

Topic	Session	Slot	Date	Room	Starting Time	End time	Title	Authors
1	0	0					Keynote Speaker	Chair: Avila, Rubin, Burgos, Mallory-Smith
1	0	1	5/12/2022	Chitlada	10:00	10:45	Tackling global crop production challenges for sustainable food and nutrition security	Martin J. Kropff
1	0	2	5/12/2022	Chitlada	10:45	11:30	Weed management: A necessary evolution	Renaud Deval
1	0	3	5/12/2022	Chitlada	10:45	11:30	HRAC Global works to promote worldwide sustainable stewardship of weed management	Caio Vitagliano Santi Rossi, Roland Beffa, and Gael Le Goupil
1	0	4	5/12/2022	Chitlada	13:30	14:15	Machine learning and advanced control systems expand the reach of physical weed control tools	Steven A. Fennimore
1	0	5	7/12/2022	Chitlada	9:00	9:45	Weed Management in 2050: Perspectives on the Future of Weed Science	James H. Westwood, Raghavan Charudattan, Stephen O. Duke, Steven A. Fennimore, Pam Marrone, David C. Slaughter, Clarence Swanton, and Richard Zollinger
1	0	6	8/12/2022	Chitlada	9:00	9:45	Genome Editing in Agriculture: Opportunities and Enablers	Chunhe Qu, and Maria Fedorova
2	0	0					Panel on Weed Management in Asia	Chair: Dr. Hiroshi Matsumoto
2	0	1	6/12/2022	Chitlada	9:00	12:00	Weed Management Challenges and Opportunities in smallholder rice production in Asia	Virender Kumar, Andrew J. McDonald, and R. K. Malik
2	0	2	6/12/2022	Chitlada	9:00	12:00	Herbicide resistant weeds in wheat-rice rotation system in Asia and their management	Samunder Singh
2	0	3	6/12/2022	Chitlada	9:00	12:00	Developing and adapting weed management strategies with smallholder farmers for higher productivity and sustainable rice farming	Madonna Casimero
3	0	0					Application Technology	MTO: Dr. Edinaldo Camargo
3	32	1	8/12/2022	Thai Boromphimarn 4	10:45	11:00	Drone Application and Rinskor™ Active Development in China	Chunhe Qu, Liang Chen, Fuli He, Zhan Xia, Duy Le, and Mauricio Morrell
3	32	2	8/12/2022	Thai Boromphimarn 4	11:00	11:15	Influence of height on spray deposition pattern of an agricultural spray drone	Daewon Koo, Clebson G. Goncalves, and Shawn D. Askew
3	32	3	8/12/2022	Thai Boromphimarn 4	11:15	11:30	A Weed-Sensing Sprayer Reduces Herbicide Use and Cost in Fallow Systems	Lydia Fields, Rachel Zuger, and Ian C. Burke
3	32	4	8/12/2022	Thai Boromphimarn 4	11:30	11:45	Maximizing herbicidal activity of triafamone mixtures by water surface application for sustainable weed management in irrigated directed seeded rice	Ramisis Fulgencio, Leo Hawod, Prem N Kumar, Amorn Chernchaivachirakul, Nico Alfredo, Yoshitaka Sato, Tai Choon Kuah, and Srinivas Parimi
3	32	5	8/12/2022	Thai Boromphimarn 4	11:45	12:00	Is herbicide applied using drone as efficient as when applied using terrestrial system?	Roque M. Z. Palacios, Rubens A. Polito, Bruno O. N. Araújo, Eugênio P. Schröder, Viviane G. Burkert, Luis A. Avila, and Edinaldo R. Camargo
4	0	0					Bioherbicides (including joint IWSS/IBG Session)	MTO: Dr. Qiang Sheng
4	23	1	7/12/2022	Thai Boromphimarn 3	14:15	14:30	Secondary metabolites of insect symbionts and their herbicidal activity	Cai-Ping Yin, Shu-Ping Shi, Yi Zhang, Ru-Yun Luan, Kun Kong, Shu-Xiang Zhang, and Ying-Lao Zhang

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4	23	2	7/12/2022	Thai Boromphimarn 3	14:30	14:45	Phytotoxicity in aqueous methanolic extracts of rice against Junglerice and total activities of identified phytotoxic compounds	Thi L. Ho, Van L. Nguyen, Linh K. Phan, Cuong T. Nguyen, Trang H. D. Nguyen, Vang L. Van, and Smeda J. Reid
4	23	3	7/12/2022	Thai Boromphimarn 3	14:45	15:00	Study of Helminthosporium Gramineum formulation for biological control weeds in the rice field	Jianping Zhang
4	27	1	7/12/2022	Thai Boromphimarn 3	15:45	16:00	Controlling arable weeds with the bio-based herbicide pelargonolic acid	Sabine Andert
4	27	2	7/12/2022	Thai Boromphimarn 3	16:00	16:15	Herbicidal activity of a nano-mixture of eugenol and phenylethyl propionate against Tribenuron-methyl resistant biotypes of Sinapis arvensis L.	Sajad Mijani, Mehdi Rastgoo, and Per Kudsk
4	27	3	7/12/2022	Thai Boromphimarn 3	16:15	16:30	Effects of Environmental Condition on the Herbicidal Activity of Sclerotinia trifoliorum	Su-Min Han, Xiaoxia Shen, Tae-Kyeong Noh, Soo-Hyun Lim, Dal-Soo Kim, and Do-Soon Kim
4	27	4	7/12/2022	Thai Boromphimarn 3	16:30	16:45	Screening fungal pathogens in diseased Microstegium vimineum as potential biological agents for bioherbicide development	Sheng Qiang
4	27	5	7/12/2022	Thai Boromphimarn 3	16:45	17:00	Evaluation of Bipolaris yamedae strain as a bioherbicidal agent against Echinochloa species	Min Tan, Wansong Chen, Jing Zhang, and Sheng Qiang
5	0	0					Climate Aspect of Weed Science	MTO: Dr. Jonathan Storkey
5	9	0.1	6/12/2022	Chitlada	13:30	14:15	Water, wind and fire: extreme climate events and the spread of invasive plants in the Pacific Northwest	David R. Clements, and Jennifer Grenz
