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Unraveling the mystery of genomes!

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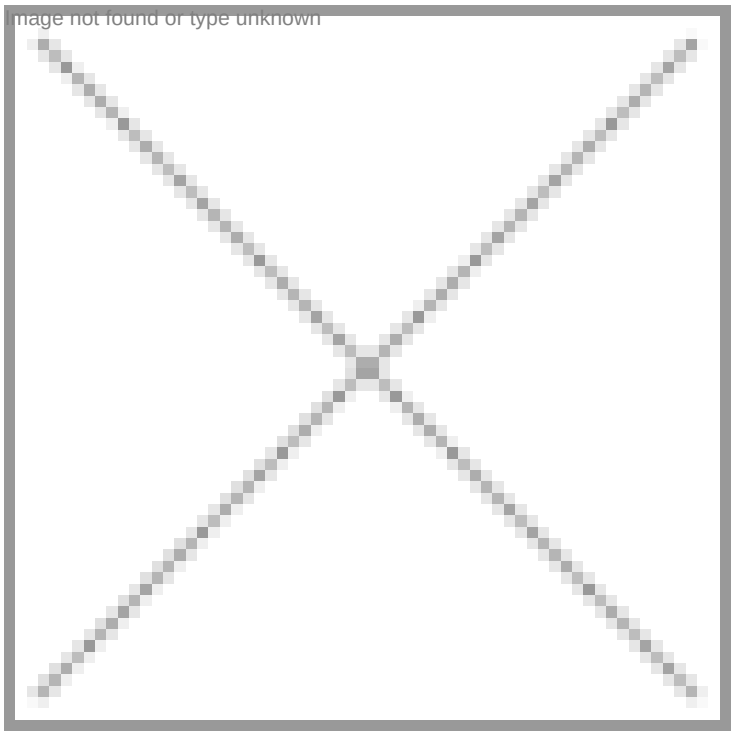

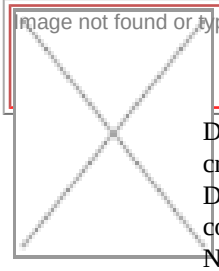

BioAgri **Dr Akhilesh Kumar Tyagi**
director, National Institute of Plant Genome Research (NIPGR), New Delhi

Dr Akhilesh Tyagi is well known for his efforts in sequencing genomes of important crops. As a part of the international group involving 10 nations working on rice genome, Dr Tyagi led India's first foray into wide plant genome sequencing in India. The group completed its task much ahead of time and the work was subsequently published in Nature. He is also leading the ongoing efforts being made in sequencing of tomato and chickpea genomes. Dr Tyagi completed his PhD in Botany in 1983 from the University of Delhi in the area of cell genetics. This in his words laid a strong foundation to take up the challenge of research in the area of gene biology when he worked as a post-doctoral fellow in Germany (1984-86). Later he joined University of Delhi and helped establish Centre for Plant Molecular Biology (CPMB) and served as its coordinator from 1996-2009. Subsequently, he served as director of Interdisciplinary Centre for Plant Genomics (ICPG) between 2005-2009. The turning point came when Dr Tyagi joined NIPGR as its head in 2009 and continues to lead the institute. Besides having over 150 publications to his credit and mentoring about 25 PhD and postdoctoral students, Dr Tyagi has also served on editorial boards of leading journals such as *Journal of Plant Biochemistry and Biotechnology*, *Proceedings of the Indian National Science Academy*, *and Transgenic Research*, among others. He has been recipient of numerous awards and honors which include the National Bioscience Award by DBT (1999), BP Pal Memorial Lecture Award by NASI (2005), and Birbal Sahni Medal by Indian Botanical Society (2006), to name a few. Dr Tyagi has chaired many notable positions during his vast expanding career. He was elected as fellow of the Indian Academy of Sciences, Bangalore;

National Academy of Sciences, Allahabad; and National Academy of Agricultural Sciences, New Delhi. He also served as vice president of Society for Plant Biochemistry and Biotechnology, and as general secretary, National Academy of Sciences. Dr Tyagi credits his contributions in research to his colleagues and research students. Currently the work on rice genomics at NIPGR has reached an exciting stage with emphasis on developing rice capable of tolerating water-deficit and improved high-yielding rice variety. The researchers at the institute led by Dr Tyagi, have made major contributions on the transcriptome and genomics of chickpea. More recently, the institute has contributed to the sequencing of tomato genome which was published in Nature. Now the on-going research is to sequence the chickpea genome. These projects have extensive collaboration with leading institutions and industry in India. â€œWe have to create such mechanisms that allow continuous contribution of basic science researchers during the phase of translation and product development. There is a need for more success stories, even if they are in select and not wide-spread areas, because success is likely to breed more success,â€? concludes Dr Tyagi. **Rahul Koul**