



The 11th International Conference on
Agricultural and Biological Sciences (ABS 2025)

CONFERENCE PROGRAM

July 21st-24th, 2025
Matsue, Japan

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* The program and abstract proceedings are for ABS 2025 Conference Academic Exchange Only.

Part I Conference Schedule Summary

July 21st, 2025 / Japan Standard Time (UTC+9)

Location: In front of Small Hall, Kunibiki Messe

14:00-18:00 On-site Registration

Note for registration:

* Please show us your name or paper ID for registration.

* Please pick up all the conference materials at the registration desk (Name Card, Conference Program, Lunch & Dinner Tickets, etc.).

July 22nd, 2025 / Japan Standard Time (UTC+9)

Location: Meeting Room 501, Kunibiki Messe

Opening Ceremony and Keynote Speeches are chaired by:

Prof. Emeritus Hisayoshi Hayashi, University of Tsukuba, Japan

Prof. Mikihisa Umehara, Toyo University, Japan

09:25-09:35	Opening & Welcome Speech <i>Prof. Emeritus Hisayoshi Hayashi, University of Tsukuba, Japan</i>
09:35-10:10	Keynote Speech 1: A Zea Genus-specific Micropeptide Controls Kernel Dehydration in Maize <i>Prof. Jianbing Yan, Huazhong Agricultural University, China</i>
10:10-10:25	Group Photo (At the entrance of Kunibiki Messe)
10:25-10:45	Coffee Break
10:45-11:20	Keynote Speech 2: Physiological Analysis of Strigolactones Using Mutant Collections in Micro-Tom <i>Prof. Mikihisa Umehara, Toyo University, Japan</i>
11:20-11:55	Keynote Speech 3: Agricultural Science and Food Education: Contributing to the development of healthier human generations <i>Prof. Emeritus Hisayoshi Hayashi, University of Tsukuba, Japan</i>
11:55-12:30	Keynote Speech 4: Applications of Large Language Models, Prompt Engineering, and AI Agents for Biology <i>Prof. Dong Xu, University of Missouri-Columbia, USA</i>
12:30-13:30	Lunch Break
13:30-17:40	Invited & Oral Session 1: Microbiology and Biotechnology

July 23rd, 2025 / Japan Standard Time (UTC+9)

Location: Meeting Room 501, Kunibiki Messe

09:00-12:10 **Invited & Oral Session 2: Agricultural Biotechnology and Crop Improvement**

12:10-13:30 **Lunch Break**

13:30-16:25 **Invited & Oral Session 3: Soil Science and Agricultural Environmental Science**

16:25-17:30 **Coffee Break and Poster Session**

17:30-20:30 **Awarding Banquet at YUUSHIEN Garden in Daikonshima** (Please gather at the entrance of Kunibiki Messe)

July 24th, 2025 / Japan Standard Time (UTC+9)

09:10 **Departure from Kunibiki Messe** (Please gather at the entrance of Kunibiki Messe)

09:30-10:30 **Visit Matsue Castle**

10:40-11:40 **Horikawa Sightseeing Boat Ride**

11:50-12:40 **Lunch Break**

13:00-15:00 **Matsue Vogel Park**

15:30 **Arrival at JR Matsue Station at 15:30** (Subject to no traffic Delays)

Notes: Please note that the itinerary, including the order of visits and time spent at each location, is subject to change based on actual circumstances.

Part II Keynote Speeches

Keynote Speech 1: A Zea Genus-specific Micropeptide Controls Kernel Dehydration in Maize



Prof. Jianbing Yan

Professor of Plant Genetics in the College of Plant Science and Technology/National Key Laboratory of Crop Genetic Improvement, Huazhong Agricultural University, China

President of Huazhong Agricultural University, China

Biography: Dr. Yan received his B.S. in 1999 and Ph. D in 2003 from Huazhong Agricultural University (HZAU). 2003-2006, he worked in China Agricultural University as lecture, associate professor. From 2006-2008, he did his post doctorate research in International Maize and Wheat Improvement Center (CIMMYT) and Cornell University. From 2009 to 2011, he worked in CIMMYT as an associate scientist and scientist. 2011-now, he works in HZAU as a professor. His research interests focus on: Maize Genomics and the Genetic Improvement of Quality Traits based on big data and Single Cell Sequencing Technology Development and Application in Plants. Till date, he published more than 100 papers in international journals including of Nature Genetics, Nature Communications, PNAS, PLoS Genet, Plant Cell, New Phytologist, Molecular Plant and so on.