5	9	0.2	6/12/2022	Chitlada	13:30	14:15	Changing climate, changing weeds: Data mining for future weed management insights	Martin M. Williams II, Christopher A. Landau, and Aaron G. Hager
5	9	1	6/12/2022	Chitlada	14:15	14:30	Impact of climate change on the degradation of oxyfluorfen	Selvakumar. S, and Chinnamuthu. C. R
5	9	2	6/12/2022	Chitlada	14:30	14:45	The role of climate change in chemical weed management	Maor Matzrafi
5	9	3	6/12/2022	Chitlada	14:45	15:00	Rise in atmospheric CO2 concentration affects weedy rice seed-shattering and the transcriptional activation of seed shattering-related genes	Andrisa Balbinot; Vivian Ebeling Viana; Anderson da Rosa Feijó; Marcus Vinicius Fipke; Tamara Heck; Lewis H Ziska; Catarine Markus; Aldo Merotto Jr.; and Luis Antonio de
5	9	4	6/12/2022	Chitlada	15:00	15:15	Amaranthus palmeri growth under different CO2 and temperature scenarios	Juliana de Souza Rodrigues, and Timothy Grey
6	0	0					Economic and Social Aspects of Weed Management	MTO: Dr. Grace Bolfrey-Arku
6	11	1	6/12/2022	Thai Boromphimarn 3	14:15	14:30	Weed management and gender roles in lowland rice production systems in Lao PDR	Bounthanom Bouahom, Gomathy Palaniappa2, Ammar Abdul Aziz, Jhoana Opena, Phetmanyseng Xangsayasane, and Jaquie Mitchell
6	11	2	6/12/2022	Thai Boromphimarn 3	14:30	14:45	Economic roles of paraquat herbicide in farmer's household incomes and pesticide traders in Indonesia	Dedi Budiman Hakim, Adi Hadiano, Dian Verawati Panjaitan, Danang Pramudita, Fitria Dewi Raswatie, and Sri Retno Wahyu Nugraheni
6	11	3	6/12/2022	Thai Boromphimarn 3	14:45	15:00	Bayer is raising the bar to help farmers manage weeds safely and sustainably	Qiang Chen, Jens Peter L. Venoe, Arunika Anggradewi, and Christian Kuester
6	16	1	6/12/2022	Thai Boromphimarn 4	15:45	16:00	Using matamat (Rynchospora corymbosa (L). Britton) for enterprise development flood-prone rice areas in Camarines Sur, Philippines	R. Marcelino, Madonna C. Casimero, Rizal G. Corales and Henrilyn Yamson

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6	16	2	6/12/2022	Thai Boromphimarn 4	16:00	16:15	Energy budgeting and economics of weed management in green manure – maize – pulse based conservation agriculture in Semi-Arid Tropics of Southern Tamil Nadu	Thirumalaikumar Ramasamy, and Dr. Anbarasan Palanisamy
6	16	3	6/12/2022	Thai Boromphimarn 4	16:15	16:30	Using ecoinformatics to estimate and characterize herbicide effectiveness in maize (<i>Zea mays</i> L.)	Shlomi Aharon, Ran Lati, Hanan Eizenberg, and Yafit Cohen
8	0	0					Integrated Weed Management	MTO: Dr. Alejandro Garcia
8	8	1	5/12/2022	Thai Boromphimarn 4	16:15	16:30	Impact of organic manures and intercrops on weed management in maize	M. Deepa, R.M. Kathiresan
8	8	2	5/12/2022	Thai Boromphimarn 4	16:30	16:45	Integrated weed management in maize: crop rotation and PRE herbicides	Milan Brankov, Milena Simić, and Vesna Dragičević
8	8	3	5/12/2022	Thai Boromphimarn 4	16:45	17:00	Influence of tillage practice and weed management on productivity of maize – Sunflower cropping system under semi arid tropical climatic condition	Murali Arthanari Palanisamy
8	8	4	5/12/2022	Thai Boromphimarn 4	17:00	17:15	Performance of wheat under different cotton stalk and herbicide management practices in cotton-wheat cropping system	Navish Kumar Kamboj, Todar Mal Poonia, and Samunder Singh
8	8	5	5/12/2022	Thai Boromphimarn 4	17:15	17:30	Influence of water regimes and herbicides for control of purple nutsedge (<i>Cyperus rotundus</i>)	Duy Le, and Mauricio Morell
8	8	6	8/12/2022	Thai Boromphimarn 3	17:30	17:45	Efficacy and selectivity of tolypralate 400 SC in tank-mixture with atrazine in winter corn (<i>Zea mays</i>) in Mato Grosso State, Brazil	Walter José Souza Buzatti, Fernanda Nunes Bressanin, and Gabrielle de Castro Macedo
8	18	1	7/12/2022	Thai Boromphimarn 1 and 2	10:45	11:00	Growth and yield performance of newly released aerobic rice varieties under varied weed pressure	B. Sreedevi, Sudharani, R. Mahenderkumar, M.D.Tuti, Artisingh, and S.R.Voleti
8	18	2	7/12/2022	Thai Boromphimarn 1 and 2	11:00	11:15	Emergence of resistance in <i>Phalaris minor</i> to the prevalent wheat herbicides in India: Development of an integrated management strategy	Makhan Singh Bhullar, Tarundeep Kaur, Jasvir Singh Gill, Gurpreet Kaur, and Manpreet Singh
8	18	3	7/12/2022	Thai Boromphimarn 1 and 2	11:15	11:30	Efficacy of integrated weed management in peanut and cotton systems utilizing high residue cover crop	Ryan Langemeier, Katilyn Price, and Steve Li
