2025 K-MPMI International Symposium

존경하는 한국식물병리학회 회원님들께,

안녕하신지요? 추워지는 겨울 항상 건강하시고, 하시는 연구 멋지게 만들어 가고 계시길 바랍니다.

우리 한국식물병리학회 산하 Korean Molecular Plant-Microbe Interactions Research Group (K-MPMI)는
지난 1997년 그 첫걸음을 내 딛은 후 지금까지 MPMI 연구의 기틀을 다짐과 동시에 우수한 연구자를 배출을 지원하는 연구회로서의 역할에 최선을 다하고 있습니다. 나아가 많은 연구자분들께서 지난 10여년동안 세계적 수준의 연구성과를 창출함으로써
이제는 FIRST MOVER로 자리매김하고 있습니다.

우리 K-MPMI의 학문적/사회적 역할을 한단계 고취시키기위하여 2025년 한국-일본-대만 연구자가 참여하는 공동심포지움을 2025년 2월 24일부터 26일까지 서울대학교에서 개최하고자 합니다.
연구책임자, 연구원 및 대학원생 발표로 구성되며, 일본 연구자 27명, 대만 연구자 14명, 독일연구자 1명, 그리고 한국 연구자 22명이 참여하여 서로의 연구결과에 대한 매우 심도깊은 토론이 있을 것으로 기대되며, 동북아시아 3개국 연구진의 친목을 다지는 기회가 될 것으로 생각됩니다.

우리 K-MPMI를 사랑하시는 한국식물병리학회 회원의 많은 참여를 바라며, 연말연시 행복한 하루하루 만들어 가시길 바랍니다. 감사합니다.

식물-미생물 상호작용 연구회 정호원
서울대학교 식물면역연구센터 최도일

Dear Esteemed Members of the Korean Society of Plant Pathology

Warm greetings to you all. On behalf of the active research group members,
I wish you good health and continued success in your research endeavors.

Since its inception in 1997, the Korean Molecular Plant-Microbe Interactions Research Group (K-MPMI) under the Korean Society of Plant Pathology has dedicated itself to laying the foundation for MPMI research and actively supporting the development of outstanding researchers.
Thanks to the dedicated efforts of our community, we have achieved significant advancements in the past decade, producing high-end research outcomes that have positioned us as a first mover in this field.

To further enhance the academic and societal contributions of our wonderful community,
we are delighted to announce the 2025 Korea-Japan-Taiwan Joint Symposium, which takes place at Seoul National University from February 24 to 26.
This symposium will bring together principal investigators, researchers, and graduate students from across these three nations. The event will feature presentations and in-depth discussions, fostering scientific exchange among 27 researchers from Japan, 14 from Taiwan, one from Germany, and 22 from Korea.
We believe this will be an invaluable opportunity to engage in meaningful discussions and strengthen ties among research communities in Northeast Asia. We sincerely encourage your active participation in this joint symposium.

May the end of the year and the upcoming holiday season bring joy and success to you and your loved ones.
With warm regards,

Ho Won Jung (K-MPMI, Korean Society of Plant Pathology)
Doil Choi (Plant Immunity Research Center, Seoul National University)

2025 K-MPMI International Symposium

Hosted & Supported by K-MPMI & Plant Immunity Research Center

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Organizer :
Kee Hoon Sohn (Seoul National University)
Chih-Hang Wu (Academia Sinica)
Cécile Segonzac (Seoul National University)
Hiroaki Adachi (Kyoto University)

Date : 24-26th Feb 2025

Location : Building 201(NICEM) Room 101, Seoul National University, Seoul

Registration Fee (200,000 KRW) includes

- Access to 64 scientific presentations
- Coffee & cookies during symposium
- Symposium dinner

February 24th (Mon)

Time	Symposium	Chair
09:30-09:40	Announcement *Kee Hoon Sohn (Seoul National University, Korea)*	
09:45-09:50	Opening Remarks *Ho Won Jung (Dong-A University, Korea)*	
09:50-10:20	TBA *Ryohei Terauchi (Kyoto University, Japan)*	
10:20-10:50	Invasive Strategies of Biotrophic Smut Fungi *Lay-Sun Ma (IPMB, Academia Sinica, Taiwan)*	*Yong Hwan Lee* *(Seoul National University)*
10:50-11:20	Beneficial microbial interactions for plants and their microbiomes *Seon-Woo Lee (Dong-A University, Korea)*	
11:20-11:30	Group Photo	
11:30-13:00	Lunch Break	
13:00-13:20	Genetic basis of bacterial wilt resistance in *Solanum americanum* *Kee Hoon Sohn (Seoul National University, Korea)*	
13:20-13:40	A diverse immune network linking Receptor-Like Proteins and helper NLRs in *Nicotiana benthamiana* *Li-Hung Chen (National Chung Hsing University, Taiwan)*	
13:40-14:00	An NLR paralog Pit2 generated from tandem duplication of Pit1 fine-tunes Pit1 localization and function *Yoji Kawano (Okayama University, Japan)*	*Cécile Segonzac* *(Seoul National University)*
14:00-14:20	Lignin barrier provides physical protection to plants against pathogens *Okmae K Park (Korea University, Korea)*	
14:20-14:40	Molecular evolution of plant NLR immune receptors to recognize pathogens *Hiroaki Adachi (Kyoto University, Japan)*	
14:40-15:00	Cloning of Rwt3.6.8, a wheat resistance gene encoding an NLR and a protein kinase that recognizes three different avirulence genes of the blast *Soichiro Asuke (Kobe University, Japan)*	
15:00-15:30	Coffee Break	
15:30-15:40	A *Pseudomonas syringae* effector HopA1 suppresses plant immunity by modulating phosphatase protein functions *Hobin Kang (Gyeongsang National University, Korea)*	
15:40-15:50	Functional analysis of Fom-2 mediated plant immunity *Kentaro Fujita (Osaka University, Japan)*	
15:50-16:00	The evolutionary history of NRC family across different plant lineages *Liang-Yu Hou (IPMB, Academia Sinica. Taiwan)*	
16:00-16:10	*Fusarium oxysporum* effector SIX8 triggers immunity in *Solanum americanum* *Wan Asrul (Seoul National University, Korea)*	*Soohyun Oh* *(Seoul National University)*
16:10-16:20	Understanding role of the conserved underside surface of the ZAR1resistosome *Tianpin Liu (Kyoto University, Japan)*	
16:20-16:30	The tobacco MYB transcription factor MDP92 is involved in N-mediated resistance *Munehisa Yoshikawa (Tokyo University, Japan)*	

February 24th (Mon)

Time	Symposium	Chair
16:30-16:40	Integrative study of glycosyl hydrolase functions and rice defense mechanisms against *Magnaporthe oryzae* and *Cochliobolus miyabeanus* *Gi Hyun Lee (Pusan National University, Korea)*	*Soohyun Oh (Seoul National University)*
16:40-16:50	Search for the causal genes of hybrid necrosis between synthetic hexaploids and common wheat *Yuto Yoden (Kyoto University, Japan)*	
16:50-17:00	Identification and characterization of the Effector for the Paired NLR Pit1 and Pit2 *Alfino Sebastian (Okayama University, Japan)*	
17:00-17:10	BIN2-mediated ORA59 phosphorylation promotes disease resistance against *Botrytis cinerea* in *Arabidopsis* *Young Nam Yang (Korea University, Korea)*	
17:10-17:20	High-throughput approaches of rice blast effector targets identification *Naomi Miyaji (IBRC, Japan)*	

February 25th (Tue)

Time	Symposium	Chair
09:20-09:50	TBA *Thomas Lahaye (University of Tuebingen, Germany)*	*Chih-Hang Wu (Academia Sinica)*
09:50-10:10	Recognition of pathogen-derived sphingolipid in *Arabidopsis* *Hiroaki Kato (Kyoto University, Japan)*	
10:10-10:30	Can bacterial effectors modulate the stability of NLR transcripts? *Ho Won Jung (Dong-A University, Korea)*	
10:30-10:50	Differential modulation of PRRs by core microbiota members *Ma Ka Wai (IPMB, Academia Sinica, Taiwan)*	
10:50-11:10	Systematic genetic screen of blast fungal avirulence determinants identifies novel AVR effectors and cognate rice NLRs *Motoki Shimizu (IBRC, Japan)*	
11:10-11:30	Microbe-induced plant volatiles *Choong-Min Ryu (KRIBB, Korea)*	
11:30-13:00	Lunch break	
13:00-13:20	Chp family proteins of Gram-positive *Clavibacter* bacteria critical for both virulence and immune response in plants *Chang-Sik Oh (Seoul National University, Korea)*	*Kook Hyung Kim (Seoul National University)*
13:20-13:40	Small proteins interact with the ion channel-like protein ACD6 to fine-tune immune regulation in *Arabidopsis thaliana* *Jong Hum Kim (POSTECH, Korea)*	
13:40-13:55	*STT3A* is required for pathogen-derived sphingolipid recognition in *Arabidopsis thaliana* *Seowon Choi (Kyoto University, Japan)*	
13:55-14:10	Giant killing: How does tiny wormy invader manipulate host plants? *Mina Ohtsu (NAIST, Japan)*	

February 25th (Tue)

Time	Symposium	Chair
14:10-14:25	Recognition specificities of YopJ family effectors by NbPtr1 and NbZAR1/JIM2 immune complex in *Nicotiana benthamiana* *Cécile Segonzac (Seoul National University, Korea)*	*Kook Hyung Kim* *(Seoul National University)*
14:25-14:50	Coffee Break	
14:50-15:00	Perception of X. oryzae TAL effectors and disease resistance mediated by rice nuclear-localized NLR Xa1 *Satomi Yoshimura (Kindai University, Japan)*	*Eui Hwan Chung* *(Korea University)*
15:00-15:10	Molecular basis for the activation of nuclear-localized NLR Xa1 in rice ETI *Ayaka Yoshihisa (Kindai University, Japan)*	
15:10-15:25	Understanding regulatory mechanism of NLR networks in *Nicotiana benthamiana* *Kodai Honda (Kyoto University, Japan)*	
15:25-15:40	Diversified decoys expands bacterial effector recognition of NbPtr1 *Ye Jin Ahn (Seoul National University, Korea)*	
15:40-15:55	Studies on FLS2 and NLRs in cucurbits *Chujia Jin (Kyoto University, Japan)*	
15:55-16:10	Conserved effector families drive NLR-mediated resistance against a wide-range of *Phytophthora* species *Soohyun Oh (Seoul National University, Korea)*	
16:10-16:30	Coffee Break	
16:30-16:45	A hydrophobic core in the CC domain is essential for NRC resistosome function *Hung-Yu Wang (IPMB, Academia Sinica, Taiwan)*	*Boyoung Kim* *(Seoul National University)*
16:45-17:00	Spatiotemporally resolved organelle dynamics in resistosome-mediated hypersensitive cell death *Yi-Feng Chen (IPMB, Academia Sinica, Taiwan)*	
17:00-17:15	Identification of critical factors for avirulence in the Korean rice blast fungus *Magnaporthe oryzae* *Kieu Thi Xuan Vo (Kyung Hee University, Korea)*	
17:15-17:30	An innovative approach of structure-guided proteomics study focusing on conserved effectors in *Colletotrichum* species *Cheng-Han Yang (NCHU, Taiwan)*	
17:30-17:45	A Cell-Death Suppression Mechanism of Smut Fungi *Florensia Ariani Damei (IPMB, Academia Sinica, Taiwan)*	
17:45-18:00	Nuclear localization sequence of MoHTR1 for transcriptional reprogramming of immunity genes in rice *You-Jin Lim (Seoul National university, Korea)*	
18:00-21:00	Symposium Dinner	

February 26th (Wed)

Time	Symposium	Chair
10:00-10:05	Developing an *in situ* visualization system to monitor root immune responses *Hiroshi Yoshida (NAIST, Japan)*	*Ye Jin Ahn* *(Seoul National University)*
10:05-10:10	Proteolysis of Maize PR1 Protein *Yu-Han Lin (IPMB, Academia Sinica, Taiwan)*	
10:10-10:15	Understanding the role of RLCKs in RIN4-mediated plant cell-surface immunity *Huiwon Lee (Korea University, Korea)*	
10:15-10:20	Toward understanding NLR dynamics during immune responses *Saki Matsuoka (NAIST, Japan)*	
10:20-10:25	Revealing a conserved structural change of non-cytotoxicity NLP effectors in Ascomycota pathogen through AlphaFold structural analysis *Chao-Hsuan Yeh (IPMB, Academia Sinica, Taiwan)*	
10:25-10:30	*In planta*-specific transcriptional regulation of *MoHTR1*, a nuclear effector gene, of *Magnaporthe oryzae* *Yoon-Ju Yoon (Seoul National University, Korea)*	
10:30-10:35	Engineering of the recognition specificity of Rmo2, a barley gene against various pathotypes of Pyricularia oryzae *Emi Katayama (Kobe University, Japan)*	
10:35-10:40	Biochemical screening of NLR and AVR pairs *Tadashi Fujiwara (Kyoto University, Japan)*	
10:40-10:45	Screening novel effectors involved in host specificity of *Pyricularia oryzae* *Krishnamoorthy Baby Monish (Kyoto University, Japan)*	
10:45-10:50	*Pseudomonas syringae* effector AvrRps4 is recognized in *Solanum americanum* *Junhyeong Kim (Seoul National University, Korea)*	
10:50-10:55	Calcium dynamics during resistosome-mediated hypersensitive cell death *Kuan-Yu Lin (IPMB, Academia Sinica, Taiwan)*	
10:55-11:00	Toward cloning of Rbl2, an oat gene for resistance to Avena and Triticum isolates of Pyricularia oryzae *Gaku Matsuzaki (Kobe University, Japan)*	
11:00-11:05	CRISPR/Cas9-mediated mutation of SlEDR1 enhanced disease resistance in tomato *Seonyeong Park (Gyeongsang National University, Korea)*	
11:05-11:10	A tightly regulated copper-inducible transient gene expression system in *Nicotiana benthamiana* incorporating a suicide exon and Cre recombinase *Bing-Jen Chiang (IPMB, Academia Sinica, Taiwan)*	
11:10-11:15	Progressive evolution of virulence on oat in the blast fungus *Kurumi Takemoto (Kobe University, Japan)*	
11:15-11:20	Discovering *Phytophthora capsici* elicitors inducing PTI response *Ye-Eun Seo (Seoul National University, Korea)*	
11:20-11:25	Identification of wheat genetic factors conferring high-temperature tolerance to genes for resistance to the blast fungus *Reo Maeda (Kobe University, Japan)*	

February 26th (Wed)

Time	Symposium	Chair
11:25-11:30	*Rhizobium rhizogenes* A4-derived strains mediate hyper-efficient transient gene expression in *Nicotiana benthamiana* and other solanaceous plants *Juan Carlos Lopez-Agudelo (IPMB, Academia Sinica, Taiwan)*	*Ye Jin Ahn* *(Seoul National University)*
11:30-11:35	Novel virulence protein CviB of Gram-positive plant-pathogenic *Clavibacter michiganensis* *In Woong Park (Seoul National University, Korea)*	
11:35-11:40	Evolution and diversification of monocot NLR-ID *Motoki Matsunaga (Kyoto University, Japan)*	
11:40-11:45	Exploring the role of a putative protease effector in supporting the virulence of *Ustilago maydis* *Minh-Quang Chau (IPMB, Academia Sinica, Taiwan)*	
11:45-11:55	Closing Remarks *Doil Choi (Seoul National University, Korea)*	