

Name	Dr. Amit K. Tripathi
Designation	Scientist-B
Date of joining ICMR	2/12/2016
Educational Qualification	<ul style="list-style-type: none"> • Doctor of Philosophy (Ph.D.) in 2016 from International Centre for Genetic Engineering and Biotechnology (ICGEB)-Jawaharlal Nehru University (JNU), New Delhi, India • Master's Degree (2010) from Devi Ahilya Vishwavidyalaya, Indore, India (Gold Medalist)
Award/Fellowship	<p><u>Awards</u></p> <ul style="list-style-type: none"> • Jawaharlal Nehru Award for PG Outstanding Doctoral Thesis Research-2017 for Biotechnology awarded by ICAR (Govt. of India) • Wiley Researcher Academy Trophy awarded by Wiley Researcher Academy. • Early Career Research Award 2017 by Science and Engineering Research Board (Department of Science and Technology), Govt. of India • Secured the First rank (82%) and qualified ICAR-National Eligibility Test (A. Biotechnology) conducted by ASRB, ICAR (Govt. of India). • Secured All India Rank-23 in GATE (Graduate Aptitude Test for Engineering)-2011 (XL) conducted jointly by the seven Indian Institutes of Technology (IITs) and the Indian Institute of Science (IISc.) • Awarded in Biotechnology Entrepreneurship Student Team (BEST) Competition 2011 organized by Department of Biotechnology, (Govt. of India) & ABLE with the third prize carrying a cash award of Rs. 1.50 lakhs • Best poster award at the 3rd International Plant Physiology Congress • Gold Medalist & University Topper at the Master's level <p><u>Fellowships</u></p> <ul style="list-style-type: none"> • Secured All India Rank-19 in CSIR-JRF (June 2010) and awarded the Junior Research Fellowship (JRF) with NET by Council of Scientific and Industrial Research (CSIR), Govt. of India • Selected for Indian Council of Medical Research (ICMR)-JRF (2010) • Secured Rank-19 in BET (Biotechnology Eligibility Test)-2010 for DBT-JRF conducted by Department of Biotechnology (DBT), Govt. of India. • Awarded Postgraduate Scholarship by Department of Biotechnology, Govt. of India (2008-2010).

Thrust Area	<ul style="list-style-type: none"> ● Gene-Environment Interaction ● Role of various epigenetic factors (such as histone chaperones, histone modifying enzymes, chromatin remodeling complexes, DNA methylation machinery and small RNAs) in mediating physiological changes associated with exposure to adverse environmental conditions.
Publications	<p><u>Tripathi AK</u>, Pareek, A, Singla-Pareek, S. L. TUNEL assay to assess extent of DNA fragmentation and programmed cell death in root cells under various stress conditions. <i>Bio-protocol</i>, 2017; 7(16): e2502.</p> <p><u>Tripathi AK</u>, Pareek A, Singla-Pareek SL. A NAP-family histone chaperone functions in abiotic stress response and adaptation. <i>Plant Physiol.</i>, 2016; 171:2854-2868. <u>PubMed PMID: 27342307</u> [Impact Factor: 5.95].</p> <p><u>Tripathi AK</u>, Singh K, Pareek A, Singla-Pareek SL. Histone chaperones in Arabidopsis and rice: genome-wide identification, phylogeny, architecture and transcriptional regulation. <i>BMC Plant Biol.</i> 2015;12; 15:42. <u>PubMed PMID: 25849155</u> [Impact Factor: 3.93].</p> <p><u>Tripathi AK</u>, Pareek A, Sopory SK, Singla-Pareek SL. Narrowing down the targets for yield improvement in rice under normal and abiotic stress conditions via expression profiling of yield-related genes. <i>Rice(NY)</i>, 2012; 5:37. <u>PubMed PMID: 24280046</u> [Impact Factor: 3.74].</p> <p>Kaur C, <u>Tripathi AK</u>, Nutan KK, Sharma S, Ghosh A, Tripathi JK, Pareek A, Singla-Pareek SL, Sopory SK. A nuclear-localized rice glyoxalase I enzyme, OsGLYI-8, functions in the detoxification of methylglyoxal in the nucleus. <i>The Plant Journal</i>, 2017; 89(3):565-576. <u>PubMed PMID: 27797431</u>. [Impact Factor: 5.78].</p> <p>Joshi R, Sahoo KK, <u>Tripathi AK</u>, Kumar R, Gupta BK, Pareek A, Singla-Pareek SL. Knockdown of an inflorescence meristem-specific cytokinin oxidase – OsCKX2 in rice reduces yield penalty under salinity stress condition. <i>Plant, Cell & Environment</i>, 2018; 41:936-946. <u>PubMed PMID: 28337744</u>. [Impact Factor: 5.42]</p> <p>Gupta BK, Sahoo KK, Ghosh A, <u>Tripathi AK</u>, Anwar K, Das P, Singh AK, Pareek A, Sopory SK, Singla-Pareek SL. Manipulation of glyoxalase pathway confers tolerance to multiple stresses in rice. <i>Plant, Cell & Environment</i>, 2018; 41(5):1186-1200. <u>PubMed PMID: 28425127</u> [Impact Factor: 5.42].</p> <p>Kumari S, Joshi R, Singh K, Roy S, <u>Tripathi AK</u>, Singh P, Singla-Pareek SL, Pareek A. Expression of a cyclophilin OsCyp2-P isolated from a salt-tolerant landrace of rice in tobacco alleviates stress via ion homeostasis and limiting ROS accumulation. <i>Functional and</i></p>

	<p><i>Integrative Genomics</i>, 2015; 15(4):395-412. <u>PubMed PMID: 25523384</u> [Impact Factor: 3.89].</p> <p>Singh AK, Kumar R, <u>Tripathi AK</u>, Gupta B, Pareek A, Singla-Pareek SL. Genome-wide investigation and expression analysis of Sodium/Calcium exchanger gene family in rice and Arabidopsis. <i>Rice(NY)</i>. 2015; 8:21 <u>PubMed PMID: 26134707</u> [Impact Factor: 3.74].</p> <p>Gupta B, <u>Tripathi AK</u>, Joshi R, Pareek A, Singla-Pareek SL. Designing climate-smart future crops employing signal transduction components. In <i>Elucidation of Abiotic Stress Signaling in Plants 2015</i> (pp. 393-413). Springer, New York, NY. [ISBN: 978-1-4939-2210-9]</p> <p>Mustafiz A, Ghosh A, <u>Tripathi AK</u>, Kaur C, Ganguly AK, Bhavesh NS, Tripathi JK, Pareek A, Sopory SK, Singla-Pareek SL. A unique Ni²⁺-dependent and methylglyoxal-inducible rice glyoxalase I possesses a single active site and functions in abiotic stress response. <i>The Plant Journal</i>, 2014 78(6):951-63. <u>PubMed PMID: 24661284</u> [Impact Factor: 5.78].</p> <p>Sahoo KK, <u>Tripathi AK</u>, Pareek A, Singla-Pareek SL. Taming drought stress in rice through genetic engineering of transcription factors and protein kinases. <i>Plant Stress</i>, 2013; 7:60–72. [ISSN: 1749-0359].</p> <p>Sahoo KK, <u>Tripathi AK</u>, Pareek A, Sopory SK, Singla-Pareek SL. An improved protocol for efficient transformation and regeneration of diverse indica rice cultivars. <i>Plant Methods (BMC)</i>, 2011 30;7(1): 49. <u>PubMed PMID: 22206592</u> [Impact Factor: 4.27].</p>
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