Home page: www.maizego.org

Honors:

- Ø Japan International Award for Young Agricultural Researchers 2010
- Ø Dupont Young Professor Award 2011
- Ø Hubei Chutian Scholar Professor, 2011
- Ø New Century Excellent Talents in University, 2011
- Ø Natural Science Foundation for Excellent Youth, 2012
- Ø Hubei “Five Four” Youth Medal, 2012
- Ø The National Top-notch Youth Support Program, 2013
- Ø China National Funds for Distinguished Young Scientists, 2015
- Ø Yangtze River Scholars Distinguished Professor, 2016
- Ø Overseas Chinese Contribution Award, 2018
- Ø The L. Stadler Mid-Career Award, 2022
- Ø The 3rd National Award for Outstanding Innovation, 2023

Abstract: Kernel dehydration rate (KDR) is a crucial production trait that affects mechanized harvesting and kernel quality in maize; however, the underlying mechanisms remain unclear. Here, we identified a quantitative trait locus (QTL), qKDR1, as a non-coding sequence that regulates the expression of qKDR1 REGULATED PEP- TIDE GENE (RPG). RPG encodes a 31 amino acid micropeptide, microRPG1, which controls KDR by precisely modulating the expression of two genes, ZmETHYLENE-INSENSITIVE3-like 1 and 3, in the ethylene signaling pathway in the kernels after filling. microRPG1 is a Zea genus-specific micropeptide and originated de novo from a non-coding sequence. Knockouts of microRPG1 result in faster KDR in maize. By contrast, overexpression or exogenous application of the micropeptide shows the opposite effect both in maize and Arabidopsis.

Our findings reveal the molecular mechanism of microRPG1 in kernel dehydration and provide an important tool for future crop breeding.

Keynote Speech 2: Physiological Analysis of Strigolactones Using Mutant Collections in Micro-Tom



Prof. Mikihisa Umehara

Department of Biological Resources, Graduate School of Life Sciences, Toyo University, Japan

Biography: Mikihisa UMEHARA is a Professor of Department of Biological Resources and Graduate School of Life Sciences, Toyo University, Japan. His major is plant physiology and plant biotechnology. He graduated from the University of Tsukuba in 1997, finished a doctor's course at the Graduate School of Biological Sciences, the University of Tsukuba in 2004, and obtained Ph.D. in Science. He worked on onion breeding in Department of Biotechnology, Fukuoka Agricultural Research Center from 2004 to 2007. He joined RIKEN Plant Science Center as a special postdoctoral researcher in 2007 and worked on a class of plant hormones, strigolactones. In 2011, he moved to Toyo University as a associate professor, and became a full professor in 2015.

Abstract: Shoot branching is an important trait in both agriculture and horticulture, as the number of axillary buds directly influences crop yield and seed production. Strigolactones (SLs) are a class of plant hormones that inhibit shoot branching in plants. In SL biosynthesis, carlactone, a biosynthetic precursor of SLs, is synthesized from β -carotene through sequential reactions catalyzed by the β -carotene isomerase DWARF27 (D27) and carotenoid cleavage dioxygenases 7 and 8 (CCD7 and CCD8). Carlactone is then converted to carlatonoic acid (CLA) via oxidation by cytochrome P450 encoded by the CYP711A gene family. CLA is further metabolized into various types of SLs. To date, more than 30 canonical and non-canonical SLs have been identified from various plants. However, the specific bioactive SLs for shoot branching inhibition remain unidentified. In our previous research, we collected SL biosynthesis mutants in the tomato cultivar Micro-Tom to evaluate the roles of SLs in tomato, but SL signaling mutants were not available. Bioactive SLs are perceived by DWARF14 (D14), a member of the α/β -fold hydrolase superfamily. Since bioactive phytohormones tend to accumulate in signaling mutants, we hypothesized that SLs involved in shoot branching inhibition might be enriched in *sld14* mutants. Therefore, we generated *sld14* mutants in Micro-Tom by genome editing. Our analysis revealed that 16-hydroxymethyl carlactonoate (16-HO-MeCLA) significantly accumulated in the nodes of the mutants compared to the wild type. We also found that CYP722A is associated with the 16-hydroxylation of CLA. 16-HO-MeCLA or the metabolites may serve as bioactive SLs. To further elucidate the physiological roles of 16-HO-MeCLA, we plan to investigate the function of the CYP722A gene.

