



Program

New Technology Leads the Way of Weed Science

PROGRAMME

19th October 2025 Sunday

13:30-18:00 Pre-Congress Workshop

Location: L7 736 Hall

Organizer: Bianca Assis Barbosa Martins & Roland Beffa

10:00-22:00 Registration

Location: Lobby

Local Chair Xiangju Li & Sheng Qiang (China)

18:30-21:00 Welcome Reception

Location: L5 Nanjing Hall

Chair: Samunder Singh

Supporter and Sponsors















POSTER SESSION

PROGRAMME

20th October 2025 Monday

| 8:30-9:30 | Opening Ceremony |
|-----------|---|
| Location: | L5 Nanjing Hall |
| Chair: | Xiangju Li (Local, China) |
| | Opening Remarks by IWSS President, APWSS, CWSS&CSPP. Congratulatory Addresses by Ministry of Agriculture and Rural Affairs of the People's Republic of China Nanjing Municipal Government Nanjing Agricultural University Institute of Plant Protection, Chinese Academy of Agricultural Sciences |

PROGRAMME

20th -24th October Monday - Friday

| 20th-24th Oct. | Invasive and Parasitic Weed |
|-----------------|---|
| Location: | L5 |
| P-IPW-Microb-01 | |
| P-IPW-Microb-02 | Facultative Apomictic Evidence from FCSS and Pollination Experiment in <i>Erigeron annuus</i> (Asteraceae: Astereae), an Invasive Alien Plant. Jianhua Hao . Suzhou University of Technology, China |
| P-IPW-Microb-03 | |
| P-IPW-Microb-04 | Photosynthetic Responses of Oat Varieties to Fluctuating Light: Implications for Weed Competition. Soo-Hyun Lim . Korea National Open University; Chungbuk National University, Korea |
| P-IPW-Microb-05 | The Effect of Climate Change on the Control of <i>Centaurea cyanus</i> , <i>Silene noctiflora</i> , and <i>Rumex crispus</i> with Glyphosate. Zahra Bitarafan . Division of Biotechnology and Plant Health, Norwegian Institute of Bioeconomy Research, Norway |

| | Genotype-Dependent Responses of Sunflower Rhizosphere |
|-----------------|---|
| | Microbiome to Broomrape Parasitism: Microbial Diversity, |
| P-IPW-Microb-06 | Composition, and Network Dynamics. Hongjuan Huang. Institute |
| | of Plant Protection, Chinese Academy of Agricultural Sciences, |
| | China |
| | How do Invasive Weeds Spread: An Account of the Global Invasion |

P-IPW-Microb-07

by *Parthenium* Weed. **Runping Mao**. Wuhan Institute of Landscape Architecture, China

| | Architecture, China |
|----------------|---|
| 20th-24th Oct. | Non-chemical Weed Management Strategies |
| Location: | L5 |
| P-Non-CWM-01 | |
| P-Non-CWM-02 | Allelopathic Effects of Grassland Toxic Grasses on Three Weeds. Jiadi Zhang. College of Plant Protection, Hunan Agricultural University, China |
| P-Non-CWM-03 | |
| | |

| 20th-24th Oct. | Herbicide Physiology Biochemistry |
|----------------|---|
| Location: | L5 |
| P-HPB-01 | Leaching of Pyroxasulfone in Different Soils under Straw and Rainfall Interaction and Its Effects on Sorghum Height. Heytor Martins . School of Agricultural and Veterinary Sciences, São Paulo State University, Brazil |
| P-HPB-02 | Comparative Dose-Response and Shikimic Acid Accumulation in <i>Palmer amaranth</i> Biotypes Collected 15 Years Apart. Pedro Augusto Silva Martins . School of Agricultural and Veterinary Sciences, São Paulo State University, Brazil |
| P-HPB-03 | Investigating the Role of Catalase in Herbicide Activity. Catherine Traxler . Colorado State University, the United States |
| P-HPB-04 | Translocation Characteristics of Florpyrauxifen-Benzyl Revealed by Leaf Excision Method. Juho Lee . Seoul National University, Korea |
| 20th-24th Oct. | Weed Biology, Ecology, and Diversity |
| Location: | L5 |
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P-WBED-01

