





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

Special Talk - "A Mutation is A Mutation"

The ICAR-National Rice Research Institute, Cuttack is conducting a Special Talk series to celebrate 75 years of India's independence as *Azadi ka Amrit Mahotsav* (AKAM). The fourth Special Talk in the series – "A Mutation is A Mutation is A Mutation" was delivered by **Prof Detlef Weigel, Managing Director, Max Planck Institute for Biology Tübingen, Germany** on 28 January 2022 at 03:30 p.m. IST (11:00 a.m. German time) on virtual mode.

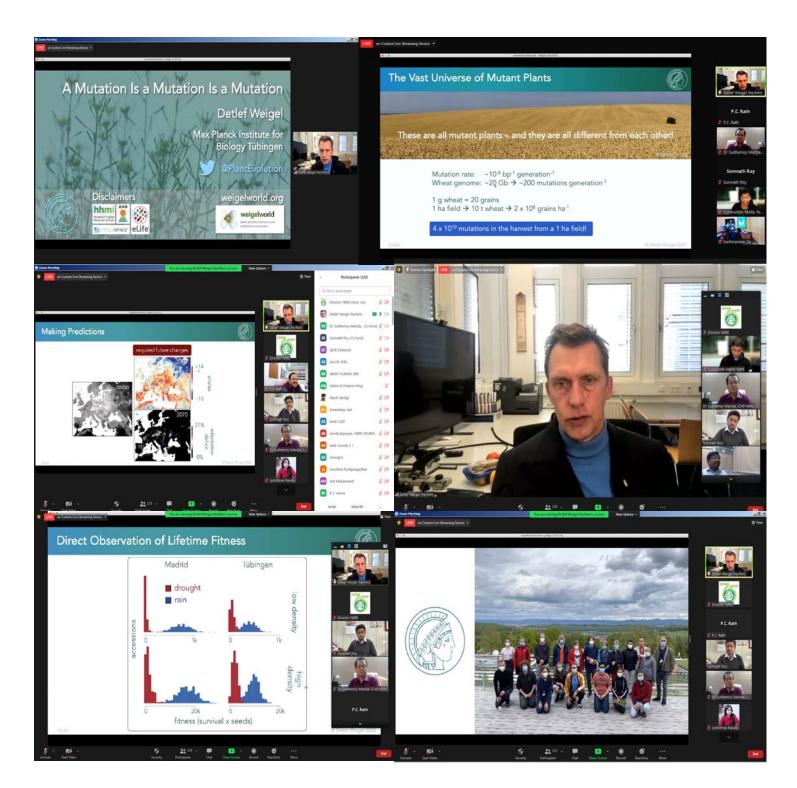
Prof Detlef Weigel, a German-American scientist, is a member of the US National Academy of Sciences, the American Academy of Arts and Sciences, the German National Academy of Sciences Leopoldina and the Royal Society, and a recipient of several scientific awards, most recently the Novozymes Prize of the Novo Nordisk Foundation (2020) and the Stephen Hales Prize of the American Society of Plant Biologists (2021).

The first major finding from his lab was that an *Arabidopsis* gene could dramatically accelerate flowering of trees; this established a proof of concept for *Arabidopsis* genetics as a platform for biotechnological discoveries. His group later discovered the first plant microRNA mutant and identified the factor that we now know to be the long sought-after mobile flower-inducing signal. Prof Weigel was also one of the first to exploit natural genetic variation for understanding how the environment affects plant development. In recent years, this work has come to incorporate questions at the interface of evolution and ecology: How can wild plants adapt to climate change, and how do they manage to keep their pathogens at bay? In this research, he draws on the fruits of a collaborative effort initiated over a decade ago to sequence the genomes of over 1,000 natural *Arabidopsis thaliana* strains (The 1001 Genomes Project).

Prof Weigel has more than 370 research publications (323 research publications, plus 51 bioRxiv submissions) and his Google Scholar citations are more than one hundred thousand, with h-index 153 and i10-index 394. He has 95 other articles, including in Nature, Nature Genetics and eLife. **He is among the ten most highly cited plant scientists in the world.** Prof Weigel's group has challenged the long-standing doctrine in evolution that mutations can arise anywhere in a genome with equal probability. Their research published in Nature (2022) shows that mutations in the genome of *Arabidopsis thaliana* appear to happen less frequently in important regions of the genome.

Prof Weigel has an extensive record of service to the scientific community, having served on a series of editorial and advisory boards. He is a forceful advocate of open access publishing and founding Deputy Editor of *eLife*. He is a co-founder of three biotech startups.

The scintillating talk by Prof Weigel on "A Mutation is A Mutation" elicited a lively discussion that drew many participants in the vortex. More than 130 participants attended the special talk in virtual mode from across the country.



The Special Talk was presided over by Dr. Padmini Swain, Director (A), ICAR-NRRI, Cuttack. Dr A. K. Nayak, Head (A), Crop Production Division, delivered Director's remarks during the virtual meeting. Dr. P.C. Rath, Head (A), Crop Protection Division (CPD) & Chairman, AKAM Committee at NRRI welcomed the Special Guest. Dr. Sudhamoy Mandal, Principal Scientist, CPD & Member-Secretary, AKAM introduced Prof. Detlef Weigel to the august audience. The program was moderated by Dr. Somnath Roy, Scientist, CRURRS & Member of AKAM Committee at NRRI. ARIS Cell of the institute hosted the virtual meeting successfully.