8	18	4	7/12/2022	Thai Boromphimarn 1 and 2	11:30	11:45	System of Rice Intensification (SRI): its potential to enhance sustainable weed management and productivity in irrigated rice (<i>Oryza sativa</i> L.)	R. Mahender Kumar, B. Sreedevi, Mangaldeep Tuti, S. Vijay Kumar, M.B.B. Prasad Babu, K. Surekha, Ch. Padmvathi, Santhosha Rathod, and R.M. Sundaram
8	18	5	7/12/2022	Thai Boromphimarn 1 and 2	11:45	12:00	Influence of Brassica carinata cropping system on weed population dynamics and emergence patterns	Pratap Devkota, Ruby Tiwari, Theresa A. Reinhardt-Piskáčková, Michael J. Mulvaney, Jason A. Ferrell, and Ramon G. Leon
8	24	1	7/12/2022	Thai Boromphimarn 4	14:15	14:30	Herbicide tolerant crops: A new component technology of integrated weed management for crop production in India agriculture	Chinnusamy Chinnagounder, Murali Arthanari Palanisamy, and Bharathi Chandrasekaran
8	24	2	7/12/2022	Thai Boromphimarn 4	14:30	14:45	Sustainable use of glyphosate in European Mediterranean perennial crops	Dimosthenis Chachalis
8	24	3	7/12/2022	Thai Boromphimarn 4	14:45	15:00	Genetically modified eucalyptus tolerant to glyphosate - an effective tool on integrated weed management	Ana Cristina Pinheiro, Thais Regina Drezza, Maria Paula Galan, Alexandre Manoeli, Carolina Rocha, Anselmo Azevedo dos Santos, Rodrigo Graça, José Mateus
8	24	4	7/12/2022	Thai Boromphimarn 4	15:00	15:15	Evaluation of agronomic traits and ecosystem services provided by sulfonylurea-resistant camelina sativa and Brassica napus	James Anderson, Brant Bigger, Kirk Howatt, Joseph Mettler, and Marisol Berti

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9	0	0					Invasive and Parasitic Plants Species	MTO: Dr. Lorraine Strathie
9	3	1	5/12/2022	Thai Boromphimarn 3	14:15	14:30	Phenotypic variation among populations of the invasive weed <i>Parthenium hysterophorus</i> L. (Asteraceae) as a tool to assess multiple introductions	Sahar Malka, Hanan Eizenberg, and Maor Matzrafi
9	3	2	5/12/2022	Thai Boromphimarn 3	14:30	14:45	Weedy <i>Erigeron</i> species (Asteraceae) need sustainable control strategies in warming world	Ahmet Uludağ, Deniz İnci, Kassim Al-Khatib, and İlhan Üremiş
9	3	3	5/12/2022	Thai Boromphimarn 3	14:45	15:00	Interference of invasive alien weeds reduced vegetation diversity	Soo-Hyun Lim, Ji-Ae Yu, Won-Cheol Lee, Su-Min Han, Jin-Won Kim, Do-Soon Kim
9	7	1	5/12/2022	Thai Boromphimarn 3	16:15	16:30	Allelopathic effects of invasive weeds on chickpea (<i>Cicer arietinum</i> L. (Fabaceae))	Rahamdad Khan, Faiz-ur-Rehman, and Syed Salim Shah
9	7	2	5/12/2022	Thai Boromphimarn 3	16:30	16:45	Effects of interspecific competition on light interception and growth of maize (<i>Zea mays</i> L. (Poaceae)) and a weed	Rahmattullah Nur, Ji-Ae You, Sumin Han, Soo-Hyun Lim, and Do-Soon Kim
9	7	3	5/12/2022	Thai Boromphimarn 3	16:45	17:00	Effects of Canopy Light Interception by Alien Weeds on Soybean Growth and Yield	Ji-Ae Yu, Won-Cheol Lee, Su-Min Han, Soo-Hyun Lim, Rahmattullah Nur, Jin-Won Kim, and Do-Soon Kim
9	7	4	5/12/2022	Thai Boromphimarn 3	17:00	17:15	Cover crops to control weeds in rambutan (<i>Nephelium lappaseum</i> L.) orchards in Chiapas, México	Dante Alfredo Hernández-Sedas
9	10	1	6/12/2022	Thai Boromphimarn 1 and 2	14:15	14:30	Management of <i>Phelipanche aegyptiaca</i> (Pers.) pomel (Orobanchaceae) in cabbage (<i>Brassica oleracea</i> var. <i>capitata</i> L. (Brassicaceae))	Amit Wallach, Guy Achdari, and Hanan Eizenberg
9	10	2	6/12/2022	Thai Boromphimarn 1 and 2	14:30	14:45	Hyperspectral imaging facilitates early recognition of <i>Orobanche cumana</i> Wallr. (Orobanchaceae) below-ground parasitism on sunflower (<i>Helianthus annuus</i> L.; Asteraceae) under field conditions	Guy Atsmon, Hanan Eizenberg, and Ran Nisim Lati
9	10	3	6/12/2022	Thai Boromphimarn 1 and 2	14:45	15:00	Genomic characterization of sunflower (<i>Helianthus annuus</i> L. (Asteraceae)) resistance to sunflower broomrape (<i>Orobanche cumana</i> Wallr. (Orobanchaceae))	Dana Sisou, Hanan Eizenberg, and Sariel Hübner
9	10	4	6/12/2022	Thai Boromphimarn 1 and 2	15:00	15:15	Stacking drought tolerance and parasitic weed resistance in hybrid maize (<i>Zea mays</i> L. (Poaceae)) to enhance resilience to stress	Abebe Menkir, Silvestro Meseka, Bunmi Bossey, David Chikoye, and Ayeoffe F. Lum
10	0	0					Modeling	MTO: Dr. Jose L. Gonzalez-Andujar
10	20	1	7/12/2022	Thai Boromphimarn 4	10:45	11:00	A population model for integrated weed management of <i>Phalaris minor</i> in rice-wheat cropping systems in India	Chun Liu, Makhan S. Bhullar, Tarundeep Kaur, Jitendra Kumar, Navdeep Mehta, Gael Le Goupil, and Shiv Shankar Kaundun
10	20	2	7/12/2022	Thai Boromphimarn 4	11:00	11:15	Are closely related weedy species regulated by the same demographic transitions?	Jane Molofsky, Dominik Thom, Stephen R. Keller, and Lindsey R. Millbrath
10	20	3	7/12/2022	Thai Boromphimarn 4	11:15	11:30	Spatial-temporal aspects of weeds distribution within fields	Lior Blank, Roni Gafni, Gal Rozenberg, Nitzan Birger, and Hanan Eizenberg
