

8th International Hybrid Rice Symposium

“Heralding an era of low carbon footprint rice hybrids”

18 – 19 October 2023
Manila, Philippines



PROGRAM

18 October, Wednesday

Plenary Keynote Address

Venue: JP Rizal Room (3rd Floor)

1030-1040H	Welcome and Opening Remarks	Hans Bhardwaj IRRI RBI Research Director CGIAR Global Rice Breeding Program Leader
1040-1100H	Plenary Talk 1 <i>(Ushering an era of low-carbon footprint rice hybrids)</i>	Jauhar Ali Principal Scientist, Hybrid Rice Breeder IRRI
1100-1130H	Plenary Talk 2 <i>(Ontogenetic complementarity between the parents provides the biological mechanism of heterosis in rice)</i>	Qifa Zhang Professor Huazhong Agricultural University
1130-1200H	Plenary Talk 3 <i>(Reducing greenhouse gas emission studies using rice hybrids)</i>	Arlene Adviento-Borbe Research Agronomist, USDA
1200-1330H	Lunch/Poster Viewing	
1330-1420H	IRC Plenary Keynote Address	

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Parallel Session 1: Hybrid Rice Genetics and Breeding

Venue: JP Rizal Room (3rd Floor)

1430-1435H Introduction of the Session

Sankalp Bhosale

IRRI RBI Deputy Head
Product Development & Varietal
Replacement Research Leader

1435-1455H Lead Speaker 1
*(Genetic mechanism of heterosis
for rice milling and appearance
quality in an elite rice hybrid)*

Jianlong Xu

Senior Scientist
Chinese Academy of Agricultural
Sciences

1455-1515H Lead Speaker 2
*(Breeding and development of
climate resilient rice hybrids)*

Yog Raj

Rice Commercial Breeding Lead (Asia)
Bayer

1515-1535H Speaker 3
*(Development of climate resilient
rice hybrids for abiotic stresses
through conventional and
molecular approaches)*

Ponnuvel Senguttuvel

Senior Scientist
ICAR-IIRR

1535-1555H Speaker 4
*(Genetic improvement of hybrid
rice for germinability using linked
genes for embryo dormancy)*

Xingyou Gu

Professor
South Dakota State University

1555-1600H Closing of the Session

1600-1630H Break/Poster Viewing

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Parallel Session 2: New Technology Applications

Venue: Room 11 (3rd Floor)

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|------------|--|---|
| 1430-1435H | Introduction of the Session | Qifa Zhang
Professor
Huazhong Agricultural University |
| 1435-1455H | Lead Speaker 5
<i>(Reciprocal recurrent selection based on genetic complementation: An efficient way to build heterosis in diploids due to directional dominance)</i> | Giovanny Covarrubias
Senior Scientist II
Quantitative Genetics and Biometrics
IRRI |
| 1455-1515H | Lead Speaker 6
<i>(Developing heterotic groups for hybrid rice development in Latin America and the Caribbean)</i> | Maria Fernanda Alvarez
Rice Program Leader
CIAT |
| 1515-1535H | Speaker 7
<i>(Evaluation of perennial rice BRRIdhan91 for superior ratooning and development of one line hybrid to fix heterosis in rice)</i> | ASM Masduzzaman
Chief Scientific Officer
BRRi |
| 1535-1555H | Speaker 8
<i>(Simulating hybrid rice yield using Decision Support System for Agrotechnology Transfer (DSSAT) CERES model under various growing environments)</i> | Marilyn Yere
Science Research Specialist II
Philippine Rice Research Institute |

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1555-1600H Closing of the Session

1600-1630H Break/Poster Viewing

Parallel Session 3: Hybrid Rice Economics

Venue: Room 12 (3rd Floor)

1430-1435H Introduction of the Session

Valerien Pede
Senior Scientist II
Agricultural Economics
IRRI

1435-1450H Lead Speaker 9
(Hybrid rice economic benefit to farmers in Sub-Saharan Africa)

Sanni Kayode
Director
AATF

1450-1505H Lead Speaker 10
(Yield and income impacts of the hybrid rice variety: evidence from farmers in Pangasinan, Philippines)

Jose Yorobe, Jr.
Adjunct Professor
Department of Agricultural and Applied Economics, UPLB

