



KISHOR U. TRIBHUVAN

ICAR-Indian Institute of Agricultural Biotechnology,
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July 01, 1987

OBJECTIVE

Plan, Undertake, Coordinate and Promote Research and Technology Development for sustainable Agriculture.

AWARDS AND RECOGNITION

- Awarded ICAR Junior Research Fellowship (2009) for M.Sc (Molecular Biology and Biotechnology)
- Awarded CSIR Junior Research Fellowship (2011) for Ph.D (Molecular Biology and Biotechnology)

EDUCATION

2009	Vasantrao Naik Marathwada Agriculture University, Parbhani B.Sc (Horticulture) 8.44
2011	ICAR-Indian Agricultural Research Institute, New Delhi - 110 012 M.Sc (Molecular Biology and Biotechnology) 8.14
2021	ICAR-Indian Agricultural Research Institute, New Delhi -110 012 Ph.D 8.44

EXPERIENCE

January 01, 2013 - April 12, 2015	ICAR- Indian Institute of Natural Resins and Gums Scientist
April 12, 2015 - December 31, 2017	ICAR-Indian Institute of Agricultural Biotechnology, Garhkhataga, Ranchi - 834 002 Scientist
January 01, 2018 - December 31, 2022	ICAR-Indian Institute of Agricultural Biotechnology, Garhkhataga, Ranchi - 834 002 Scientist (Senior Scale)
January 01, 2023 - till date	ICAR-Indian Institute of Agricultural Biotechnology, Garhkhataga, Ranchi -834 002 Senior Scientist

TEACHING AND STUDENTS GUIDING

Actively involved in teaching B.Tech (Biotechnology), M.Sc (Molecular Biology and Biotechnology) and Ph.D (Molecular Biology and Biotechnology).

Guided four M.Sc (Molecular Biology and Biotechnology) Students.

PUBLICATION

Research paper

Pahal S, Srivastava H, Saxena S, Tribhuvan KU, Kaila T, Sharma S, Grewal S, Singh NK, Gaikwad K (2023) Comparative transcriptome analysis of two contrasting genotypes provides new insights into the drought response mechanism in pigeon pea (*Cajanus cajan* L. Millsp.). *Genes Genom.* <https://doi.org/10.1007/s13258-023-01460-z>

Tribhuvan KU, Mishra T, Dilip S, Pandey A, Kumar S, Mahato JL, Raiger HL, Pattanayak A, Singh BK (2023) Genic-SSR-based genetic diversity and population structure analysis in a global germplasm collection highlights the African origin of winged bean (*Psophocarpus tetragonolobus* L.). *Genet Resour Crop Evol.* <https://doi.org/10.1007/s10722-023-01624-6>

Sanyal R, Pradhan B, Jawed D, Tribhuvan KU, Dahuja A, Kumar M, Kumar N, Mishra GP, Ram C, Mahatma MK, Singh BK, Mangrauthia SK, Singh AK, Sharma TR, Pattanayak A., Bishi SK (2023) Spatio-temporal expression pattern of Raffinose Synthase genes determine the levels of Raffinose Family Oligosaccharides in peanut (*Arachis hypogaea* L.) seed. *Sci Rep*, 795 (2023). <https://doi.org/10.1038/s41598-023-27890-z>

Karkute SG, Tribhuvan KU, Yadav S (2022) Nutrition Rich Fruits and Vegetables: Status and Opportunities in the Era of Genome Editing. *Journal of Allbiosolution.*

Kumar K, Anjoy P, Sahu S, Durgesh K, Das A, Tribhuvan KU, Mithra ASV, Joshi R, Jain PK, Singh NK, Rao AR, Gaikwad K (2022) Single trait versus principal component-

based association analysis for flowering related traits in pigeonpea. *Sci Rep*, Volume 12: 10453. <https://doi.org/10.1038/s41598-022-14568-1>

