assess multiple introductions	Chaff lining harvest weed seed control in dryland crops
14:30	-	14:45	Pairing nanoparticles with FANA technology for spray-on gene silencing in weeds	Light and temperature affect the germination of barnyard grass in drill sown rice in Australia	Weedy Erigeron species (Asteraceae) need sustainable control strategies in warming world	Revealing the interaction between compost rate and non-chemical weed control methods on control efficacy in organic field crops

14:45	-	15:00	Early detection of glyphosate effect on <i>Solanum nigrum</i> L. using hyperspectral sensor and machine learning	Determination of <i>Echinochloa</i> P. Beauv. spp. and their some lower taxa in rice fields in the Edirne Province of Türkiye	Interference of invasive alien weeds reduced vegetation diversity	Cover crops in Mediterranean vineyards – use of natural and sown plants for weed management and wine quality
15:00	-	15:15	Applications of digital tools in weed detection, mapping, and precision integrated management	Seed production and shattering of barnyardgrass (<i>Echinochloa crus-galli</i>) in response to time of emergence and crop geometry in transplanted rice		Cover-crops as a mean to reduce herbicide use in field crops and their effect on weed community structure
Poster Session Area						
15:15	-	15:30	Posteres Even Numbers With Authors Present and Cofee Break		Location: Third Floor	
15:30	-	15:45				
15:45	-	16:00				
16:00	-	16:15				
Concurrent Sessions						
			Chitlada - Session #5	Thai Boromphimarn 1 and 2 - Session #6	Thai Boromphimarn 3 - Session #7	Thai Boromphimarn 4 - Session #8
			New Technology For Weed Management	Weed Biology and Ecology	Invasive and Parasitic Plants Species	Integrated Weed Management
			<i>Chair: Eugene Law</i>	<i>Chair: Ahmed Uludag</i>	<i>Chair: Bernal Valverde</i>	<i>Chair: Alejandro Garcia</i>
16:15	-	16:30	Mapping and estimating <i>Parthenium hysterophorus</i> L. using an unmanned aerial system	The Weed Seed Buffet: How and Why Do Carabid Seed Predators Choose Among Weed Seeds?	Allelopathic effects of invasive weeds on chickpea (<i>Cicer arietinum</i> L. (Fabaceae))	Impact of organic manures and intercrops on weed management in maize
16:30	-	16:45	Sustainable use of herbicides using digital and precision application technologies	Long term effect of grain legumes and management practices on weed seedbank	Effects of interspecific competition on light interception and growth of maize (<i>Zea mays</i> L. (Poaceae)) and a weed	Integrated weed management in maize: crop rotation and PRE herbicides
16:45	-	17:00	Required input information for sustainable weed management strategies enabled by autonomous in-field intervention technology	Weed interference and seed bank dynamics under a conservation agriculture-based maize-wheat-mungbean system	Effects of Canopy Light Interception by Alien Weeds on Soybean Growth and Yield	Influence of tillage practice and weed management on productivity of maize – Sunflower cropping system under semi arid tropical climatic condition
17:00	-	17:15	Laser weeding with a 2 µm fiber laser: The effect on weeds and the environment	Rice weed seed contamination of farmers' retained and certified seeds in Lao PDR	Cover crops to control weeds in rambutan (<i>Nephelium lappaseum</i> L.) orchards in Chiapas, México	Performance of wheat under different cotton stalk and herbicide management practices in cotton-wheat cropping system
17:15	-	17:30		Efficient weed management in legume-based cropping for higher productivity and income augmentation		Influence of water regimes and herbicides for control of purple nutsedge (<i>Cyperus rotundus</i>)
17:30	-	17:45				Efficacy and selectivity of tolpyralate 400 SC in tank-mixture with atrazine in winter corn (<i>Zea mays</i>) in Mato Grosso State, Brazil
18:00	-	18:15	Welcome Reception: Venue Sala Thai			
18:15	-	18:30				
18:30	-	18:45				
18:45	-	19:00				
19:00	-	19:15				
19:15	-	19:30				
19:30	-	19:45				
19:45	-	20:00				
Tuesday - December 06, 2022						
Chitlada						
Panel: Weed Management in Asian Crops				Chair: Dr. Hiroshi Matsumoto		