1505-1520H Speaker 11
(Farmers' perception and Willingness to Pay (WTP) for seeds of hybrid rice varieties in Sub-Saharan African: Evidence from double hurdle model in Benin)

Aminou Arouna
Program Leader and Impact Assessment Economist
AfricaRice

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1520-1535H

Speaker 12

(Impact of hybrid rice expansion on rice production since 1980s: from a historical input and output data aspect in China)

Qianyun Zeng

Graduate Student
South China Agricultural University

1535-1550H

Speaker 13

(Yield quality and economics of hybrid rice cultivation in Pakistan)

Iftikhar Ali

Assistant Professor
University of Agriculture, Pakistan

1550-1600H

Q&A

1600-1630H

Break/Poster Viewing

Parallel Session 4: Crop and Resource Management

Venue: JP Rizal Room (3rd Floor)

1630-1635H

Introduction of the Session

Anton Urfels

Senior Scientist I
Water Management, IRRI

1635-1655H

Invited Speaker 1

(What role can hybrids play in the move towards low-emissions rice production?)

Bjoern Ole Sander

Senior Scientist II-Climate Change
Country Representative (Thailand)
IRRI

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1655-1715H

Invited Speaker 2
(Half-feed combine harvesters: a quantification of their grain savings and carbon reductions with selected hybrid rice varieties)

Craig Jamieson
Director and Founder
Straw Innovations Ltd.

1715-1735H

Speaker 3
(Identification of QTLs and candidate resistant genes against rice-false smut disease (Ustilaginoidea virens) using genome-wide association study approach)

Erik Jon de Asis
Associate Scientist
Hybrid Rice, IRRI

1735-1755H

Speaker 4
(Energy footprint of different rice establishment methods: A case study from South India)

Shanmugam Vijayakumar
Postdoctoral Fellow
Agronomy and Weed Science
IRRI

1755-1800H

Closing of the Session

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Parallel Session 5: National Policies and Public-Private Engagement on Hybrid Rice

Venue: Room 11 (3rd Floor)

1630-1635H Introduction of the Session

Maria Fernanda Alvarez
Rice Program Leader
CIAT

1635-1655H Invited Speaker 5
(Development and promotion of hybrid rice technology through Alliance for Hybrid Rice in Africa (AHyRA))

Dorothy Onyango
Program Officer - Rice
AATF

1655-1715H Lead Speaker 6
(Bayer hybrid rice precision breeding transformation journey)

Veeresh Gowda
Product Design Lead
Bayer

1715-1735H Speaker 7
(Strengthening and sustaining rice seed system to increase adoption of hybrid rice through the development and implementation of local government unit-led rice development plan)

Fidel Ramos
Senior Science Research Specialist
PhilRice, Isabela

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1735-1755H

Speaker 8
(Public-Private partnerships in agriculture research: A perspective of International Rice Research Institute)

Linga Reddy Gutha
Senior Manager
IRRI Tech Transfer

1755-1800H

Closing of the Session

Parallel Session 6: Country Reports

Venue: Room 12 (3rd Floor)

1630-1635H

Introduction of the Session

Sanni Kayode
Director
AATF

1635-1650H

Speaker 9: China

CNRRI

1650-1705H

Speaker 10: Bangladesh

Md. Jamil Hasan
Chief Scientific Officer
BRRI

1705-1720H

Speaker 11: India
(Hybrid Rice in India)

AS Hari Prasad
Principal Scientist - Hybrid Rice
ICAR

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|--------------|---|--|
| 1720-1735H | Speaker 12: Nepal
<i>(Enhancing rice grain yield in subtropical region of Nepal through the use of IRRI's hybrid elite lines)</i> | Ram Baran Yadaw
Senior Rice Breeder
National Rice Research Program
Nepal |
| 1735-1750H | Speaker 13: Iran
<i>(Hybrid rice breeding and seed production in Iran)</i> | Majid Sattari
Research Scientist
Rice Research Institute of Iran |
| 1750-1755H | Q&A | |
| 1755 – 1800H | Closing of the Session | |

19 October, Thursday

Plenary Keynote Address

Venue: JP Rizal Room (3rd Floor)

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|------------|---|---|
| 1030-1040H | Welcome and Opening Remarks | Jauhar Ali
Principal Scientist, Hybrid Rice Breeder
IRRI |
| 1040-1100H | Plenary Talk 1
<i>(An integrated strategy by efficient exploiting and mining “favorable” alleles for improving hybrid rice)</i> | Zhikang Li
Chief Scientist
CAAS |