10	20	4	7/12/2022	Thai Boromphimarn 4	11:30	11:45	Herbicide resistance prediction: Comparison between a mechanistic model vs a random forest model	Roland Beffa, Janin Lepke, Johannes Herrmann, Nicolas Remy, and Otto Richter
10	20	5	7/12/2022	Thai Boromphimarn 4	11:45	12:00	A regional scale-study of the contribution of local, management and climatic variables on <i>Amaranthus</i> spp. infestation in processing tomato	Roni Gafni, Hanan Eizenberg, and Lior Blank
11	0	0					New Technology For Weed Management	MTO: Dr. Muthukumar Bagavathiannan

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11	1	1	5/12/2022	Chitlada	14:15	14:30	Novlect™ 120 EC – A post-emergence herbicide for broad-spectrum weed control in direct-seeded rice in India	Sunil Kumar, Siva Golla, Neeraj Sharma, Le Duy, Mauricio Morell, and Edwin Rogbell
11	1	2	5/12/2022	Chitlada	14:30	14:45	Pairing nanoparticles with FANA technology for spray-on gene silencing in weeds	Katie Martin, Veenu Aishwarya, and Todd Gaines
11	1	3	5/12/2022	Chitlada	14:45	15:00	Early detection of glyphosate effect on Solanum nigrum L. using hyperspectral sensor and machine learning	Omer Nehurai, Hanan Eizenberg, and Ran N. Lati
11	1	4	5/12/2022	Chitlada	15:00	15:15	Applications of digital tools in weed detection, mapping, and precision integrated management	Muthukumar Bagavathiannan, Bishwa Sapkota, Chengsong Hu, Matthew Kutugata, Ubaldo Torres, Bholuram Gurjar, Joe Johnson, Daniel Ginn, Augusto
11	5	1	5/12/2022	Chitlada	16:15	16:30	Mapping and estimating Parthenium hysterophorus L. using an unmanned aerial system	Saima Hashim, and Haroon Shah
11	5	2	5/12/2022	Chitlada	16:30	16:45	Sustainable use of herbicides using digital and precision application technologies	Joanna Davies, and Haytham Shbaita
11	5	3	5/12/2022	Chitlada	16:45	17:00	Required input information for sustainable weed management strategies enabled by autonomous in-field intervention technology	Marie Zingsheim, and Thomas F. Döring
11	5	4	5/12/2022	Chitlada	17:00	17:15	Laser weeding with a 2 µm fiber laser: The effect on weeds and the environment	C. Andreasen, Z. Zang, and M. Saberi
11	14	1	6/12/2022	Thai Boromphimarn 1 and 2	15:45	16:00	Determination of the critical period for weed control in maize production after rice and weed mapping by unmanned aerial vehicle	Suphannika Intanon, Patthaphong Patthamachit, Sittichai Choosumrong, and Wanwisa Pansak
11	14	2	6/12/2022	Thai Boromphimarn 1 and 2	16:00	16:15	Smart and slow-release nanoencapsulated herbicide formulations for effective weed control in rainfed and irrigated ecosystems	C. R. Chinnamuthu
11	14	3	6/12/2022	Thai Boromphimarn 1 and 2	16:15	16:30	GROW: An international research network for precision integrated weed management	Eugene P. Law, Steven B. Mirsky, Victoria Ackroyd, Muthukumar Bagavathiannan, Lauren M. Lazaro, Ramon G. Leon, Chris Reberg-Horton, Mark J. VanGessel, and
11	14	4	6/12/2022	Thai Boromphimarn 1 and 2	16:30	16:45	Harvest weed seed control (HWSC) as a tool for weed management in arable crops in Israel	Yossi Kashti, Idan S. Roth, Moshe Sibony, Ohalivav Keisar, David Bonfil, Jaime Kigel, and Baruch Rubin
11	14	5	6/12/2022	Thai Boromphimarn 1 and 2	16:45	17:00	Maize (Zea mays) Seed Coating with Acetolactate Synthase (ALS)-inhibitors for Control of Striga hermonthica	Adunoye F. Olusegun, Abebe Menkir, David Chikoye, and Ayeoffe F. Lum
11	19	1	7/12/2022	Thai Boromphimarn 3	10:45	11:00	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	Yoshitaka Sato, Ramisis Fulgencio, Kenji Sugiura, Wei Zheng, Amorn Chernchavachirakul, Prem N Kumar, and Hafiz Fahimuddin Shah
11	19	2	7/12/2022	Thai Boromphimarn 3	11:00	11:15	TVE29: A New Mode-of-Action Herbicide Interfering with de Novo Pyrimidine Biosynthesis for Effective Management of Herbicide-Resistant Grass Weeds Globally	Atul Puri, Yafei Pan, Thomas Selby, and Steve Gutteridge
11	19	3	7/12/2022	Thai Boromphimarn 3	11:15	11:30	Crop herbicide tolerance evaluation using UAV based remote sensing	Ryan Langemeier, Livia Pereira, Justin McCaghren, and Steve Li
12	0	0					Non-Chemical weed control	MTO: Dr. Marleen Riemens
12	4	1	5/12/2022	Thai Boromphimarn 4	14:15	14:30	Chaff lining harvest weed seed control in dryland crops	Andre Lucas Simoes Araujo, Eric P. Westra, Neeta Soni, Vipan Kumar, Misha Manuchehri, Lovreet Shergill, Todd Gaines
12	4	2	5/12/2022	Thai Boromphimarn 4	14:30	14:45	Revealing the interaction between compost rate and non-chemical weed control methods on control efficacy in organic field crops	Itai Shulner, Meidad Kissinger, and Ran Nisim Lati