9:00	-	9:05	Introduction of the purpose and content of the panel		Dr. Hiroshi Matsumoto	
9:05	-	09:20	Weed Management Challenges and Opportunities in smallholder rice production in Asia		Dr. Virender Kummar	
9:20	-	9:40				
9:40	-	10:00	Herbicide resistant weeds in wheat-rice rotation system in Asia and their management		Dr. Samunder Singh	
10:00	-	10:15	Coffee Break			
10:15	-	10:30				
10:30	-	10:45				
10:45	-	11:00	Coffee Break			
11:00	-	11:15				
11:15	-	11:35				
11:00	-	11:15	Developing and adapting weed management strategies with smallholder farmers for higher productivity and sustainable rice farming		Dr Madonna Casimero	
11:15	-	11:35				

11:35	-	11:45	Panel Discussion			
11:45	-	12:00				
12:00	-	12:15	Lunch and		Goji Restaurant, 1st floor	
12:15	-	12:30				
12:30	-	12:45				
12:45	-	13:00	Exhibition visit		Foyer Area	
13:00	-	13:15				
13:15	-	13:30				
Chitlada - Session #9						
Climate aspects of weed Science						
Plenary Session (Chair: Jonathan Storkey)						
13:30	-	13:45	Water, wind and fire: extreme climate events and the spread of invasive plants in the Pacific Northwest. David Clements			
13:45	-	14:00	Changing climate, changing weeds: Data mining for future weed management insights. Martin Williams			
14:00	-	14:15	Plenary Discussion			
Concurrent Sessions						
			Chitlada - Session #9	Thai Boromphimarn 1 and 2 - Session #10	Thai Boromphimarn 3 - Session #11	Thai Boromphimarn 4 - Session #12
			Climate aspects of weed Science continue	Invasive and Parasitic Plants Species	Economic and Social Aspects of Weed	Weed Resistant to Herbicides
			<i>Chair: Dr. Jonathan Storkey</i>	<i>Chair: Dr. Samunder Singh</i>	<i>Chair: Dr. Paul Tseng</i>	<i>Chair: Dr. Hamidereza Sasanfar</i>
14:15	-	14:30	Impact of climate change on the degradation of oxyfluorfen	Management of Phelipanche aegyptiaca (Pers.) pomel (Orobanchaceae) in cabbage (Brassica oleracea var. capitata L. (Brassicaceae))	Weed management and gender roles in lowland rice production systems in Lao PDR	Herbicide resistant development in grass weed populations across wheat fields of Iran over a quarter of a century
14:30	-	14:45	The role of climate change in chemical weed management	Hyperspectral imaging facilitates early recognition of Orobanche cumana Wallr. (Orobanchaceae) below-ground parasitism on sunflower (Helianthus annuus L.; Asteraceae) under field conditions	Economic roles of paraquat herbicide in farmer's household incomes and pesticide traders in Indonesia	An insight into quinclorac resistance mechanism in early water grass (Echinochloa oryzoides)
14:45	-	15:00	Rise in atmospheric CO2 concentration affects weedy rice seed-shattering and the transcriptional activation of seed shattering-related genes	Genomic characterization of sunflower (Helianthus annuus L. (Asteraceae)) resistance to sunflower broomrape (Orobanche cumana Wallr. (Orobanchaceae))	Bayer is raising the bar to help farmers manage weeds safely and sustainably	Occurrence of pyrazosulfuron-ethyl resistance in a population of Fimbristylis miliacea (L.) Vahl. in paddy fields
15:00	-	15:15	Amaranthus palmeri growth under different CO2 and temperature scenarios	Staking drought tolerance and parasitic weed resistance in hybrid maize (Zea mays L. (Poaceae)) to enhance resilience to stress		Cross and multiple resistance profile to ACCase and ALS inhibitor herbicides in winter wild oat (Avena sterilis subsp. ludoviciana (Durieu) Gillet & Magne) populations
15:15	-	15:30	Coffee Break			
15:30	-	15:45	Coffee Break			
Concurrent Sessions						
			Chitlada - Session #13	Thai Boromphimarn 1 and 2 - Session #14	Thai Boromphimarn 3 - Session #15	Thai Boromphimarn 4 - Session #16
			Weed Resistance to Herbicides	New Technology For Weed Management	Physiology of Plants and Herbicide	Economic and Social Aspects of Weed
			<i>Chair: Dr. Pattarasuda Chayapakdee</i>	<i>Chair: Dr. C.R.Chinnamuthu</i>	<i>Chair: Dr. Maor Matzrafi</i>	<i>Chair: Matheus Noguera</i>