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1100-1130H

Plenary Talk 2
(Harnessing heterosis for improving productivity and profitability in rice)

Ashok Kumar Singh
Director
ICAR-IARI

1130-1200H

Plenary Talk 3
(Progress of the agricultural sector in the Philippines: A focus on hybrid rice program implementation and private sector mobilization)

Frisco Malabanan
Hybrid Rice Consultant
Department of Agriculture

1200-1330H

Lunch/Poster Viewing

Parallel Session 7: Hybrid Rice Genetics and Breeding

Venue: JP Rizal Room (3rd Floor)

1430-1435H

Introduction of the Session

Zhikang Li
Chief Scientist
CAAS

1435-1455H

Lead Speaker 1
(Estimation of genetic parameters in hybrid and F2 generations of aromatic fine rice)

Arif Hasan Khan Robin
Professor
Bangladesh Agricultural University

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1455-1515H

Lead Speaker 2
(Identification and evaluation of promising TGMS lines in rice at sterility inducing and limiting environments)

Manonmani Swaminathan
Professor
TNAU

1515-1535H

Speaker 3
(Unraveling the finest heterotic two line rice hybrids with superior cooking quality)

Ramamoorthy Pushpam
Assistant Professor
TNAU

1535-1555H

Speaker 4
(Improvement of salt tolerance in thermogenic male sterile parents of Mestiso 19 and Mestiso 20 through marker-aided selection)

Jerome Galapon
Science Research Specialist I
PhilRice, Isabela

1555-1600H

Closing of the Session

1600-1630H

Break/Poster Viewing

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Parallel Session 8: New Technology Applications

Venue: Room 11 (3rd Floor)

1430-1435H	Introduction of the Session	John de Leon Executive Director PhilRice
1435-1455H	Lead Speaker 5 <i>(Enabling shared service for the global CGIAR-NARES breeding networks through CGIAR-BRS Lab Services)</i>	Rajaguru Bohar Senior Scientist - EiB Regional Genotyping Coordinator (South Asia), CIMMYT
1455-1515H	Invited Speaker 6 <i>(Future of digital extension: Full stack and platform based approaches for rice industry)</i>	Shaik Meera Director ICAR-Agricultural Technology Application Research Institute
1515-1535H	Speaker 7 <i>(The Hybrid Rice "Breeding by Design")</i>	Dorothy Onyango Program Officer - Rice AATF
1535-1555H	Speaker 8 <i>(Developing a promising Genomic breeding system for future rice)</i>	Yidan Ouyang Professor Huazhong Agricultural University
1555-1600H	Closing of the Session	
1600-1630H	Break/Poster Viewing	

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Parallel Session 9: Country Reports

Venue: Room 12 (3rd Floor)

1430-1435H Introduction of the Session

AS Hari Prasad
Principal Scientist - Hybrid Rice
ICAR

1435-1455H Speaker 9: Pakistan
(Advancements and perspectives in hybrid rice cultivation for climate resilience and food security: A comprehensive review of the current status)

Muhammad Yousuf
National Coordinator (Rice)
Pakistan Agricultural Research Council

1455-1515H Speaker 10: Philippines
(Hybrid rice in the Philippines: Status, challenges, and opportunities)

Frodie Waing
Senior Science Specialist
PhilRice

1515-1535H Speaker 11: Colombia
(New rice hybrid cultivars developed for Colombian farmers)

Nelson Fernando Amezquita Varon
Rice Breeder
Centro Experimental en Fedearroz

1535-1555H Speaker 12: Uganda
(Progress in development of hybrid rice in Uganda)

Jimmy Lamo
Plant Breeder
National Agricultural Research Organization

1555-1600H Closing of the Session

1600-1630H Break/Poster Viewing

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Parallel Session 10: Hybrid Rice Genetics and Breeding

Venue: JP Rizal Room (3rd Floor)