| P-WBED-02 | Long-Term Monitoring of Weed Biodiversity on Arable Land in the Czech Republic. Michaela Kolářová. Czech University of Life Sciences Prague, Czech Republic |
|----------------------|---|
| P-WBED-03 | Socio-Economic and Environmental Impacts, Management, and Sustainable Utilization of Water Hyacinth (<i>Eichhornia crassipes</i> (Mart.) Solms-Laubach: Pontederiaceae) in Lake Lanao—Agus River, Philippines. Juliet Candog Bangi. Mindanao State University Main Campus, Philippines |
| P-WBED-04 | Effects of Straw Returning on Photosynthetic Characteristics and Yield in a Rice–Barnyardgrass Coexistence System. Gui Li. Institute of Plant Protection, Jiangsu Academy of Agricultural Sciences, China |
| 20th-24th Oct. | Integrated Weed Management |
| Location: | L5 |
| P-IWM-01 | Effects of Biodegradable Plastic Mulching Film on Weed Suppression in Chili Pepper Cultivation. Jae Hyoung You . Seoul National University, Korea |
| P-IWM-02 | |
| P-IWM-03 | |
| P-IWM-04 | A Diversified Toolbox: Strengthening Weed Resistance Management Through Integrated Weed Management (IWM). Bianca Martins. Bayer AG, Germany |
| P-IWM-05 | Application of Nanocellulose for Weed Management. Haruyuki Nakada . Shizuoka University, Japan |
| P-IWM-06 | Arylex.Diflufenican 27% OD Broad Leaf Weeds Control in Wheat of China. Jiajun Wu . Corteva (China) Investment Co., Ltd., China |
| P-IWM-07 | Allelopathy of Oilseed Rape Straw Aqueous Extracts on Weeds and |
| | Rice. Jinwen Zhu. Zhejiang University, China |
| P-IWM-08 | Rice. Jinwen Zhu. Zhejiang University, China Efficacy of Imazamox Nanoformulations in Controlling Barnyardgrass and Weedy Rice. Sivia Fogliatto. University of Torino, DISAFA, Italy |
| P-IWM-08 P-IWM-09 | Efficacy of Imazamox Nanoformulations in Controlling Barnyardgrass |
| | Efficacy of Imazamox Nanoformulations in Controlling Barnyardgrass and Weedy Rice. Sivia Fogliatto. University of Torino, DISAFA, Italy Physiological and Biochemical Response of Common Ragweed (<i>Ambrosia artemisiifolia</i> L.) Following Foliar Treatment with Phenolic Acids. Maja Scepanovic. University of Zagreb Faculty of Agriculture, |

| P-CWM-01 | Efficacy of Herbicide Doses in the Control of <i>Sporobolus indicus</i> (L.) R. Br. Arthur Nardi Campalle. School of Agricultural and Veterinary Sciences, São Paulo State University, Brazil |
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| P-CWM-02 | Optimized Extrapolation Methods Enhance Prediction of <i>Elsholtzia densa</i> Distribution on the Tibetan Plateau. Zeyuan Liu. Qinghai Academy of Agricultural and Forestry Sciences, Qinghai University, China |
| P-CWM-03 | Fabrication of Pendimethalin-Loaded Polymer Fluid Carrier for Long- Term Weed Control. Xueping Huang. Institute of Plant Protection and Agro-Products Safety, Anhui Academy of Agricultural Sciences, China |
| P-CWM-04 | Evaluation of Weed Control Efficacy and Safety of Pyraquinate and Its Mixtures in Direct-Seeded Rice Fields. Yuan Kong. Institute of Plant Protection, Shandong Academy of Agricultural Sciences, China |
| P-CWM-05 | Enhancing Glyphosate Translocation to Underground Propagules of <i>Cyperus rotundus</i> via Metal Nanoparticles. Srimathi K. Department of Agronomy, Tamil Nadu Agricultural University, India |
| P-CWM-06 | |
| P-CWM-07 | |
| P-CWM-08 | Arylex + Picloram 58 g/L EC Broadleaf Weeds Control in Oilseed Rape in China. Jiajun Wu. Corteva (China) Investment Co., Ltd., China |
| P-CWM-09 | |
| P-CWM-10 | Effect of Weed Management with Zinc and Iron Biofortification on Weed Density and Yield of Finger Millet (<i>Eleusine coracana</i> L.). Lalchand Kumawat. Rajasthan College of Agriculture, Maharana Pratap University of Agriculture and Technology, India |

| 20th-24th Oct. | Weed Omics, Adaptation and Evolution |
|----------------|--|
| Location: | L5 |
| P-Omics-01 | Chromosome-Level Assemblies of the Allohexaploid Genomes of <i>Conyza sumatrensis</i> and <i>Conyza bonariensis</i> . Anthony Gomes . Federal Rural University of Rio de Janeiro, Brazil & Colorado State University, the United States |
| P-Omics-02 | OsGS2 Editing by CRISPR/Cas9 Technique to Improve Resistance of Rice to Glufosinate. Yanmei Jiang . South China Agricultural University, China |