15:45	-	16:00	Herbicide mixture decreases Echinochloa crus-galli control and increase the expression of detoxification genes	Determination of the critical period for weed control in maize production after rice and weed mapping by unmanned aerial vehicle	Watergrass (Echinochloa spp.) in California rice: Phenotypes and herbicide susceptibility	Using matamat (Rynchospora corymbosa (L.) Britton) for enterprise development flood-prone rice areas in Camarines Sur, Philippines
16:00	-	16:15	Resistance mechanism of auxin-herbicide quinclorac in late watergrass	Smart and slow-release nanoencapsulated herbicide formulations for effective weed control in rainfed and irrigated ecosystems	Evaluation of Glufosinate-ammonium post-emergent herbicide in combination with several pre-emergent herbicides in prolonging the period of weed control in circles of immature oil palm	Energy budgeting and economics of weed management in green manure – maize – pulse based conservation agriculture in Semi-Arid Tropics of Southern Tamil Nadu

16:15	-	16:30	Florpyrauxifen sensitivity variation between East Asian and American <i>Echinochloa oryzicola</i>	GROW: An international research network for precision integrated weed management	Benoxacor, fenclorim, and melatonin as potential safeners in protecting tomato against 2,4-D drift	Using ecoinformatics to estimate and characterize herbicide effectiveness in maize (<i>Zea mays</i> L.)	
16:30	-	16:45	Temperature affects the metabolic-based florpyrauxifen-benzyl resistance in <i>Echinochloa crus-galli</i>	Harvest weed seed control (HWSC) as a tool for weed management in arable crops in Israel	Stress memory mechanism involved in reducing <i>Eragrostis plana</i> sensitivity to glyphosate herbicide		
16:45	-	17:00	Herbicide Resistance Action Committee Asia (HRAC Asia) helps to protect crop yields and quality in the global fight against herbicide-resistant weeds.	Maize (<i>Zea mays</i>) Seed Coating with Acetolactate Synthase (ALS)-inhibitors for Control of <i>Striga hermonthica</i>	Carbohydrate dynamics in roots of <i>Cirsium arvense</i> and <i>Sonchus arvensis</i>		
17:00	-	17:15	Investigating herbicide-resistance mechanisms in <i>Echinochloa phyllopogon</i> found in Japan				
17:15	-	17:30					
17:30	-	17:45	Graduate Students' and Early Career Networking Reception - Sponsored by the International Weed Science Society				The Great Hall, 7th floor
17:45	-	18:00					
18:00	-	18:15					
18:15	-	18:30					
18:30	-	18:45					
18:45	-	19:00					
19:00	-	19:15					
19:15	-	19:30					
Wednesday - December 07, 2022							
Chitlada							
			Keynote Speaker			Chair: Dr. Luis Avila	
9:00	-	9:15	Weed Management in 2050: Perspectives on the Future of Weed Science			Keynote Speaker - Dr. Jim Westwood	
9:15	-	9:35					
9:35	-	9:45					Questions and Answers
Poster Session Area							
9:45	-	10:00	Poster Odd Numbers With Authors Present and Cofee Break			Location: Third Floor	
10:00	-	10:15					
10:15	-	10:30					
10:30	-	10:45					
Concurrent Sessions							
			Chitlada - Session #17	Thai Boromphimarn 1 and 2 - Session #18	Thai Boromphimarn 3 - Session #19	Thai Boromphimarn 4 - Session #20	
			Weed Resistance to Herbicides	Integrated Weed Management	New Technology For Weed Management	Modeling	
			<i>Chair: Dr. Silvia Panozzo</i>	<i>Chair: Dr. Sofia Marques</i>	<i>Chair: Dr. HS Kim</i>	<i>Chair: Dr. Jose L. Gonzalez-Andujar</i>	
10:45	-	11:00	Amaranthus tuberculatus – invasive and multiple herbicide-resistant weed in Israel	Growth and yield performance of newly released aerobic rice varieties under varied weed pressure	Formulation and application technology for weed management in rice fields: Excellent weed control in combination with non-uniform ultra-low volume drip application and self-spreading SC formulation	A population model for integrated weed management of <i>Phalaris minor</i> in rice-wheat cropping systems in India	
11:00	-	11:15	Mechanisms of herbicide resistance in <i>Amaranthus</i> species in South Africa	Emergence of resistance in <i>Phalaris minor</i> to the prevalent wheat herbicides in India: Development of an integrated management strategy	TVE29: A New Mode-of-Action Herbicide Interfering with de Novo Pyrimidine Biosynthesis for Effective Management of Herbicide-Resistant Grass Weeds Globally	Are closely related weedy species regulated by the same demographic transitions?	