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|------------|--|--|
| 1630-1635H | Introduction of the Session | Ashok Kumar Singh
Director
ICAR-IARI |
| 1635-1655H | Invited Speaker 1
<i>(Molecular and phenotypic characterization of potential restorers derived through GMS-mediated population improvement in rice)</i> | Revathi Ponnuswamy
Senior Scientist
ICAR-IIRR |
| 1655-1715H | Lead Speaker 2
<i>(Mitochondrial gene knockout and mechanistic analysis of Tadukan-type cytoplasmic male sterile rice)</i> | Ayumu Takatsuka
Graduate Student
Tohoku University |
| 1715-1735H | Speaker 3
<i>(Evaluation of new cytoplasmic male sterile rice (Oryza sativa L.) lines for yield, drought tolerance and influence of floral characters on the outcrossing potential)</i> | Moushree Sarkar
R&D Head
GMS Agritech Pvt. Ltd. |
| 1735-1755H | Speaker 4
<i>(Heterotic pools in hybrid rice parental lines)</i> | Kanneboina Sruthi
Scientist
ICAR-IIRR |
| 1755-1800H | Closing the Session | |

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Parallel Session 11: Crop and Resource Management

Venue: Room 11 (3rd Floor)

1630-1635H	Introduction of the Session	Arlene Adviento-Borbe Research Agronomist USDA
1635-1655H	Invited Speaker 5 <i>(Harnessing hybrid rice technology for improving direct-seeded rice systems)</i>	Virender Kumar Research Leader Climate-adaptive Agronomy and Mechanization, IRRI
1655-1710H	Invited Speaker 6 <i>(Unraveling the molecular mechanism of Bispyribac-Sodium Resistance in Echinochloa crus-galli (Barnyardgrass): A huge threat to effective weed control in inbred and hybrid rice productions)</i>	Niña Gracel Dimaano Associate Professor University of the Philippines, Los Baños
1710-1725H	Speaker 7 <i>(Assessment of biochar for enhancing fertilizer use efficiency and its impact on growth, development and yield of rice hybrids)</i>	Fahd Rasul Associate Professor Univeristy of Agriculture Pakistan

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1725-1740H

Speaker 8

*(In vitro evaluation of various fungicides and bio-control agents against sheath blight of rice caused by *Rhizoctonia solani* Kuhn.)*

V.K. Parthiban

Professor
TNAU

1740-1755H

Speaker 9

(Genotypic expression of nutrient use efficiency and grain yield of lowland-rice varieties in heavy metal polluted inland valley soil in a derived savanna)

Paul S. Soremi

Lecturer
Federal University of Agriculture
Nigeria

1755-1800H

Closing of the Session

Parallel Session 12: Flash Talk by Young Researchers

Venue: Room 12 (3rd Floor)

1630-1635H

Introduction of the Session

Jauhar Ali

Principal Scientist, Hybrid Rice Breeder
IRRI

1635-1655H

Presentation 1

(Farmers' WTP valuation of rice hybrid seeds using the double-bounded dichotomous choice (DBDC) approach in the Senegal River Valley)

Aristide Akpa

Graduate Student
University of Liège

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Presentation 2

(Unravelling the physiological basis of heterosis for grain-yield components in hybrid rice (Oryza sativa L.))

Faraz Azeem

Graduate Student
Hybrid Rice, IRRI

1655-1715H

Presentation 3

(Molecular screening of restorers for enhancing the hybrid rice yield potential)

Nivedha Rakkimuthu

Graduate Student
Genetics and Plant Breeding
TNAU

Presentation 4

(Value chain analysis of hybrid rice seed industry in India: Evidence from Telangana State, India)

Sheelam Kavi Raju

Graduate Student
PJ TSAU

1715-1735H

Presentation 5

(Developing optimized sheath blight resistance assessment methods and identifying novel genomic regions associated with it in rice (Oryza sativa L.))

Usha Shrestha

Graduate Student
Hybrid Rice, IRRI

Presentation 6

(Evaluation of Green Super Rice parents for resistance against rice root-knot nematode (Meloidogyne graminicola) in direct-seeded rice ecosystems)

Roan Jemimah Reyes

BS Student, UPLB

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1735-1755H

Presentation 7
*(Genomic regions associated with
arsenic accumulation and
responses in rice)*

Varunseelan Murugaiyan
Postdoctoral Fellow
Hybrid Rice, IRRI

Presentation 8
*(Differential effects of arsenite and
arsenate on rice plants differing in
glutathione-S-transferase gene
expression)*

Ambika Pandey
Graduate Student
Hybrid Rice, IRRI

1755-1800H

Closing of the Session