Keynote Speech 3: Agricultural Science and Food Education: Contributing to the Development of Healthier Human Generations



Prof. Emeritus Hisayoshi Hayashi
University of Tsukuba, Tsukuba, Japan

Biography: Dr. Hisayoshi Hayashi graduated from University of Tsukuba in 1980. After working as an extension officer in Nagano Prefecture for one year, he moved to Chushin Agricultural Experiment Station, where he worked in the field crop cultivation department for six years. He then moved to University of Tsukuba, where he served as a professor at the Laboratory of Crop Production Systems and the Laboratory of Crop Science, before being appointed professor emeritus at University of Tsukuba in April 2023. He is a former president of the Japanese Society of Farm Work Research and a fellow of Japan Association of International Commission of Agricultural and Biosystems Engineering. Since April 2023, he has been leading training programs for extension workers, researchers, and government officials in developing countries as a training advisor at Japan International Cooperation Agency Tsukuba Center (JICA Tsukuba).

Abstract: The primary goal of the educational activities of universities is to provide specialized education for the development of human resources in the relevant field. On the other hand, in recent years, universities are also required to contribute to society. Agricultural science is an academic discipline that plays an important role in the agricultural industry, and its scope is extremely diverse. It is also a field related to food, which is directly related to human survival. With the modernization of society, roles have become increasingly divided, and people live by eating food without understanding how it is produced. As the world population exceeds 10 billion in the 21st century, and hunger is difficult to solve, it is necessary to develop food education that will develop all people to understand food production.

Keynote Speech 4: Applications of Large Language Models, Prompt Engineering, and AI Agents for Biology



Prof. Dong Xu

*Department of EECS and C.S. Bond Life Sciences Center
University of Missouri-Columbia, USA*

Biography: Dong Xu is Curators' Distinguished Professor in the Department of Electrical Engineering and Computer Science, with appointments in the Christopher S. Bond Life Sciences Center and the Informatics Institute at the University of Missouri-Columbia. He obtained his Ph.D. from the University of Illinois, Urbana-Champaign in 1995 and did two years of postdoctoral work at the US National Cancer Institute. He was a Staff Scientist at Oak Ridge National Laboratory until 2003 before joining the University of Missouri, where he served as Department Chair of Computer Science during 2007-2016. Over the past 30 years, he has conducted research in many areas of computational biology and bioinformatics, including single-cell data analysis, protein structure prediction and modeling, protein post-translational modifications, protein localization prediction, computational systems biology, biological information systems, and bioinformatics applications in human, microbes, and plants. His research since 2012 has focused on the interface between bioinformatics and deep learning. He has published more than 500 papers with more than 28,000 citations and an H-index of 89 according to Google Scholar. He was elected to the rank of American Association for the Advancement of Science (AAAS) Fellow in 2015 and American Institute for Medical and Biological Engineering (AIMBE) Fellow in 2020.

Abstract: Large language models (LLMs), trained on massive datasets, are opening new frontiers in biology, especially when combined with prompt-based learning, retrieval-augmented generation (RAG), and AI agents. This presentation showcases our work leveraging these tools across multiple biological domains, such as plant science. We developed RAG and prompt refinement techniques to improve gene relationship prediction. We built AI agents for protein annotation and Fatplants (<https://fatplants.net>), our database of plant lipid-related genes and metabolism. In protein modeling, we introduced S-PLM, a contrastive learning-based, 3D structure-aware protein language model that enhances sequence-based predictions. Prompting protein language models further boosted tasks like signal peptide and targeting signal prediction. We also applied prompt-based learning to large single-cell RNA-seq models, improving several single-cell analysis tasks. In addition, we developed scPlantAnnotate, a plant-specific large single-cell RNA-seq model, for plant cell type annotation that significantly outperforms current reference-based methods across four plant species. Our findings demonstrate the transformative potential of LLMs and AI agents in advancing biological research.

Part III Oral Presentations

General Guidelines

- ✚ All presentation times are shown in Japan Standard Time (UTC+9).
- ✚ Duration for Invited Oral Presentation: 20 minutes of presentation, including 3-5 minutes of Q&A.
- ✚ Duration for Regular Oral Presentation: 15 Minutes of presentation, including 2-3 minutes of Q&A.
- ✚ All presenters are requested to reach the Session Room prior to the scheduled time and complete their presentation on time.
- ✚ Presenters should prepare Power Point or PDF Files for Presentation with Paper ID (ABS****) marked on the last page.
- ✚ A signed and stamped presentation certificate will be issued after the presentation.