11:15	-	11:30	Phenotyping of <i>Amaranthus hybridus</i> biotypes carrying two different allelic variants of acetolactate synthase (ALS)	Efficacy of integrated weed management in peanut and cotton systems utilizing high residue cover crop	Crop herbicide tolerance evaluation using UAV based remote sensing	Spatial-temporal aspects of weeds distribution within fields	

11:30	-	11:45	Cross-resistance of common ragweed (<i>Ambrosia artemisiifolia</i> L.) to ALS-inhibiting herbicides, and management options in dominant arable crops in Serbia	System of Rice Intensification (SRI): its potential to enhance sustainable weed management and productivity in irrigated rice (<i>Oryza sativa</i> L.)		Herbicide resistance prediction: Comparison between a mechanistic model vs a random forest model					
11:45	-	12:00	Spatial patterns of natural variation in the resistance to herbicides in the <i>Sinapis alba</i> L., Brassicaceae (White Mustard)	Influence of Brassica carinata cropping system on weed population dynamics and emergence patterns		A regional scale-study of the contribution of local, management and climatic variables on <i>Amaranthus</i> spp. infestation in processing tomato					
12:00	-	12:15	Lunch and Exhibition visit		Goji Restaurant, 1st floor Foyer Area						
12:15	-	12:30									
12:30	-	12:45									
12:45	-	13:00									
13:00	-	13:15									
13:15	-	13:30									
Chitlada - Session #21											
Weed Resistance to Herbicides											
Plenary Session (Chair: Aldo Merotto Jr.)											
13:30	-	13:45	Searching for the genomic region responsible for multiple-herbicide resistance in <i>Echinochloa phyllopogon</i>								
13:45	-	14:00	Herbicide discovery through innovation and diversity. Dr. Steve Powles								
14:00	-	14:15	Questions and Answers								
Concurrent Sessions											
		Chitlada - Session #21		Thai Boromphimarn 1 and 2 - Session #22		Thai Boromphimarn 3 - Session #23		Thai Boromphimarn 4 - Session #24			
		Weed Resistance to Herbicides		Weed Issue in Asia		Bioherbicides (including joint IWSS/IBG)		Integrated Weed Management			
		<i>Chair: Dr. Aldo Merotto Jr.</i>		<i>Chair: Dr. Virender Kumar</i>		<i>Chair: Dr. Qiang Sheng</i>		<i>Chair: Carlos Rigon</i>			
14:15	-	14:30	Understanding a new mechanism of resistance to dicamba in <i>Bassia scoparia</i>	Conservation agriculture: A Boon for weed management in Asia	Secondary metabolites of insect symbionts and their herbicidal activity	Herbicide tolerant crops: A new component technology of integrated weed management for crop production in India agriculture					
14:30	-	14:45	Multiple herbicide resistance: A major challenge for the control of the intractable <i>Echinochloa</i> weed species	Potential impact of tillage and residue management on weed dynamics and climatic resilient rice-wheat crop production in north-western Indo-Gangetic Plains of India	Phytotoxicity in aqueous methanolic extracts of rice against Junglerice and total activities of identified phytotoxic compounds	Sustainable use of glyphosate in European Mediterranean perennial crops					
14:45	-	15:00	Herbicide resistant genes located on heterologous chromosomes reduce the risk of gene flow in resistant crops	Weed management strategies for rice-based cropping system in Bangladesh: Present status and future needs	Study of <i>Helminthosporium Gramineum</i> formulation for biological control weeds in the rice field	Genetically modified eucalyptus tolerant to glyphosate - an effective tool on integrated weed management					
15:00	-	15:15	Can Agriculture 4.0 solve the challenge of global weed resistance?	Direct seeded rice and zero tillage wheat in North-Western India: Weed issues and sustainability		Evaluation of agronomic traits and ecosystem services provided by sulfonylurea-resistant camelina sativa and Brassica napus					
15:15	-	15:30	Coffee Break								
15:30	-	15:45									
Concurrent Sessions											
		Chitlada - Session #25			Thai Boromphimarn 1 and 2 - Session #26			Thai Boromphimarn 3 - Session #27		Thai Boromphimarn 4 - Session #28	