| P-Omics-03 | Establishment Status and Identification of <i>Artemisia</i> Species from Commercial Revegetation Seeds. Kento Kita . Graduate School of Agriculture, Kyoto University, Japan |
|----------------|--|
| P-Omics-04 | Chenopodium album Genetically and Phenologically Distinct from the Native Populations Establishes at a Grain Landing Port in Japan. Shinichi Tanaka. Graduate School of Agriculture, Kyoto University, Japan |
| P-Omics-05 | |
| P-Omics-06 | Unveiling the Growth Mechanisms of <i>Convolvulus arvensis</i> L.: Evolutionary and Expression Insights into WOX and CLE Gene Families. Zilin Zhang . Institute of Cotton Research of Chinese Academy of Agricultural Sciences, China |
| 20th-24th Oct. | Advanced Technologies for Weed Detection & Management |
| Location: | L5 |
| P-AT WDM-01 | Early-Stage Weed Identification in Maize and Soybean Fields Using Mask R-CNN. Dong-Hwan Kim . Seoul National University, Korea |
| P-AT WDM-02 | · |
| 20th-24th Oct. | Biological Weed Control/ Biohercide Workshop |
| Location: | L5 |
| | |
| P-BC-BWP-01 | Integrative Analyses of Metabolome and Transcriptome Identifies the Potential Mechanism of <i>Aureobasidium pullulans</i> PA-2 Inhibiting |
| P-BC-BWP-01 | Integrative Analyses of Metabolome and Transcriptome Identifies the Potential Mechanism of <i>Aureobasidium pullulans</i> PA-2 Inhibiting <i>Chenopodium album</i> L. growth. Liang Cheng . Qinghai Academy of |

| 20th-24th Oct. | Herbicide Resistance and Management |
|----------------|---|
| Location: | L5 |
| P-HRM-01 | Sensitivity Assessment of Three Dominant Weeds in Maize Fields to Glufosinate. Yuxin Wang . Institute of Plant Protection, Chinese Academy of Agricultural Sciences, China |

Herbicide Resistance to Imazethapyr and Glyphosate in *Bidens pilosa* L. and Assessment of Glycine max L. Biological Response Using Dose— P-HRM-02 Response Curves in Zambia. Admore Nyaguze. International Institute of Tropical Agriculture, Zambia Genetic Diversity and Population Structure Analysis of a Diverse P-HRM-03 Collection of Bidens pilosa L. in Zambia Using DArT SNP Markers David Chikoye. International Institute of Tropical Agriculture, Zambia **P-HRM-04** P-HRM-05 Underlying Genetic and Epigenetic Mechanisms Determining Gene-Flow Risk Difference of A- or C-Chromosome Transgenes from **P-HRM-06** Herbicide-Resistant *Brassica napus* to *B. juncea*. Xiaoling Song. Nanjing Agricultural University, China Simulated Herbicide Mixtures Delay Both Monogenic and Polygenic **P-HRM-07** Resistance Evolution in Weeds. Wei Zheng. Bayer CropScience (China) Ltd., China Proactive Resistance Management for Corn Weed Control with P-HRM-08 Capreno. Karanpreet Singh. Bayer CropScience Ltd., India Bioactivity of Nano-Quinclorac Against Different Resistant Echinochloa crus-galli Populations in Rice Fields: Biological Activity and Evaluation of Rice Safety. Guolan Ma. Institute of Plant Protection, **P-HRM-09** Hunan Academy of Agricultural Sciences, Hunan Provincial Key Laboratory of Weed Biology and Safety Prevention and Control, China Study on Glufosinate Resistance and Herbicide Screening for *Eleusine* P-HRM-10 indica in Guangdong Province. Ying Chen. College of Agriculture, South China Agricultural University, China Resistance to Three Acetyl-CoA Carboxylase (ACCase) Inhibitors and Diversity of Target Mutations in Digitaria spp. from Rice Fields of P-HRM-11 Jiangsu Province. Qian Yang. Jiangsu Lixiahe District Institute of Agricultural Sciences, China Development of Seedling-Based Herbicide Resistance Testing for Echinochloa spp. and Their Distribution in Fukushima Prefecture. **P-HRM-12** Manabu Yoshikawa. Hama-Dori Research Centre, Fukushima Agricultural Technology Centre, Japan Preliminary Evaluation of Herbicide Resistance Levels of Echinochloa P-HRM-13 spp. from Major Paddy Fields in China. Guifang Duan. GreenTech Laboratory, CAC International, China

| P-HRM-14 | The Resistance Mechanism of <i>Amaranthus retroflexus</i> L. to Fluoroglycofen-ethyl in Soybean Fields. Shenao Hu. Institute of Plant Protection, Chinese Academy of Agricultural Sciences, China |
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| P-HRM-15 | Interaction of Pinoxaden Mixed with Broadleaf Herbicides on Different Weed Species in Wheat. Hamidreza Sasanfar. Iranian Research Institute of Plant Protection, Agricultural Research, Education and Extension Organization (AREEO), Iran |
| P-HRM-16 | Dose-response and Shikimic Acid Accumulation on Palmer amaranth Biotypes from Georgia. Pedro Augusto Silva Martins. São Paulo State University, Brazil |
| 20th-24th Oct. | Progress in Weed Technology in China |
| Location: | L5 |
| PWTChina-01 | Effects of Four Volatile Organic Compounds on Aegilops tauschii Germination. Cunyu Wei. Institute of Plant Protection, Chinese Academy of Agricultural Sciences, China |
| PWTChina-02 | Genome Wide Identification ABC Transporters Related to Glufosinate Ammonium Resistance in <i>Eleusine indica</i> (L.) Gaertn. Wen Chen . South China Agricultural University, China |
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| 20th-24th Oct. | Student Posters |
| 20 th -24 th Oct. | Student Posters L5 |
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| Location: | |
| Location: Stu-01 | Investigating Germination and Seeding Growth Traits Related to Adaptation to Roadside Environments in Winter Annual Plants. Kanau |
| Location: Stu-01 Stu-02 | Investigating Germination and Seeding Growth Traits Related to Adaptation to Roadside Environments in Winter Annual Plants. Kanau Mitsueda. Kyoto University, Japan Comparison of Growth Performance of Rramie (<i>Boehmeria nivea</i> L.) through Stem Cutting Propagation under Varying Conditions. Mako |
| Location: Stu-01 Stu-02 Stu-03 | Investigating Germination and Seeding Growth Traits Related to Adaptation to Roadside Environments in Winter Annual Plants. Kanau Mitsueda. Kyoto University, Japan Comparison of Growth Performance of Rramie (<i>Boehmeria nivea</i> L.) through Stem Cutting Propagation under Varying Conditions. Mako Munechika. Shizuoka University, Japan Plant Opals on the Surface of <i>Setaria</i> spp. Seeds Are Related to Seed |

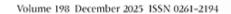
| Stu-07 | Insect Antifeedants from <i>Mikania micrantha</i> . Taisei Yamaguchi . Department of Applied Biological Chemistry, School of Agriculture, Kindai University, Japan |
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| Stu-08 | Insect Antifeedants from Aerial Parts of <i>Sphagneticola trilobata</i> . Tomoka Shiba . Department of Applied Biological Chemistry, School of Agriculture, Kindai University, Japan |
| Stu-09 | Insect Antifeedant Activity of Triterpene Lactones from <i>Physalis</i> spp Atsuki Takeuchi . Department of Applied Biological Chemistry, School of Agriculture, Kindai University, Japan |
| Stu-10 | Mutagenesis and Transcriptomic Analysis of a Highly Pathogenic <i>Alternaria alternata</i> DT-DYLC against <i>Chenopodium album</i> L. Yuzhe Wang . Qinghai Academy of Agricultural and Forestry Sciences, Qinghai University, China |
| Stu-11 | Exploring Allelopathic Potential of Rice Bran By-Products for Weed Management. Pijittra Learkin . Faculty of Agriculture Nature Resources and Environment, Naresuan University, Thailand |
| Stu-12 | Evaluation of Chinese Milk Vetch (<i>Astragalus sinicus</i>) for Weed Control in Regenerative Winter Cropping Systems. Moe Takida . Shizuoka University, Japan |
| Stu-13 | Investigating the Role of Catalase in Herbicide Activity. Catherine J Traxler . Colorado State University, the United States |
| Stu-14 | Remote Assessment of Soybean Damage and Yield Loss Caused by Herbicides Using UAV Multispectral Imagery. Yoonsang Cho . Seoul National University, Korea |
| Stu-15 | Physiological and Biochemical Response of Common Ragweed (<i>Ambrosia artemisiifolia</i> L.) Following Foliar Treatment with Phenolic Acids. Laura Pismarović . Faculty of Agriculture, University of Zagreb, Croatia |
| Stu-16 | Assessing Stage-Specific Herbicide Sensitivity in <i>Abutilon theophrasti</i> Using Spectral Image Analysis. YunSeo Kang . Seoul National University, Korea |
| Stu-17 | Panicum maximum Jacq. cv. (Mombaza) Resistant to Diuron Herbicide in Pineapple Fields in Costa Rica. Fernando Ramirez-Muñoz. Universidad Nacional, Costa Rica |
| Stu-18 | |
| Stu-19 | Metabolism of <i>CYP96A146</i> from <i>Descurainia sophia</i> L. to Mode Substrates and Herbicides. Fan Xu . China Agricultural University, China |

| Stu-20 | Mechanism of Cross-Resistance to ALS-Inhibiting Herbicides in <i>Fimbristylis littoralis</i> : Trp-574-Leu Mutation and Enhanced Metabolism. Yueyue Shi . Anhui Science and Technology University, China |
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| Stu-21 | Studies on the Mechanism of <i>Alopecurus japonicus</i> Resistance to Clodinafop-Propargyl in Wheat Fields. Rui Cheng . Anhui Science and Technology University, China |
| Stu-22 | Light Competition by Smooth Pigweed Resulted in Soybean Growth and Yield Reduction. Jinwoo Shin . College of Agriculture and Life Sciences, Seoul National University, Korea |
| Stu-23 | Effect of Sowing Time and Phosphorus Fertilization under Different Establishment Methods on Weed Dynamics of Chickpea (<i>Cicer arietinum</i> L.) Mayank Kumar . College of Agriculture, Chaudhary Charan Singh Haryana Agricultural University, India |
| Stu-24 | Investigation of Auxin Resistance in Broadleaf Weeds in Australia. <u>Yuanlin Qi</u> . The University of Adelaide, Australia |
| Stu-25 | Glyphosate and Aminomethylphosphonic Acid Contents in Soybean Field Soils Across the Americas: Contrast between Brazil and Canada. Celso Franca. Universidade Estadual de Maringá, Brazil |
| Stu-26 | Optimizing Mechanical Weeding in Transplanted Rice: Effects of Timing and Frequency on Weed Control, Community Dynamics, and Crop Yield. Dexiao Bu . Nanjing Agricultural University, China |
| Stu-27 | Effect of Dehydrocostus Lactone on Soil Microorganisms. Longxiang Yang. Institute of Plant Protection, Chinese Academy of Agricultural Sciences, China |
| Stu-28 | Adaptation Mechanisms of <i>Solanum nigrum</i> L. to Saline–Alkali Environments. Zhiqiang Tan . Institute of Plant Protection, Chinese Academy of Agricultural Sciences, China |
| Stu-29 | Predicting the Potential Distribution of <i>Eriochloa villosa</i> in Northeast China's Spring Maize Fields Using a MaxEnt-R Framework: Implications for Climate Change Early Warning. Wenli Liu. Shenyang Agricultural University, China |
| Stu-30 | PfUGT73C5 confer metabolic resistance to fenoxaprop-P-ethyl in <i>Polypogon fugax</i> . Qi Li. Anhui Agricultural University, China |
| Stu-31 | Enantioselection Bioactivity Disturbances in the Photosynthesis of <i>Echinochloa crus-galli</i> Caused by Flusulfinam, a Novel Chiral Herbicide. Junqi Zhu. Guangxi University, China |
| Stu-32 | Basing Target Enzyme Study the Enantioselective Bioactivity Action Mechanism of Flusulfinam, a Novel HPPD Inhibitor Herbicide. Shiling Liu. Guangxi University, China |

| Stu-33 | and Soil Environments. Feng Chen. Institute of Plant Protection, Chinese Academy of Agricultural Sciences, China |
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| Stu-34 | Establish the Safety Threshold for Fluridone on Rotation Maize and Develop Rice Husk Biochar Regulation Strategy. Yuzhu Wang. Institute of Plant Protection, Chinese Academy of Agricultural Sciences, China |
| Stu-35 | Survey of Weed Seed Contaminants in Imported Seeds for Cultivation in Japan. Kadomoto Yuka . Kyoto University, Japan |

PROGRAMME 24th October 2025 Friday

| 16:00-17:00 | Close Ceremony |
|---------------|-------------------------------|
| Location: | L5 Nanjing Hall |
| Chair: | Samunder Singh; Chuanli Zheng |
| 18:00 - 21:00 | Dinner |





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