Tribhuvan KU, Singh DK, Pradhan B, Bishi SK, Pandey A, Kumar S, Bhati J, Mishra DC, Das A, Sharma TR, Pattanayak A, Singh BK (2022) Sequencing and de novo transcriptome assembly for discovering regulators of gene expression in Jack (*Artocarpus heterophyllus*). *Genomics*, Volume 114 (3), 110356, <https://doi.org/10.1016/j.ygeno.2022.110356>

Tribhuvan KU, Kaila T, Srivastava H, Das A, Kumar K, Durgesh K, Joshi R, Singh BK, Singh NK, Gaikwad K (2022) Structural and functional analysis of CCT family genes in pigeonpea. *Molecular biology reports*. <https://doi.org/10.1007/s11033-021-06860-6>

Singh DK, Pandey A, Choudhary SB, Kumar S, Tribhuvan KU, Mishra DC, Bhati J, Kumar M, Tomar JB, Bishnoi SK, Mallick MA, Bhadana VP, Sharma TR, Patanayak A, Singh BK (2021) Development of genic-SSR markers and their application in revealing genetic diversity and population structure in an Eastern and North-Eastern Indian collection of Jack (*Artocarpus heterophyllus* Lam.). *Ecological Indicators*, Volume 131, 108143, <https://doi.org/10.1016/j.ecolind.2021.108143>.

Kumar K, Srivastava H, Das A, Tribhuvan KU, Durgesh K, Joshi R, Mithra ASV, Jain PK, Singh NK, Gaikwad K (2021) Identification and characterization of MADS box gene family in pigeonpea for their role during floral transition. *3 Biotech* 11, 108. <https://doi.org/10.1007/s13205-020-02605-7>

Kandasamy T, Kumari K, Ghosh J, Tribhuvan KU, Lohot VD, Gargi M, Ghosal S (2020) EST-SSRs reveal genetic distinction between lac and grain yielding genotypes of pigeonpea. *Journal of Plant Biochemistry and Biotechnology*, <https://doi.org/10.1007/s13562-020-00558-9>

Tribhuvan KU, Das A, Srivastava H, Kumar K, Kumar D, Sandhya, Mithra ASV, Jain PK, Gaikwad K (2020) Identification and characterization of PEBP family genes reveal CcFT8 a probable candidate for photoperiod insensitivity in *C. cajan*. *3 Biotech*, 10:2190-5738. <https://doi.org/10.1007/s13205-020-02180-x>

Das A, Saxena S, Kumar K, Tribhuvan KU, Singh NK, Gaikwad K (2020) Non-coding RNAs having strong positive interaction with mRNAs reveal their regulatory nature during flowering in a wild relative of pigeonpea (*Cajanus scarabaeoides*). *Molecular Biology Reports*, <https://doi.org/10.1007/s11033-020-05400-y>

Tribhuvan KU, Mithra ASV, Sharma P, Das A, Kumar K, Tyagi A, Solanke AU, Sandhya, Sharma R, Jadhav PV, Raveendran M, Fakrudin B, Sharma TR, Singh NK, Gaikwad K (2019) Identification of genomic SSRs in cluster bean (*Cyamopsis tetragonoloba*) and demonstration of their utility in genetic diversity analysis. *Industrial Crops and Products*, 133: 221-231

Das A, Nigam D, Junaid A, Tribhuvan KU, Kumar K, Durgesh K, Singh N, Gaikwad K (2019) Expressivity of the key genes associated with seed and pod development is highly regulated via lncRNAs and miRNAs in Pigeonpea. *Scientific Reports* 9(1). <https://doi.org/10.1038/s41598-019-54340-6>

Kaila T, Saxena S, Ramakrishna, Tyagi A, Tribhuvan KU, Srivastava H, Sandhya, Chaudhury A, Singh NK, Gaikwad K (2019) Comparative RNA editing profile of mitochondrial transcripts in cytoplasmic male sterile and fertile pigeonpea reveal significant changes at the protein level. *Molecular Biology Reports*. 46: 2067-2084

Tribhuvan KU, Kumar K, Sevanthi AM, Gaikwad K (2018) MutMap: a versatile tool for identification of mutant loci and mapping of genes. *Indian Journal of Plant Physiology*. 23 (4): 612-621.