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12	4	3	5/12/2022	Thai Boromphimarn 4	14:45	15:00	Cover crops in Mediterranean vineyards – use of natural and sown plants for weed management and wine quality	Ido Walk, Yishai Netzer, Yaakov Goldwasser, Moshe Sibony, and Baruch Rubin
12	4	4	5/12/2022	Thai Boromphimarn 4	15:00	15:15	Cover-crops as a mean to reduce herbicide use in field crops and their effect on weed community structure	Gal Rozenberg, Yohay Carmel, and Lior Blank
12	38	1	8/12/2022	Thai Boromphimarn 1 and 2	15:45	16:00	Complementary strategies to manage weeds in direct seeded rice (<i>Oryza sativa</i> L.)	Ramesh K. Singh, Neelam Bisen, and Santosh Kumar
12	38	2	8/12/2022	Thai Boromphimarn 1 and 2	16:00	16:15	Screening of rice genotypes for their weed competitiveness in Lao PDR	laeh Homsengchanh
12	38	3	8/12/2022	Thai Boromphimarn 1 and 2	16:15	16:30	Mulching for weed control in aerobic rice	Banugu Sreedevi, Aarti Singh, J. Sudharani, Mangaldeep Tuti, and R. Mahenderkumar
12	38	4	8/12/2022	Thai Boromphimarn 1 and 2	16:30	16:45	Weed control measurements for organic rice production	Xiang Qu, Pinglei Gao, Zheng Zhang, and Sheng Qiang
13	0	0					Physiology Of Plants and Herbicide Interaction	MTO: Dr. Maor Matzrafi
13	15	1	6/12/2022	Thai Boromphimarn 3	15:45	16:00	Watergrass (<i>Echinochloa</i> spp.) in California rice: Phenotypes and herbicide susceptibility	Whitney Brim-DeForest, Taiyu Guan, and Troy Clark
13	15	2	6/12/2022	Thai Boromphimarn 3	16:00	16:15	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	Meor Badli Shah Ahmad Rafie, and Samsudin Amit
13	15	3	6/12/2022	Thai Boromphimarn 3	16:15	16:30	Benoxacor, fenclorim, and melatonin as potential safeners in protecting tomato against 2,4-D drift	Tabata Oliveira, Edicarlos Castro, Josiane Argenta, Shaun Broderick, and Te Ming Tseng
13	15	4	6/12/2022	Thai Boromphimarn 3	16:30	16:45	Stress memory mechanism involved in reducing <i>Eragrostis plana</i> sensitivity to glyphosate herbicide	Marcus V. Fipke, Vivian E. Viana, Anderson R. Feijó, Andrisa Balbinot, Tamara Heck, Franck E. Dayan, Edinaldo R. Camargo, and Luis A. Avila
13	15	5	6/12/2022	Thai Boromphimarn 3	16:45	17:00	Carbohydrate dynamics in roots of <i>Cirsium arvense</i> and <i>Sonchus arvensis</i>	Marian Weigel, Sabine Andert, Jürgen Müller, and Bärbel Gerowitt
13	30	1	8/12/2022	Thai Boromphimarn 1 and 2	10:45	11:00	Diagnosis of herbicide activity and mode of action using spectral image analysis	Tae-Kyeong Noh, Ga-Hyun Song, Taek-Sung Lee, and Do-Soon Kim
13	30	2	8/12/2022	Thai Boromphimarn 1 and 2	11:00	11:15	Understanding resistance patterns to auxin herbicides with dual-luciferase assays in <i>Arabidopsis thaliana</i> protoplasts	Sofia Marques Hill, Mahima Krishnan, Christopher Preston, Chad Sayer, Franck Dayan, and Todd Gaines
13	30	3	8/12/2022	Thai Boromphimarn 1 and 2	11:15	11:30	Herbicide bioassay using multi-well plate and spectral image analysis	Seung-Min Jeong, Tae-Kyeong Noh, Do-Soon Kim, and Nam-Chon Paek
13	30	4	8/12/2022	Thai Boromphimarn 1 and 2	11:30	11:45	Investigating the mode of action of Daimuron in reducing the phytotoxicity of various herbicides in rice	Yuki Morimoto, Kohei Kurata, and Satoshi Iwakami
13	30	5	8/12/2022	Thai Boromphimarn 1 and 2	11:45	12:00	Early diagnosis of herbicide activity and mode of action using chlorophyll fluorescence image analysis	Seung-Hui Mun, Tae-Kyeong Noh, Do-Soon Kim, and Hyungsuk Kimm
14	0	0					Weed Biology and Ecology	MTO: Dr. Michaela Kolářová
14	2	1	5/12/2022	Thai Boromphimarn 1 and 2	14:15	14:30	Distribution Characteristics of <i>Echinochloa</i> Species in Chinese Rice Fields: A Case Survey on 73 Sites	Lu Yongliang, and Dong Liyao

Topic	Session	Slot	Date	Room	Starting Time	End time	Title	Authors
14	2	2	5/12/2022	Thai Boromphimarn 1 and 2	14:30	14:45	Light and temperature affect the germination of barnyard grass in drill sown rice in Australia	Jhoana Opena, James Pratley, Hanwen Wu, Jeffrey McCormick, and Deirdre Lemerle
14	2	3	5/12/2022	Thai Boromphimarn 1 and 2	14:45	15:00	Determination of Echinochloa P. Beauv. spp. and their some lower taxa in rice fields in the Edirne Province of Türkiye	Onur Göktepe, Ahmet Uludağ, and Necmi Aksoy
14	2	4	5/12/2022	Thai Boromphimarn 1 and 2	15:00	15:15	Seed production and shattering of barnyardgrass (Echinochloa crus-galli) in response to time of emergence and crop geometry in transplanted rice	S Vijayakumar, Sanjay Saha, and P Saravanane
14	6	1	5/12/2022	Thai Boromphimarn 1 and 2	16:15	16:30	The Weed Seed Buffet: How and Why Do Carabid Seed Predators Choose Among Weed Seeds?	Christian J. Willenborg, Khaldoun A. Ali, Boyd A. Mori2, and Sean M. Prager
14	6	2	5/12/2022	Thai Boromphimarn 1 and 2	16:30	16:45	Long term effect of grain legumes and management practices on weed seedbank	Narendra Kumar, Chaitanya P. Nath, Kali K. Hazra, and Chandra S. PraharaJ