Oral Presentation Guidelines

Devices Provided by the Conference Organizer:

- ✚ Laptops (with MS-Office & Adobe Reader) & Projectors & Screen
- ✚ Laser Sticks
- ✚ Microphones
- ✚ Please send us the PowerPoint once it is ready and have the PPT back up in a U-disk. For presenters who do not send the PowerPoint, please save it in the laptop of the corresponding session 15 min in advance. Kindly tell the Session Chair (before the start of your session) that you are present.

Best Oral Presentation Selection Procedure

ONE best presentation will be selected from EACH session based on the following criteria:

- | | | |
|---------------------|----------------------------|-------------------------|
| ✓ Research Quality | ✓ Presentation Performance | ✓ Presentation Language |
| ✓ PowerPoint Design | ✓ Effective Communications | |

Selection Procedure

- An assessment sheet (see picture) will be delivered to listeners before the session starts;
- When the session finishes, each listener is required to fill out the sheet (he/she can vote for two excellent presentations) and give it to the Session Chair;
- The Session Chair will count the votes and select the best oral presentation with the most votes. If there is a tie, the Session Chair will make the final decision.

Best Oral Presentations Award

The Best Oral Presenter from each session will be awarded an official certificate and a complimentary registration to the ABS 2026.

Sample of Assessment Sheet

Oral Presentation Assessment

Dear participants,

After carefully listening to the presentations of this session, please kindly recommend two excellent Oral Presentations with reference to the following evaluation criteria.

The Session Chair will count the votes from each presentation and select ONE Best Oral Presentation in this session. If there is a tie, the Session Chair will make the final decision.

The winner will be announced on the official website after the conference.

You can refer to the following criteria for best oral selection:

Items	Assessment
Content	Right, Logical, Original, Well-Structured
Language	Standard, Clear, Fluent, Natural
Performance	Spirited Appearance, Dress Appropriately, Behaves Naturally
PowerPoint	Layout, Structure, Typeset, Animation, Multimedia
Reaction	Build a Good Atmosphere, Speech Time Control Properly

Please write down the paper ID and give reasons for your recommendation:

Paper ID	Reasons

Evaluated by: _____

Paper ID: _____

Note: Please fill it out and give it to the Session Chair or assistant so that the Best Oral Presentation can be selected.

Invited & Oral Session 1: Microbiology and Biotechnology

Time: 13:30-17:40, July 22nd, 2025

Location: Meeting Room 501, Kunibiki Messe

Session Chairs:

13:30-15:25 Prof. Fufeng Liu, Tianjin University of Science & Technology

15:50-17:40 Prof. Huawen Fu, National Tsing Hua University

13:30-13:50	ABS4716 (Invited)	Combining genes from different yeast species in a non-GMO way through interspecific hybridization <i>Prof. Matthias Sipiczki, University of Debrecen, Hungary</i>
13:50-14:10	ABS4725 (Invited)	Immobilization of sucrose isomerase and its application in the production of isomaltulose <i>Prof. Fufeng Liu, Tianjin University of Science & Technology, China</i>
14:10-14:25	ABS4739	Rational design and high-throughput screening of D-allulose 3-epimerase <i>Dr. Hui-Min Qin, Tianjin University of Science & Technology, China</i>
14:25-14:40	ABS4726	Research on pathogen detection technology based on CRISPR/Cas biosensing systems <i>Dr. Lijuan Yin, Tianjin University of Science & Technology, China</i>
14:40-14:55	ABS4683	Unravelling the stress tolerance mechanisms of lacticaseibacillus paracasei zhang - insights into the viable but non-culturable state <i>Ms. Ran Gao, Inner Mongolia Agricultural University, China</i>
14:55-15:10	ABS4685	Screening of entomopathogenic fungi to effective whitefly nymph management: Enzymatic activity and secondary metabolites analysis using FTIR <i>Ms. Sudarat Pimkhonburee1, Suranaree University of Technology, Thailand</i>
15:10-15:25	ABS4752	Microbial activity and community characteristics of organic and conventional farmland <i>Ms. Young mi Lee, National Institute of Agricultural Science, Rural Development Administration, South Korea</i>
15:25-15:50	Coffee Break	
15:50-16:10	ABS4719 (Invited)	Helicobacter pylori neutrophil-activating protein: From a virulence factor to a potential therapeutic target <i>Prof. Huawen Fu, National Tsing Hua University</i>
16:10-16:30	ABS4730 (Invited)	Integrated strategies for evaluating natural products in hyperuricemia and gout management: from uricosuric effects to anti-inflammatory effects <i>Assoc. Prof. Ting Wu, Huazhong Agricultural University, China</i>
16:30-16:50	ABS4692 (Invited)	Real time capacitance variation monitoring due to cell-drug reactions using single and multi-well array ECIS <i>Prof. Moongyu Jang, Hallym University, South Korea</i>