Das A, Kumar K, Tribhuvan KU, Das SS, Mishra M (2018) Development of haploid and double haploid in fruit crops-A review. *Int.J.Curr.Microbiol.App.Sci*. 7(5): 2119-2132

Singh BK, Mishra DC, Yadav S, Ambawat S, Vaidya E, Tribhuvan KU, Kumar A, Kumar S, Kumar S, Chaturvedi KK, Rani R, Yadav P, Rai A, Singh VV, Singh D (2016) Identification, characterization, validation and cross-species amplification of genic-

Books

Tribhuvan KU. Introductory plant biotechnology, Parmar Publication, Dhanbad-828109, Jharkhand.

Tribhuvan KU. Applications of Biotechnology, Parmar Publication, Dhanbad-828109, Jharkhand

Book chapters

Tribhuvan KU, Mishra T, Raj A, Shivakumaraswamy M, Singh BK (2023) 'Discovery and annotation of long non-coding RNAs (lncRNAs) from transcriptome data' in Dr. Harshada Joshi (eds) Advances in Biotechnology and Bioscience (Volume 14), Akinik Publications, New Delhi, Page 89-112.

Sharma S, Kumar K, Tribhuvan KU, Kumar S, Jain P, Saxena S, Vijayan J, Srivastava H, Gaikwad K (2022) 'High-throughput Genotyping Platforms' in Sonah H, Goyal V, Shivaraj SM, Deshmukh RK (eds) Genotyping by Sequencing for crop Improvement. Wiley publication, pages 22-37

Kumar K, Das A, Sandhya, Tribhuvan KU, Janghel D, Srivastava H (2019) 'Agrobacterium Mediated Gene Transfer in Plants: An Extension and Modification of Natural Process' in Dr. Gyanendra Kumar Rai (eds) Advances in Biotechnology and Bioscience (Volume 2). Akinik Publications Delhi, Page 01-16

Solanke AU, Tribhuvan KU, Kanika (2016) Genomics: an integrative approach for molecular biology. In: Biotechnology Progress and Prospects (Khurana SMP & Singh M, eds.), Studium Press LLC, USA, pp 234-270.

Popular Articles

Anshul Watts, Archana Watts, Ritesh Kumar Raipuria, Kishor U. Tribhuvan and Nand Lal Meena (2020) Salsola stocksii-The underutilized plant having various applications. Scientific India, 8(3)

Panzade KP, Kale SS, Manoj ML, Tribhuvan KU (2020) Progress of transgenic crops in India. food and scientific reports, 1(8): 45-46

Panzade KP, Tribhuvan KU, Kale SS (2020) Impact of climate change on agriculture and transgenic crops. Food and scientific reports, 1(4): 22-24

Panzade KP, Tribhuvan KU, Kapale VP (2020) Genome sequencing of Indian Cobra: the way forward towards discovering broad-based antivenom. Food and Scientific reports, 1: 30-31.

Panzade KP, Tribhuvan KU, Damse DN (2020) Hybrid cotton: A hidden truth behind the breakdown of Bt-cotton resistance against bollworm. Indian Farmer - A Monthly Magazine 6(6) 423-426

Tribhuvan KU, Das A, Pawar D, Bhowmick R (2019) Role of refugia crop in maintaining Bt cotton resistance. Indian Farmer - A Monthly Magazine 6(3) 195-197.

Das A, Tribhuvan KU, Kumar K, Das SS (2019) Tissue culture mediated propagation of banana for generation of virus free plants. Indian Farmer - A Monthly Magazine 6(6) 423-426.