14	6	3	5/12/2022	Thai Boromphimarn 1 and 2	16:45	17:00	Weed interference and seed bank dynamics under a conservation agriculture-based maize-wheat-mungbean system	Sonaka Ghosh, and T. K. Das
14	6	4	5/12/2022	Thai Boromphimarn 1 and 2	17:00	17:15	Rice weed seed contamination of farmers' retained and certified seeds in Lao PDR	Khamtay Vongxayya, Jhoana Opena, Phetmanyseng Xangsayasane, Deirdre Lemerle, and Jaquie Mitchell
14	6	5	5/12/2022	Thai Boromphimarn 1 and 2	17:15	17:30	Efficient weed management in legume-based cropping for higher productivity and income augmentation	Chaitanya P. Nath, Narendra Kumar, K.K. Hazra, C.S. PraharaJ, and Asik Dutta
14	34	1	8/12/2022	Thai Boromphimarn 1 and 2	14:15	14:30	Effects of salinity on weed and crop species germination	Nebojša Nikolić, Aurora Ghirardelli, Michela Schiavon, and Roberta Masin
14	34	2	8/12/2022	Thai Boromphimarn 1 and 2	14:30	14:45	Effect of light, temperature, and sowing depth with different straws on germination of Chamaesyce hirta	Vanessa F. Vital Silva, Naira M. Freitas, Luiz A. I. Ferreira, Te-Ming Tseng, and Rubem S. Oliveira Jr
14	34	3	8/12/2022	Thai Boromphimarn 1 and 2	14:45	15:00	Thermal time to emergence of California accessions of Oryza sativa f. spontanea under flooded field conditions	Liberty B. Galvin, and Kassim Al-Khatib
14	34	4	8/12/2022	Thai Boromphimarn 1 and 2	15:00	15:15	Temperature-dependent mechanisms of blackgrass seed dormancy and after-ripening	Nahema Venceslai, Marta Pérez, Thomas Holloway, Chun Liu, Sarah Cook, Lynn Tatnell, Gerhard Leubner-Metzger, and Kazumi Nakabayashi
15	0	0					Weed Issue in Asia	MTO: Dr. Virender Kumar
15	22	1	7/12/2022	Thai Boromphimarn 1 and 2	14:15	14:30	Conservation agriculture: A Boon for weed management in Asia	U.P. Singh, Nikhil Kumar Singh, Kajal Verma, Anurag Upadhyay,Sitesh Jha, Sanjeev Kumar Kashyap, H.S. Ravi Kumar, Himanshu Singh, Rakesh Kumar, Prabhat Singh,
15	22	2	7/12/2022	Thai Boromphimarn 1 and 2	14:30	14:45	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	Ankur Chaudhary, Dharam Bir Yadav, Ashok Yadav, Satbir Singh Punia, and Todar Mal Poonia
15	22	3	7/12/2022	Thai Boromphimarn 1 and 2	14:45	15:00	Weed management strategies for rice-based cropping system in Bangladesh: Present status and future needs	Khairul Bhuiyan
15	22	4	7/12/2022	Thai Boromphimarn 1 and 2	15:00	15:15	Direct seeded rice and zero tillage wheat in North-Western India: Weed issues and sustainability	Dharam Bir Yadav, Ashok Yadav, R.K. Malik, Gurjeet Gill, and Virender Kumar
15	26	1	7/12/2022	Thai Boromphimarn 1 and 2	15:45	16:00	Comparative study on morphological characteristics of weedy rice in the Mekong Delta	Nguyen The Cuong, Dong Thanh Liem, Nguyen Thi Thoan, Le Hoang Ninh, Nguyen Tuan Anh, Vien Phuc Dat, and Ho Le Thi
15	26	2	7/12/2022	Thai Boromphimarn 1 and 2	16:00	16:15	Farmers' Perception on the Characteristics and Management of Weedy Rice in Southern Luzon, Philippines	Clare Hazel R. Tabernilla, Priscilla M. Barcial, and Analiza Henedina M. Ramirez

Topic	Session	Slot	Date	Room	Starting Time	End time	Title	Authors
15	26	3	7/12/2022	Thai Boromphimarn 1 and 2	16:15	16:30	Current weed management practices and obstacles in rainfed lowland direct seeded rice systems in Southern Cambodia	Sophornthida Lim, Sareth Chea, Gomathy Palaniappan, Jhoana Opena, and Jaquie Mitchell
16	0	0					Weed Omics	MTO: Dr. Caio Brunharo
16	33	0.1	8/12/2022	Chitlada	13:30	14:15	Use of a combined transcriptomics and association mapping approach to determine the non-target-site based gene(s) involved in atrazine resistance in <i>Amaranthus palmeri</i>	Shiv Shankhar Kaundun, Sarah-Jane Hutchings, Lucy Jackson, Richard Dale, Marta Simoes, Stephanie Widdison, Melissa Braziers-Hicks, Joe Downes, and Eddie
16	33	0.2	8/12/2022	Chitlada	13:30	14:15	Transcriptomic Analysis of the Rapid Response Biotype of Glyphosate Resistant <i>Ambrosia trifida</i> (Giant Ragweed)	Crystal D. Sparks, Christopher Van Horn, Roland S. Beffa, Todd A. Gaines, Franck E. Dayan, and Philip Westra
16	33	1	8/12/2022	Chitlada	14:15	14:30	The International Weed Genomics Consortium: a resource for weed genomics	Sarah Morran, Dana Macgregor, Eric L. Patterson, Mithila Juglam, Roland S. Beffa, and Todd Gaines
16	33	2	8/12/2022	Chitlada	14:30	14:45	<i>Miscanthus sinensis</i> , a noxious perennial weed now under domestication into a bioenergy crop based on its genome-wide association study	Yeon-Ho Park, Tae-Kyoung Noh, Jae-Hyoung You, Min-Jung Yook, Hee-Jong Koh, and Do-Soon Kim
16	33	3	8/12/2022	Chitlada	14:45	15:00	Cytochrome P450 gene of family 72 is involved in tembotrione metabolism in HPPD-resistant Palmer amaranth (<i>Amaranthus palmeri</i>)	Rigon, Carlos Alberto G.; Sparks, Crystal; Charton, Lennart; Kuepper, Anita; Beffa, Roland S.; Dayan, Franck E.; and Gaines, Todd A.