16:50-17:10	ABS4636 (Invited)	Summer-ready moths: innovations in bamboo borer breeding practices <i>Assoc. Prof. Manaporn Manaboon, Chiang Mai University, Thailand</i>
17:10-17:25	ABS4609	Identification of plastic-degrading bacteria in the human gut <i>Prof. Sukkyoo Lee, Daegu Gyeongbuk Institute of Science and Technology, South Korea</i>
17:25-17:40	ABS4780	Development of a photoinduced nuclear translocation thiophene-based fluorescent drug to increase anticancer efficiency of doxorubicin <i>Mr. Thanh Dat Dinh, National Chung Hsing University</i>

Video Presentation:

ABS4773	How microfluidics shape light in scarab beetle <i>Dr. Danica Pavlović, Institute of Physics Serbia, Serbia</i>
ABS4770	Evaluation of amaranth bioactive compounds with hypoglycemic effect in murine in vivo models and human pilot phase <i>Dr. Leslie Becerril Serna, University of Valle de Atemajac, Mexico</i>

Invited & Oral Session 2: Agricultural Biotechnology and Crop Improvement

Time: 09:00-12:10, July 23rd, 2025

Location: Meeting Room 501, Kunibiki Messe

Session Chairs:

09:00-10:35 Prof. Yuan-Ming Zhang, Huazhong Agricultural University, China

10:50-12:10 Dr. Jariya Roddee, Suranaree University of Technology, Thailand

09:00-09:20	ABS4711 (Invited)	Waste mushroom fungi beds as source of good biostimulants which gives solution for rice yielding and grain quality problems under high temperature stress <i>Prof. Kimiko Itoh, Niigata University, Japan</i>
09:20-09:35	ABS4687	Advancing multi-technology approaches for selection of rice varieties resistant to feeding by brown planthopper (<i>nilaparvata lugens</i>) <i>Dr. Jariya Roddee, Suranaree University of Technology, Thailand</i>
09:35-09:50	ABS4649	The effect of biological treatment of soybean in organic farming on production and quality parameters <i>Assoc. Prof. Petr Konvalina, University of South Bohemia, Czech Republic</i>
09:50-10:05	ABS4686	Stomata on bracts and petals as possible mediators in the ant-pollinator conflict of interest of <i>Vachellia cornigera</i> (Leguminosae) <i>Dr. Sandra Luz Gómez-Acevedo, Universidad Nacional Autónoma de México, Mexico</i>
10:05-10:20	ABS4697	¹⁵N-isotope labelling of cover crop and nitrogen recovery by cabbage and subsequent komatsuna: hairy vetch vs. oats <i>Dr. Khin Thawda Win, National Agriculture and Food Research Organization, Japan</i>
10:20-10:35	ABS4696	Development and evaluation for the low-carbon precise pneumatic servo plug tray seeding machine <i>Prof. Hao-Ting Lin, National Chung Hsing University</i>
10:35-10:50	Coffee Break	
10:50-11:10	ABS4652 (Invited)	The resistance mechanism of different ecotype bananas to fusarium wilt of banana <i>Prof. Sijun Zheng, Yunnan Academy of Agricultural Sciences, Alliance of Bioversity and CIAT, China</i>
11:10-11:25	ABS4688	Early detection of cotton verticillium wilt based on generative adversarial networks and hyperspectral imaging technology <i>Dr. Fei Tan, Shihezi University, China</i>
11:25-11:40	ABS4756	The compressed variance component mixed model to identify QTNs and QTN-by-environment and QTN-by-QTN interactions for complex traits <i>Prof. Yuan-Ming Zhang, Huazhong Agricultural University, China</i>

11:40-11:55	ABS4755	<p>Genome-wide association studies and multi-omics analysis unravel genetic architecture of heterosis and identify its candidate genes in maize NCII population</p> <p><i>Dr. Ying Chen, Huazhong Agricultural University, China</i></p>
11:55-12:10	ABS4761	<p>The genetic basis of heterosis for yield-related traits in rice</p> <p><i>Dr. Miaomiao Zhao, Huazhong Agricultural University, China</i></p>

Invited & Oral Session 3: Soil Science and Agricultural Environmental Science

Time: 13:30-16:25, July 23rd, 2025

Location: Meeting Room 501, Kunibiki Messe

Session Chairs:

13:30-15:10 Prof. Seong Kyun Kim, Daegu Gyeongbuk Institute of Science and Technology, South Korea

