



ICAR-National Rice Research Institute (ICAR-NRRI)
(An ISO9001:2015 Certified Institute)
Cuttack - 753006



Azadi ka Amrit Mahotsav - Celebration of 75 Years of India's Independence at ICAR-National Rice Research Institute, Cuttack, India

Special Talk - "Plant immunity signaling: Paths from fundamental research towards application"

The ICAR-National Rice Research Institute, Cuttack is conducting a Special Talk series to celebrate 75 years of India's independence espoused as *Azadi ka Amrit Mahotsav* (AKAM). The tenth Special Talk in the series – **"Plant immunity signalling: Paths from fundamental research towards application"** was delivered by **Prof Jane E Parker, Research Group Leader, Max Planck Institute for Plant Breeding Research, Cologne, Germany** on 02 July 2022 at 12:30 p.m. IST (9:00 a.m. Central Euro Time) on virtual mode.

Prof Jane E Parker, a renowned German plant scientist of British origin, is a member of the Academy of Europe, EMBO, the German National Academy of Sciences 'Leopoldina' and the American Association for the Advancement of Science, and a recipient of the prestigious Alexander von Humboldt 'Sofja Kovaleskaja' award for excellence in science research (2001). She is on Science Editorial Board since 2011.

Prof Parker started off her lecture with basic concepts of cell surface and intracellular pathogen recognition, and subsequent pattern-triggered immunity (PTI) and effector-triggered immunity (ETI). She touched upon nucleotide-binding leucine-rich repeat (NLR) super-family protein receptors in animals and plants. Mammalian and plant NLR proteins are released from auto-inhibition by pathogen perturbations. She emphasized on gene-for-gene hypothesis of Harold Flor in NLR direct vs indirect recognition of pathogen effector interference. She pointed out that *Arabidopsis* TNL (Toll-like interleukin-1 receptor (TIR) domain in TIR-NLR) receptor pair RRS1 and RPS4 confers resistance to multiple pathogens.

Dr. P.K. Singh, ICAR

Dr. P.K. Singh, ICAR-CI

Smaranika Mishra

Smaranika Mishra

V K RAO

V K RAO

Dr. SD Mohapatra...

Dr. SD Mohapatra ICA

Devanna, ICAR...

Devanna, ICAR NRRI

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The Special Talk was presided over by Dr. Padmini Swain, Director (A), ICAR-NRRI, Cuttack. Dr. P.C. Rath, Head (A), Crop Protection Division (CPtD) & Chairman, AKAM Committee at NRRI welcomed the Special Guest. Dr. Sudhamoy Mandal, Principal Scientist, CPtD & Convener, AKAM introduced Prof. Jane E Parker to the august audience. The program was beautifully moderated by Dr. Amrita Banerjee, Scientist, CRURRS, Hazaribagh. Dr Somnath Roy, Senior Scientist, CRURRS, Hazaribagh designed the elegant flyer and coordinated the virtual program. ARIS Cell of the institute hosted the virtual meeting successfully.