		Weed Resistance to Herbicides			Weed Issue in Asia			Bioherbicides (including joint IWSS/IBG)			
		<i>Chair: Dr. Carol Mallory-Smith</i>			<i>Chair: Dr. Udai Singh</i>			<i>Chair: Dal-Soo Kim</i>			
15:45	-	16:00	Thiobencarb resistance mechanism in late watergrass (<i>Echinochloa phyllopogon</i>) is distinct from CYP81A-based cross-resistance	Comparative study on morphological characteristics of weedy rice in the Mekong Delta	Controlling arable weeds with the bio-based herbicide pelargonic acid						

16:00	-	16:15	Cross-resistance of Echinochloa spp. to auxinic herbicides: a case of pre-selection	Farmers' Perception on the Characteristics and Management of Weedy Rice in Southern Luzon, Philippines	Herbicidal activity of a nano-mixture of eugenol and phenylethyl propionate against Tribenuron-methyl resistant biotypes of Sinapis arvensis L.		
16:15	-	16:30	Involvement of GS2 amplification and overexpression in Amaranthus palmeri resistance to glufosinate	Current weed management practices and obstacles in rainfed lowland direct seeded rice systems in Southern Cambodia	Effects of Environmental Condition on the Herbicidal Activity of Sclerotinia trifoliorum		
16:30	-	16:45	Transgene escape from corn confers resistance to glyphosate in teosinte		Screening fungal pathogens in diseased Microstegium vimineum as potential biological agents for bioherbicide development		
16:45	-	17:00	Herbicide-resistant weeds jeopardize sustainability of arable crops		Evaluation of Bipolaris yamedae strain as a bioherbicidal agent against Echinochloa species		
17:00	-	17:15					
17:15	-	17:30	International Weed Science General Assembly			Chitlada	
17:30	-	17:45					
17:45	-	18:00					
18:00	-	18:15					
18:15	-	18:30					
18:30	-	18:45					
18:45	-	19:00					
Thursday - December 08, 2022							
Chitlada							
Keynote Speaker				Chair: Nilda Roma-Burgos			
9:00	-	9:15	Gene Editing as a tool for weed management and to produce climate resilient crops		Keynote Speaker - Chunhe Qu		
9:15	-	9:30					
9:30	-	9:45	Questions and Answers				
9:45	-	10:00	Student's Award				
10:00	-	10:15	Coffee Break				
10:15	-	10:30					
10:30	-	10:45					
10:45	-	11:00	Location: poster area				
Concurrent Sessions							
Chitlada - Session #29			Thai Boromphimarn 1 and 2 - Session #30		Thai Boromphimarn 4 - Session #32		
Weed Resistance to Herbicides			Physiology of Plants and Herbicide Interaction		Application Technology		
<i>Chair: Dr. Do-Soon Kim</i>			<i>Chair: Dr. Sabine Ardet</i>		Chair: Dr. Steven Fennimore		
10:45	-	11:00	Inheritance of 2,4-D resistance in Conyza sumatrensis population from Brazil	Diagnosis of herbicide activity and mode of action using spectral image analysis	Drone Application and Rinskor™ Active Development in China		
11:00	-	11:15	Transcriptome analysis of Conyza sumatrensis resistant to 2,4-D caused by rapid necrosis	Understanding resistance patterns to auxin herbicides with dual-luciferase assays in Arabidopsis thaliana protoplasts	Influence of height on spray deposition pattern of an agricultural spray drone		
11:15	-	11:30	A Pro197Ser mutation confers cross-resistance to ALS-inhibiting herbicides in Erigeron sumatrensis in Brazil	Herbicide bioassay using multi-well plate and spectral image analysis	A Weed-Sensing Sprayer Reduces Herbicide Use and Cost in Fallow Systems		
11:30	-	11:45	Diverse mutations in Acetolactate synthase genes in Glebionis coronaria populations resistant to Tribenuron-ethyl	Investigating the mode of action of Daimuron in reducing the phytotoxicity of various herbicides in rice	Maximizing herbicidal activity of triafamone mixtures by water surface application for sustainable weed management in irrigated directed seeded rice		

11:45	-	12:00	Innovative approaches for quick susceptibility monitoring in Echinochloa species against triafamone	Early diagnosis of herbicide activity and mode of action using chlorophyll fluorescence image analysis	Is herbicide applied using drone as efficient as when applied using terrestrial system?