15:10-16:25 Prof. Ashfaque Ahmed, University of Dhaka, Bangladesh

13:30-13:50	ABS4784 (Invited)	Mangrove forests in the context of food security and climate change <i>Prof. Ashfaque Ahmed, University of Dhaka, Bangladesh</i>
13:50-14:10	ABS4758 (Invited)	Water-efficient artificial phytoextraction technology for the remediation of heavy metal contaminated soil <i>Prof. Seong Kyun Kim, Daegu Gyeongbuk Institute of Science and Technology, South Korea</i>
14:10-14:25	ABS4674	Potential of sophorolipids as promising surfactants for environmental remediation <i>Ms. Glen Lelyn Quan, Saraya Co., Ltd., Japan</i>
14:25-14:40	ABS4747	Effects of no-tillage on soil bulk density under major soil types in China <i>Prof. Lifeng Hu, the Open University of China, China</i>
14:40-14:55	ABS4734	Unmanned aerial vehicle spray plantation to steep slide slopes <i>Assoc. Prof. Pei-Chi Shao, Chang Jung Christian University</i>
14:55-15:10	ABS4655	Overview of landslide ecosystem with super-thick material in Ngasinan village <i>Ms. Anastasia Neni Candra Purnamasari, Universitas Gadjah Mada, Indonesia</i>
15:10-15:25	ABS4668	Driving factors of vegetation cover change in Beibu Gulf urban agglomeration <i>Dr. Zhaogang Fu, Lingnan Normal University, China</i>
15:25-15:40	ABS4705	A study on the coordination of recruiting farm volunteers through green tourism: an interview with JA Tourism & Communications <i>Mr. Hiroyuki Murata, Ohara Graduate School of Accounting, Japan</i>
15:40-15:55	ABS4762	Assessing the conservation and enhancement value of revegetated strips on arthropod assemblages in a pasture landscape <i>Dr. Peter O'Donnell, Kongju National University, South Korea</i>
15:55-16:10	ABS4646	The role of wildlife photography in conservation and scientific research: a visual approach to protecting biodiversity <i>Ms. Tiago Rodrigues, Bioventura Institute, Brazil</i>
16:10-16:25	ABS4777	Innovative foam-based approaches for treating trichloroethylene dense non-aqueous phase liquid: comparative assessment of regular and persulfate-oxidative foams <i>Ms. Xuyen Thi Hong Luong, National Chung Hsing University</i>

Part IV Poster Presentations

Poster Presentation Guidelines

Materials Provided by the Conference Organizer:

- X Racks & Base Fabric Canvases
- Adhesive Tapes or Clamps

Materials Provided by the Presenters:

- Home-Made Posters
- Posters Printed by Conference

Requirement for the Posters:

- Material: not limited
- Size: W1200*H2100**



Display Rack

Best Poster Presentation Selection Procedure

Selection Criteria:

- Research Quality
- Presentation Skill
- Design

Samples of Stickers



Selection Procedure:

- 6-8 volunteers will be invited from the participants to serve as the judges to review the posters (Note: A judge would not have a poster or know the participant exhibiting a poster)
- 2 red stickers and 2 green stickers will be provided to the judges. The red sticker stands for “Research Quality” with a value of 2 points; the green sticker stands for “Presentation Skill and Design” with a value of 1 point
- Each judge will go around the poster session and give the stickers to the poster which he/she thinks is of high quality or well designed and well presented, please be noticed that the judge cannot give 2 red or 2 green stickers to the same poster (one red and one green sticker is acceptable)
- After the poster session, the conference secretary will count the points from each poster and ONE best poster presentation with more points will be selected. If there is a tie, the one with more red (Research Quality) stickers wins.

Nature of the Award

- This award consists of free registration to the ABS 2026 and a certificate
- **TWO** outstanding poster presenters will be selected and honored with certificates during the award ceremony. The winners will be announced at the banquet and featured on the ABS 2026 official website.

List of Posters

Time: 16:25-17:30, July 23rd, 2025

Location: Meeting Room 501, Kunibiki Messe

ABS4677	An anti-mycobacterial drug inhibits dengue virus replication through AMPK-mediated antiviral responses <i>Prof. Jin-Ching Lee, National Sun Yat-sen University</i>
ABS4689	Identification of early resistance-related genes in luffa against <i>fusarium</i> wilt through transcriptome analysis <i>Ms. Yu-Xuan Jiang, National Chung-Hsing University</i>
ABS4690	Trait analysis and genetic structure of hybrid progeny between <i>hydrangea macrophylla</i> and <i>hydrangea chinensis</i> <i>Ms. Chu-Chang Yin, National Chung-Hsing University</i>
ABS4691	Genome-wide association study identifies loci associated with <i>Fusarium oxysporum</i> f. sp. <i>luffae</i> Fomh16 resistance in Luffa <i>Ms. Yu-Chi Liu, National Chung-Hsing University</i>
ABS4694	Genetic architecture and QTL tagging of flowering and fruit traits in bitter gourd using computer-assisted phenotyping <i>Ms. Chi-Chen Wei, National Chung-Hsing University</i>
ABS4695	Transcriptome analysis of early resistance gene expression in luffa against fusarium wilt caused by <i>fusarium oxysporum</i> strain FOLUST <i>Mr. Che-Han Chu, National Chung-Hsing University</i>
ABS4701	Comparative analysis of the plastomes of <i>Iris</i> species from Kazakhstan <i>Dr. Shyryn Almerikova, Institute of Plant Biology and Biotechnology, Kazakhstan</i>
ABS4702	Chloroplast genome sequencing of <i>Lonicera</i> L. species from Kazakhstan: comparative and phylogenetic analyses <i>Dr. Moldir Yermagambetova, Institute of Plant Biology and Biotechnology, Kazakhstan</i>
ABS4703	Characterization of the plastid genomes of <i>Allium</i> species from Kazakhstan <i>Prof. Saule Abugalieva, Institute of Plant Biology and Biotechnology, Kazakhstan</i>
ABS4704	Genetic exploration and genome-wide association study of leaf morphology in sweet potato germplasm from the TARI Chiayi Branch, Taiwan <i>Mr. Chong-Wei Lee, National Chung-Hsing University</i>
ABS4706	Cotton verticillium wilt severity detection based on hyperspectral imaging and SSFNet <i>Mr. Yang Gao, Shihezi University, China</i>
ABS4735	Pressure–temperature interactions affecting hydration resistance in rice paddy <i>Ms. Xin-Fang Li, National Taiwan University</i>
ABS4736	Innovative processing of nano-structured cellulose for Pickering emulsion stabilization <i>Prof. Shih Hsin Chen, National Taiwan University</i>
ABS4740	The study on the synthetic chromosomes rearrangement improving yeast β-glucan and regulatory target localization <i>Dr. Peipei Han, Tianjin University of Science & Technology, China</i>

ABS4741	Sensory evaluation of beer brewed with <i>NTH1</i> and <i>FKS3</i> gene-deleted <i>Saccharomyces cerevisiae</i> <i>Prof. Yun-Chin Chung, Providence University</i>
ABS4754	Development of ultrafast real-time PCR assay for identifying <i>Lupinus angustifolius</i> and <i>Lupinus albus</i> <i>Dr. Ho Soo Lim, National Institute of Food and Drug Safety Evaluation, South Korea</i>
ABS4769	UPLC-QTOF-MS-based metabolomic analysis of tea leaves during fermentation by <i>Eurotium cristatum</i> <i>Dr. Eun-Hye Kim, Tea Industry Institute, South Korea</i>
ABB1344	Design of HPK1 inhibitors for cancer immunotherapy by protein structural biology <i>Dr. Su-Ying Wu, National Health Research Institutes</i>
ABS4783	Effects of growing seasons on growth and yield of 12 parthenocarpic cucumber cultivars cultivated under greenhouse conditions in Thailand <i>Dr. Arak Tira-umphon, Suranaree University of Technology, Thailand</i>

Part V Conference Venue

Kunibiki Messe **(Shimane Prefectural Convention Center)**

The biggest convention center in Shimane prefecture, Kunibiki Messe, is located in the center of Matsue City. There are Exhibition Hall (4,018 sqm), Multipurpose Hall (686 sqm), International Conference Hall (510 sheets), and 19 meeting rooms.

Free Wi-Fi is available in building.



It takes only 7 minutes on foot from JR Matsue Station to Kunibiki Messe

 **Kunibiki Messe**

Kunibiki
Ohashi
Bridge

JR Matsue Station

Kunibiki Messe

Address: 1-2-1 Gakuen Minami Matsue City, Shimane,
JAPAN 690-0826

Tel: +81+852-24-1111

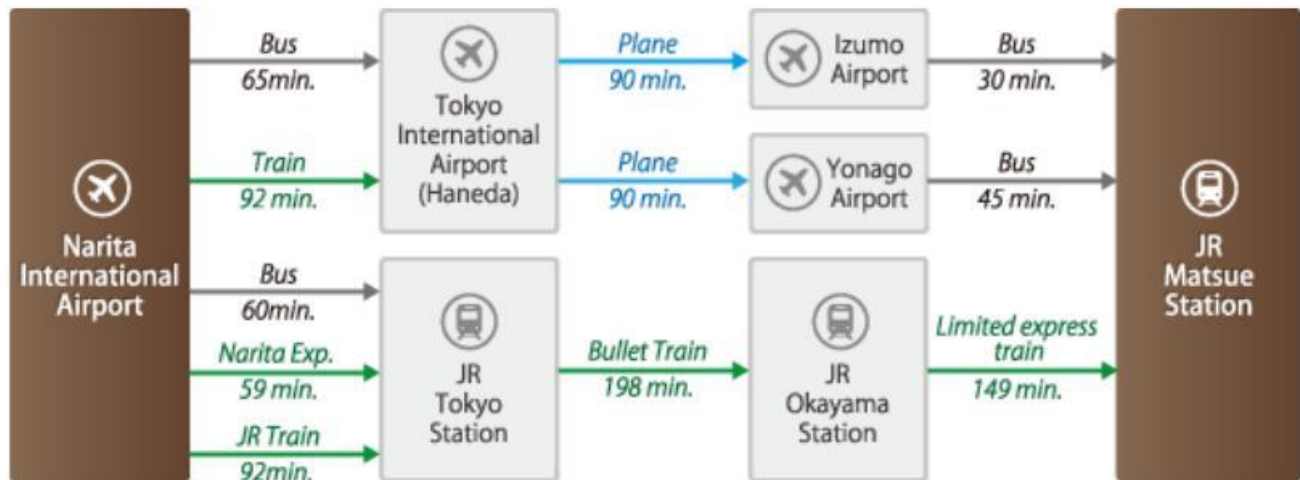
Fax: +81+852-22-9219

E-mail: kunibiki@kunibikimesse.jp

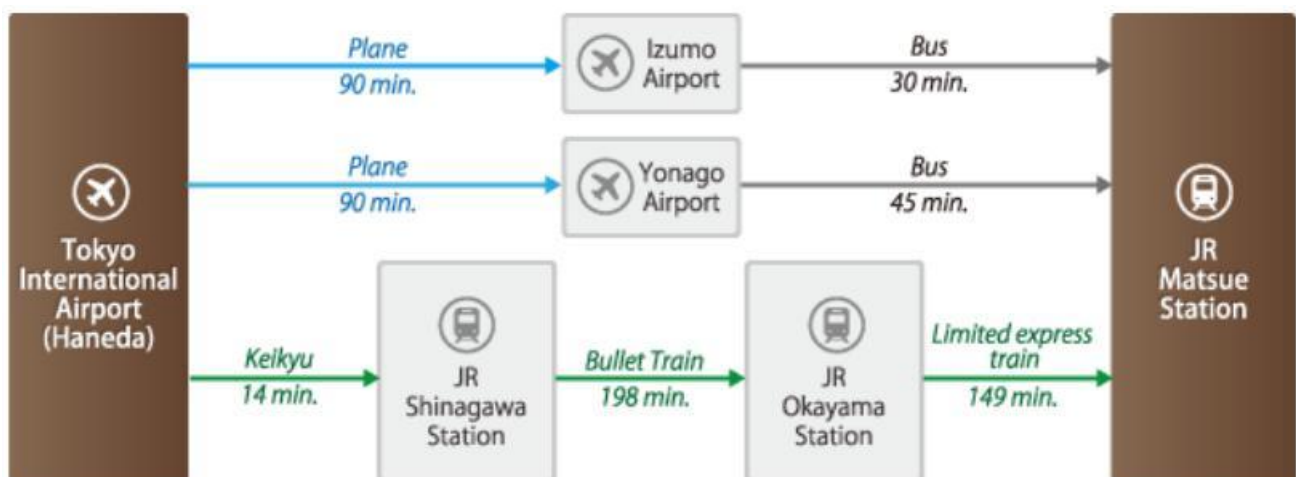
Access to JR Matsue Station:



1. From Narita International Airport



2. From Tokyo International Airport



3. From Kansai International Airport



Part VI Acknowledgements

On behalf of the ABS 2025 Organizing Committee, we would like to take this opportunity to express our sincere gratitude to our participants. We would also like to express our acknowledgements to the Technical Program Committee members who have given their professional guidance and valuable advice as reviewers. For those who contribute to the success of the conference organization without listing the name below, we would love to say thanks as well.

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