

CURRICULUM VITAE

1. MAILING ADDRESS

Dr. Lam-Son Phan Tran, Professor

Texas Tech University

Department of Plant and Soil Science

Institute for Genomics of Crop Abiotic Stress Tolerance (IGCAST)

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Web of Science ResearcherID (A-1346-2009):

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Google Scholar ID: https://scholar.google.co.jp/citations?hl=en&user=PA-FRFsAAAAJ&view_op=list_works&sortby=pubdate

2. EDUCATION

- 1994-1997: Godollo University of Agricultural Sciences, Hungary (currently, Szent Istvan campus of Hungarian University of Agriculture and Life Sciences, Hungary)
- Qualification: **Doctor of Philosophy**
Ph.D. program: *Biological Bases of Agricultural Biotechnology*.
- 1988-1994: Godollo University of Agricultural Sciences, Hungary
Qualification: **Master of Agricultural Sciences** (specialized in *Biotechnology*)
- 1991-1992: Courses in International Trade organized in Godollo University of Agricultural Sciences, Hungary
Qualification: **Certificate in International Trade**
- 1987-1988: International Preparatory Institute, Hungary: 1987-1988
Qualification: Hungarian Language Training Course
- 1986-1987: Hanoi Languages University, Vietnam
Qualification: Hungarian Language Training Course

3. PROFESSIONAL CAREER

- 09/2020-current: Professor, Texas Tech University, Department of Plant and Soil Science, Institute for Genomics of Crop Abiotic Stress Tolerance (IGCAST), USA
- 04/2021-current: Senior Visiting Scientist, RIKEN, Japan
- 05/2019-05/2022: Visiting Scientist, Duy Tan University, Vietnam
- 10/2015-12/2020: Visiting Scientist, Ton Duc Thang University, Vietnam
- 03/2012-12/2020: Visiting Professor of Vietnam Academy of Agricultural Science
- 01/01/2009-31/08/2020: Unit Leader, Stress Adaptation Research Unit (former Signaling Pathway Research Unit), RIKEN Center for Sustainable Resource Science (former RIKEN Plant Science Center), Yokohama, Japan.
- 06/08/2007-31/12/2008: Senior Research Scientist, Soybean Genomics and Biotechnology Laboratory, Division of Plant Science, National Center for Soybean Biotechnology, University of Missouri-Columbia, MO, 65211, USA.
- 01/10/2003-31/07/2007: Special Researcher, Biological Resources Division, Japan International Research Center for Agricultural Sciences (JIRCAS), Japan.
- 10/10/2001-30/09/2003: JIRCAS fellow, Biological Resources Division, Japan International Research Center for Agricultural Sciences (JIRCAS), Japan.

- 01/03/2001-05/10/2001: JSPS postdoctoral fellow, Department of Microbial Cell Biology, Graduate School of Biological Science, Nara Institute of Science and Technology, Japan.
- 01/12/1998-30/11/2000: STA postdoctoral fellow, Applied Bacteriology Laboratory, Division of Microbiology, National Food Research Institute, Tsukuba, Japan.
- 01/07/1998-30/11/1998: Senior Researcher, Phylaxia company in conjunction with Department of Biotechnology and Molecular Genetics of Szent Istvan University, Hungary.
- 01/09/1997-30/06/1998: Researcher, Molecular Genetics Group, Hungarian Academy of Sciences, Department of Biotechnology and Molecular Genetics, Szent Istvan University, Hungary.
- 1994-1997: Ph.D. student, Teaching Assistant, Department of Biotechnology and Molecular Genetics, Szent Istvan University, Hungary.
- 1992-1994: Teaching Assistant and Demonstrator, Department of Biotechnology and Molecular Genetics, Szent Istvan University, Hungary.
- 1990-1992: part-time technician, Department of Biotechnology and Molecular Genetics, Szent Istvan University, Hungary.

4. TEACHING AND SUPERVISING EXPERIENCE

Teaching

- 09/2020-current: Professor, Texas Tech University, Department of Plant and Soil Science, Institute for Genomics of Crop Abiotic Stress Tolerance (IGCAST), USA
- 03/2012-12/2020: Visiting Professor of Vietnamese Academy of Agricultural Sciences
- 1992-1994: Teaching Assistant and Demonstrator in Department of Biotechnology and Molecular Genetics, Szent Istvan University, Hungary.

Supervising

- 01/2009-current: supervised/co-supervised 10 graduate students, supervised 9 postdoctoral researchers, and hosted more than 22 M.Sc and Ph.D students and visiting scholars from different countries for short-term visits.
- 2007-2008: participated in advising Ph.D students of Molecular Genetics and Soybean Genomics Laboratory, University of Missouri-Columbia, USA.
- 2006-2007: participated in advising M.Sc and Ph.D students of Biological Resources Division, JIRCAS-Laboratory of Plant Molecular Physiology, University of Tokyo, Japan.
- 1994-1997: participated in advising M.Sc and Ph.D students of Department of Biotechnology and Molecular Genetics, Szent Istvan University, Hungary.

5. CURRENT RESEARCH OF INTERESTS

- Functions of signaling molecules (e.g., acetate, ethanol, Ca, hormones, NO, H₂S, Ca, etc.), and their crosstalk in plant responses to abiotic stresses (e.g., drought, salinity heavy metal stresses, and pathogens).
- Signaling regulatory network controlling plant growth, productivity and responses to environmental stresses.
- Functional genomics of legume crops for improvement of productivity under adverse conditions.
- Discovery of novel genes for improvement of abiotic stress tolerance of crops (chickpea, common bean, cotton, maize, rice, soybean, and sorghum).
- Isolation and characterization of plant growth-promoting microorganisms that can confer abiotic tolerance and biotic resistance to various crops.
- Large-scale data mining of plant genomic sequences for functional and comparative genomics.

6. PROFESSIONAL DUTIES

Handling editor

- Editor of Plant Nano Biology (from 03/2022~)
- Associate Editor of AoB PLANTS (from 11/2020~)
- Associate Editor of Plant-Environment Interactions (from 7/2019~)
- Editor of Scientific Reports (from 10/2014~)
- Associate Editor of Plant Molecular Biology Reporter (from 04/2014~)
- Associate Editor of BMC Plant Biology (from 10/2013~)
- Associate Editor of BMC Genomics (from 09/2013~)
- Editor of International Journal of Molecular Sciences (from 05/2013~)
- Associate Editor of Frontiers in Plant Science (from 07/2016~)
- Academic Editor of BioMed Research International (former Journal of Biomedicine and Biotechnology) (from 10/2012~)
- Academic Editor of PloS One (from 02/2012~)
- Associate Editor of Critical Reviews in Biotechnology (04/2020-09/2021)

Board members

- Member of Editorial Board of Oil Crop Science (from 01/2023~)
- Member of Editorial Board of Plant Communications (from 01/2020~)
- Member of Editorial Board of Current Protein & Peptide Science (from 02/2019~)
- Member of the Bio2 (Functional Biology) Fellowship panel at the Research Foundation Flanders (01/2019-12/2019)
- Member of Editorial Board of Plant & Cell Physiology (from 01/2016~)
- Member of Editorial Board of Plant Science (04/2014-12/2016)
- Member of Editorial Board of Critical Reviews in Biotechnology (from 04/2012-03/2020)
- Member of Editorial Board of Biotechnology Advances (from 03/2012~)

Ad hoc reviewer

- **For journals:** Agricultural Water Management; