

9th International Rice and Wheat Blast Conference PRELIMINARY SCHEDULE

Tuesday June 11th

Plenary 1: Molecular mechanisms of infection and effector biology

Convener:

- 08:00 – 08:30 [Blast Diseases: Past, Present and Future \(Barbara Valent, Kansas State University, USA\)](#)
- 08:30 – 09:00 [tRNA modification and codon usage bias fine-tune the translation and unconventional secretion of *Magnaporthe oryzae* cytoplasmic effectors into rice cells \(Richard Wilson, University of Nebraska, USA\)](#)
- 09:00 – 09:30 [The Ferroptosis landscape of *Magnaporthe*-Rice interaction \(Naweed Naqvi, Temasek Life Sciences Laboratory, Singapore\)](#)
- 09:30 – 10:00 [Elucidating the molecular mechanism of host specificity of the destructive wheat blast fungus *Magnaporthe oryzae* *Triticum* \(Guo-Liang Wang, The Ohio State University, USA\).](#)
- 10:00 – 10:30 COFFEE BREAK

Convener:

- 10:30 – 11:00 [Dissecting the turgor-sensing mechanisms required for appressorium-mediated infection by the rice blast fungus *Magnaporthe oryzae* \(Lauren Ryder, The Sainsbury Laboratory, UK\)](#)
- 11:00 – 11:30 [Nuclear effectors of the rice blast fungus, *Magnaporthe oryzae* \(Yong-Hwan Lee, Seoul National University, South Korea\)](#)
- 11:30 – 12:00 [Mechanisms of fungal-specific nuclear division and migration in the rice blast fungus *Magnaporthe oryzae* \(Chang-Hyun Khang, University of Georgia, USA\)](#)
- 12:00 – 13:30 LUNCH

Plenary 2: Molecular mechanisms of host resistance

Convener:

- 13:30 – 14:00 [Nullifying *SnRK1β1A* gene in rice unleashes broad-spectrum resistance to fungal diseases \(You-Liang Peng, China Agricultural University, China\)](#)
- 14:00 – 14:30 [Investigating the mechanism of Ubiquitin E3 Ligase-mediated rice immunity against *Magnaporthe oryzae* \(Yuese Ning, Chinese Academy of Agricultural Sciences, China\)](#)



14:30 – 15:00 [OsAGO1-associated miRNA networks in rice immunity against the blast fungus \(Wen-Ming Wang, \(Sichuan Agricultural University, China\)\)](#)

Poster Flash Talks – Session 1 (Convener:)

15:00 – 15:15 Fungal molecular-mimicry of host chemical defense (**Sayali Bakore**, Indian Institute of Technology, Bombay, India)

15:15 – 15:30 The blast effector *PWL2* is a virulence factor that modifies the cellular localisation of host protein HIPP43 to suppress immunity (**Vincent Were**, The Sainsbury Lab, UK)

15:30 – 15:45 NADPH oxidase-derived reactive oxygen species: key signaling molecules that promote blast fungus pathogenicity (**Catalina Rodriguez-Puerto**, University of Arkansas, USA)

15:45 – 17:30 COFFEE BREAK and POSTER SESSION

Wednesday, June 12th

Plenary 3: Pathogen Genome Dynamics, Population Dynamics and Evolution

Convener:

08:00 – 08:30 [Genomics of *Pyricularia oryzae*: recent tools for old questions. \(Didier Tharreau, CIRAD, France\)](#)

08:30 – 09:00 [Solving wheat blast evolution opened a can of phylogenomic worms \(Mark Farman, University of Kentucky, USA\)](#)

09:00 – 09:30 [The role of mini-chromosomes in adaptive evolution of the blast fungus \(Thorsten Langner, Max Planck Institute for Biology, Tübingen, Germany\)](#)

09:30 – 10:00 [Dynamics of mini-chromosomes and evolution of mini-chromosomes in the wheat blast fungus \(Sanzhen Liu, Kansas State University, USA\)](#)

10:00 – 10:30 COFFEE BREAK



Plenary 4: Host Resistance and Specificity

Convener:

10:30 – 11:00 [Insights into the interaction between rice and *Magnaporthe oryzae* for controlling blast disease \(Xuewei Chen, Sichian Agricultural University, China\)](#)

11:00 – 11:30 [Insight into the molecular dialogue between plants and pathogenic fungi from the investigation of rice blast disease \(Thomas Kroj, French National Institute for Agriculture, Food, and Environment \(INRAE\), France\)](#)

11:30 – 12:00 [Cloning of *RMG8* and its variants, genes for resistance to wheat blast in *Triticum* and *Aegilops* species \(Soichiro Asuke, Kobe University, Japan\)](#)

12:00 – 13:30 LUNCH

Convener:

13:30 – 14:00 [Population biology of wheat blast pathogen in Minas Gerais, Brazil: Host specialization and cross-infection dynamics \(Emerson Del Ponte, Univ. Federal de Viçosa, Brazil.\)](#)

14:00 – 14:30 [Host specificity and genetic relatedness of *Pyricularia oryzae* isolates from oats and turfgrass in Georgia \(Bochra Bahri, University of Georgia, USA\)](#)

Poster Flash Talks – Session 2 (Convener:)

14:30 – 14:45 Rice metacaspase 1 forms stress granules upon salicylic acid treatment, senescence and pathogen challenge with *Magnaporthe oryzae* (**Fernando Navarrete**, Center for Research in Agricultural Genomics (CRAG), Spain)

14:45 – 15:00 1,2,3-triazoles derivatives inhibit appressorium formation of the rice blast fungus by targeting D-lactic acid dehydrogenase (**Jun Yang**, China Agricultural University, China)

15:00 – 15:15 Advanced lines nursery with durable resistance to *Magnaporthe oryzae* and their use in rice breeding programs from 2006 to 2021 in Latin America (**Yamid Sanabria**, Latin American Irrigated Rice Fund, FLAR, Colombia)

15:15 – 15:30 GROUP PHOTO

15:30 – 17:30 COFFEE BREAK and POSTER SESSION



Thursday, June 13th

Plenary 5: Breeding for Resistance

Convener:

- 08:00 – 08:30 [Identification and introgression of resistance genes for combating leaf and neck blast in rice: an IRRI perspective \(Van Schepler-Luu, IRRI, The Philippines\)](#)
- 08:30 – 09:00 [Mitigating the growing threat of wheat blast to global wheat production \(Xinyao He, CIMMYT, Mexico\)](#)
- 09:00 – 09:30 [Toward the development of wheat lines with durable resistance to wheat blast \(Yukio Tosa, Kobe University\)](#)
- 09:30 – 10:00 [Wheat blast in Zambia- Occurrence and management \(Batiseba Tembo Zambia Agriculture Research Institute, Zambia\), recorded presentation plus zoom questions.](#)
- 10:00 – 10:30 COFFEE BREAK

Plenary 6: Integrated Disease Management

Convener:

- 10:30 – 11:00 [Integrated management of *Magnaporthe oryzae* in LAC \(Gustavo Prado, FLAR Consultant, Colombia\)](#)
- 11:00 – 11:30 Unanticipated genetic diversity of rice blast in Uganda: Is Africa home to more than meets the eye? (Geoffrey Onaga, AfricaRice, Côte d'Ivoire)
- 11:30 – 12:00 [Using major resistance genes to manage rice blast disease in the USA \(Yulin Jia, Dale Bumpers National Rice Research Institute, USA\)](#)
- 12:00 – 13:30 LUNCH

Convener:

- 13:30 – 14:00 [Production vulnerability to wheat blast disease under climate change \(J. Mauricio Fernandes, EMBRAPA Trigo, Brazil\)](#)
- 14:00 – 14:30 [Development of machine learning methods for accurate prediction of plant disease resistance \(Houxiang Kang, Chinese Academy of Agricultural Sciences, China\)](#)





- 14:30 – 14:50 [Understanding the genetic base of Rice Blast Resistance in The Latin American Germplasm \(**Gloria Mosquera**, CIAT, Colombia\)](#)
- 14:50 – 15:10 [The rice peroxisomal receptor pex5 negatively regulates resistance to a fungal pathogen \(**You Xiaoman**, Institute of Plant Protection, Chinese Academy of Agricultural Sciences, China\)](#)
- 15:10 – 15:30 [A novel nuclear localization sequence of MoHTR1, a nuclear effector of the rice blast fungus, for transcriptional reprogramming of immunity genes in rice \(**You-Jin Lim**, Seoul National University, Seoul, Republic of Korea\)](#)
- 15:30 – 17:00 PRESENTATION of the LIFETIME ACHIEVEMENT AWARD IN RICE BLAST RESEARCH, Presented to Dr. Yukio Tosa (Kobe University, Japan) and Dr. Yong-Hwan Lee (Seoul National University, South Korea)
- 17:00 CLOSING