16	33	4	8/12/2022	Chitlada	15:00	15:15	Digital Seedbank: An integrative approach to understanding weed seedbank dynamics	Thomas E. Holloway, Zane Duxbury, Chun Liu, Katrin Hermann, Anne Seville, Breno F. Campos, Lucio Garcia, Jonathan Cohn, Kelly Schilling, Gael Le Goupil, Eddison
17	0	0					Weed Resistance	MTOs: Dr. Aldo Merotto Jr., Dr. Satoshi Iwakami and Dr. Caio Brunharo
17	12	1	6/12/2022	Thai Boromphimarn 4	14:15	14:30	Herbicide resistant development in grass weed populations across wheat fields of Iran over a quarter of a century	Hamidreza Sasanfar, and Eskandar Zand
17	12	2	6/12/2022	Thai Boromphimarn 4	14:30	14:45	An insight into quinclorac resistance mechanism in early water grass (<i>Echinochloa oryzoides</i>)	Muhammad Zia Ul Haq, and Qiang Sheng
17	12	3	6/12/2022	Thai Boromphimarn 4	14:45	15:00	Occurrence of pyrazosulfuron-ethyl resistance in a population of <i>Fimbristylis miliacea</i> (L.) Vahl. in paddy fields	Mongkol Sripeangchan, and Tosapon Pornprom
17	12	4	6/12/2022	Thai Boromphimarn 4	15:00	15:15	Cross and multiple resistance profile to ACCase and ALS inhibitor herbicides in winter wild oat (<i>Avena sterilis</i> subsp. <i>ludoviciana</i> (Durieu) Gillet & Magne) populations	Hamidreza Sasanfar, Mehdi Rastgoo, Eskandar Zand, Abdolreza Bagheri, and Mohammad Hassan Rashed Mohassel
17	13	1	6/12/2022	Chitlada	15:45	16:00	Herbicide mixture decreases <i>Echinochloa crus-galli</i> control and increase the expression of detoxification genes	Carlos A. G. Rigon; Luan Cutti; Guilherme T. Menegol; Walker Schaidhauer; Enrico Z. Ferreira, Todd Gaines; and Aldo Merotto Jr.
17	13	2	6/12/2022	Chitlada	16:00	16:15	Resistance mechanism of auxin-herbicide quinclorac in late watergrass	Pattarasuda Chayapakdee, Usawadee Chanasut, Nattawut Sareein, Takuya Yamaguchi, Hiroshi Matsumoto, and Satoshi Iwakami
17	13	3	6/12/2022	Chitlada	16:15	16:30	Florpyrauxifen sensitivity variation between East Asian and American <i>Echinochloa oryzicola</i>	Xiaoxia Shen, Tae-Kyeong Noh, Madina Mulyukova, Jae-Hyoung You, Jee-hwan Yi, and Do-Soon Kim
17	13	4	6/12/2022	Chitlada	16:30	16:45	Temperature affects the metabolic-based florpyrauxifen-benzyl resistance in <i>Echinochloa crus-galli</i>	Luan Cutti, Guilherme M. Turra, Crystal Sparks, Carlos A.C. Rigon, Angela Da Cas Bundt, Catarine Markus, Todd Gaines, and Aldo Merotto
17	13	5	6/12/2022	Chitlada	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.	Luis Camacho, Ramisis Fulgencio, Le Duy, Sudakir Sudakir, Susan Knight, Wu Ben, and Ya-Fei Pan
17	17	1	7/12/2022	Chitlada	10:45	11:00	<i>Amaranthus tuberculatus</i> – invasive and multiple herbicide-resistant weed in Israel	Idan S. Roth, Inon Yadid, Aviv Singer, Zvi Peleg, Moshe Sibony, and Baruch Rubin

Topic	Session	Slot	Date	Room	Starting Time	End time	Title	Authors
17	17	2	7/12/2022	Chitlada	11:00	11:15	Mechanisms of herbicide resistance in <i>Amaranthus</i> species in South Africa	Juan Vorster, Nhlanhla Shibangu, Adelaide Simelane, and Charl Reinhardt
17	17	3	7/12/2022	Chitlada	11:15	11:30	Phenotyping of <i>Amaranthus hybridus</i> biotypes carrying two different allelic variants of acetolactate synthase (ALS)	Andrea Milani, Samuele Pinton, and Silvia Panozzo
17	17	4	7/12/2022	Chitlada	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	Goran Malidža, Jovana Krstić, Maria Salas, Jean-Sébastien Notter, Miloš Rajković, and Nataša Kočiš Tubić
17	17	5	7/12/2022	Chitlada	11:45	12:00	Spatial patterns of natural variation in the resistance to herbicides in the <i>Sinapis alba</i> L., Brassicaceae (White Mustard)	Laura Ruiz-Torres, Rafael Jaime Bueno, Luisa María Martínez Martínez, Pedro Rey Zamora, and Antonio José Manzaneda Ávila
17	21	0.1	7/12/2022	Chitlada	13:30	14:15	Searching for the genomic region responsible for multiple-herbicide resistance in <i>Echinochloa phyllopogon</i>	Kai Sugiura, Kanade Fukunishi, Tohru Tominaga, Mitsuhiro P. Sato, Kenta Shirasawa, and Satoshi Iakami
17	21	0.2	7/12/2022	Chitlada	13:30	14:15	Structure-based design, binding mode, and resistance profile of the new BASF PPO-inhibiting herbicide trifludimoxazin (Tirexor)	Aimone Porri, Raphael Aponte, Douglas Findley, Michael Betz, and Jens Lerchl