12:00	-	12:15	Lunch and Exhibition visit		Goji Restaurant, 1st floor Foyer Area
12:15	-	12:30			
12:30	-	12:45			
12:45	-	13:00			
13:00	-	13:15			
13:15	-	13:30			
Thai Boromphimarn 1 and 2 - Session #33					
Weed Omics					
Plenary Session					
13:30	-	13:45	Use of a combined transcriptomics and association mapping approach to determine the non-target-site based gene(s) involved in atrazine resistance in Amaranthus palmeri		
13:45	-	14:00	Transcriptomic Analysis of the Rapid Response Biotype of Glyphosate Resistant Ambrosia trifida (Giant Ragweed)		
14:00	-	14:15	Questions and Answers		
Concurrent Sessions					
			Thai Boromphimarn 1 and 2 - Session #33		Thai Boromphimarn 3 - Session #34
			Weed Omics continue		Weed Biology and Ecology
			<i>Chair: Dr. Caio Brunharo</i>		<i>Chair: Dr. Christian Willenborg</i>
14:15	-	14:30	Digital Seedbank: An integrative approach to understanding weed seedbank dynamics		Effects of salinity on weed and crop species germination
14:30	-	14:45	Miscanthus sinensis, a noxious perennial weed now under domestication into a bioenergy crop based on its genome-wide association study		Effect of light, temperature, and sowing depth with different straws on germination of Chamaesyce hirta
14:45	-	15:00	Cytochrome P450 gene of family 72 is involved in tembotrione metabolism in HPPD-resistant Palmer amaranth (Amaranthus palmeri)		Thermal time to emergence of California accessions of Oryza sativa f. spontanea under flooded field conditions
15:00	-	15:15	The International Weed Genomics Consortium: a resource for weed genomics		Temperature-dependent mechanisms of blackgrass seed dormancy and after-ripening
15:15	-	15:30	Coffee Break		
15:30	-	15:45			
Concurrent Sessions					
			Thai Boromphimarn 1 and 2 - Session #38		Thai Boromphimarn 3 - Session #39
			Non-Chemical weed control		Weed Resistant to Herbicides
			<i>Chair: Dr. Rafael Pedroso</i>		<i>Chair: Dr. Satoshi Iwakami</i>
15:45	-	16:00	Complementary strategies to manage weeds in direct seeded rice (Oryza sativa L.)		Herbicide resistance correlates with seed dormancy and seed biomass in Italian Ryegrass (Lolium multiflorum)
16:00	-	16:15	Screening of rice genotypes for their weed competitiveness in Lao PDR		Usage of molecular genotyping to confirm target-site resistance to ALS- and ACCase inhibitor herbicides in Lolium spp. species from South Africa
16:15	-	16:30	Mulching for weed control in aerobic rice		Two novel approaches to herbicide discovery to better confront resistance: Compounds that are multisite inhibitors and/or target protein-protein interactions

16:30	-	16:45	Weed control measurements for organic rice production	Implementation of the resistance in-season quick test for Phalaris minor in wheat fields of Northern India
16:45	-	17:00		Herbicide resistance validation in Phalaris minor and management at farmers' fields in wheat
17:15	-	17:30	Closing Ceremony, Awards and banquet	Thai Chitlada 1+2
17:30	-	17:45		
17:45	-	18:00		
18:00	-	18:15		
18:15	-	18:30		
18:30	-	18:45		
18:45	-	19:00		
19:00	-	19:15		
19:15	-	19:30		
19:30	-	19:45		
19:45	-	20:00		
20:00	-	20:15		
20:15	-	20:30		
20:30	-	20:45		
20:45	-	21:00		
21:00	-	21:15		
21:15	-	21:30		
21:30	-	21:45		
21:45	-	22:00		