17	21	1	7/12/2022	Chitlada	14:15	14:30	Understanding a new mechanism of resistance to dicamba in <i>Bassia scoparia</i>	Jacob Montgomery, Todd Gaines, Phillip Westra, Franck Dayan, Sarah Morran, and Neeta Soni
17	21	2	7/12/2022	Chitlada	14:30	14:45	Multiple herbicide resistance: A major challenge for the control of the intractable <i>Echinochloa</i> weed species	Bernal E. Valverde
17	21	3	7/12/2022	Chitlada	14:45	15:00	Herbicide resistant genes located on heterologous chromosomes reduce the risk of gene flow in resistant crops	Shao Zicheng, Qiang Sheng, and Song Xiaoling
17	21	4	7/12/2022	Chitlada	15:00	15:15	Can Agriculture 4.0 solve the challenge of global weed resistance?	Bodo Peters
17	25	1	7/12/2022	Chitlada	15:45	16:00	Thiobencarb resistance mechanism in late watergrass (<i>Echinochloa phyllopogon</i>) is distinct from CYP81A-based cross-resistance	Niña Gracel Dimaano, Tohru Tominaga, and Satoshi Iwakami
17	25	2	7/12/2022	Chitlada	16:00	16:15	Cross-resistance of <i>Echinochloa</i> spp. to auxinic herbicides: a case of pre-selection	Nilda Roma-Burgos, Matheus Nogueira, Juan Camilo Velasquez, and Gulab Rangani
17	25	3	7/12/2022	Chitlada	16:15	16:30	Involvement of GS2 amplification and overexpression in <i>Amaranthus palmeri</i> resistance to glufosinate	Matheus M Nogueira, Nilda Roma-Burgos, Jens Lerchl, Frank Brandle, James Heiser, and Isabel S Werle
17	25	4	7/12/2022	Chitlada	16:30	16:45	Transgene escape from corn confers resistance to glyphosate in teosinte	Luan Cutti, Paula S. Angonese, Estéfani Sulzbach, Guilherme M. Turra, Catarine Markus, Todd A. Gaines, and Aldo Merotto
17	25	5	7/12/2022	Chitlada	16:45	17:00	Herbicide-resistant weeds jeopardize sustainability of arable crops	Baruch Rubin
17	29	1	8/12/2022	Chitlada	10:45	11:00	Inheritance of 2,4-D resistance in <i>Conyza sumatrensis</i> population from Brazil	Andre Lucas Simoes Araujo, Jessica Ferreira Lourenço Leal, Amanda dos Santos Souza, Sarah Morran, Todd Gaines, and Camila Ferreira de Pinho
17	29	2	8/12/2022	Chitlada	11:00	11:15	Transcriptome analysis of <i>Conyza sumatrensis</i> resistant to 2,4-D caused by rapid necrosis	Aldo Merotto, Paula Angonese, Catarine Markus, and Guilherme Turra
17	29	3	8/12/2022	Chitlada	11:15	11:30	A Pro197Ser mutation confers cross-resistance to ALS-inhibiting herbicides in <i>Erigeron sumatrensis</i> in Brazil	Vanessa F. Vital Silva, Rafael R. Mendes, Andreia K. Suzukawa, Fernando S. Adegas, Francimar C. Marcelino-Guimaraes, and Rubem S. Oliveira Jr.
17	29	4	8/12/2022	Chitlada	11:30	11:45	Diverse mutations in Acetolactate synthase genes in <i>Glebionis coronaria</i> populations resistant to Tribenuron-ethyl	Yosra Menchari, Satoshi Iwakami, Yoshiko Shimono, and Tohru Tominaga

Topic	Session	Slot	Date	Room	Starting Time	End time	Title	Authors
17	29	5	8/12/2022	Chitlada	11:45	12:00	Innovative approaches for quick susceptibility monitoring in Echinochloa species against triafamone	W. Zheng, J. Benz Aco, C. Ueno, and R. Fulgencio
17	39	1	8/12/2022	Thai Boromphimarn 3	15:45	16:00	Herbicide resistance correlates with seed dormancy and seed biomass in Italian Ryegrass (Lolium multiflorum)	Aniruddha Maity, Vijay Singh, Russell Jessup, and Muthukumar Bagavathiannan
17	39	2	8/12/2022	Thai Boromphimarn 3	16:00	16:15	Usage of molecular genotyping to confirm target-site resistance to ALS- and ACCase inhibitor herbicides in Lolium spp. species from South Africa	Hestia Nienaber
17	39	3	8/12/2022	Thai Boromphimarn 3	16:15	16:30	Two novel approaches to herbicide discovery to better confront resistance: Compounds that are multisite inhibitors and/or target protein-protein interactions	Jonathan Gressel
17	39	4	8/12/2022	Thai Boromphimarn 3	16:30	16:45	Implementation of the resistance in-season quick test for Phalaris minor in wheat fields of Northern India	Jitendra Kumar, Manojit Ghosh, Shiv Shankar Kaundun, Susan Knight, Punit Khullar, Arvind Kumar, and Kanti Tyagi
17	39	5	8/12/2022	Thai Boromphimarn 3	16:45	17:00	Herbicide resistance validation in Phalaris minor and management at farmers' fields in wheat	Todar Mal Poonia, Samunder Singh, Ankur Chaudhary, and Satbir Singh Punia
17	39	6	8/12/2022	Thai Boromphimarn 3	17:00	17:15	Investigating herbicide-resistance mechanisms in Echinochloa phyllopogon found in Japan	Tomomi Kubo, Akira Uchino, Tohru Tominaga, and Satoshi Iwakami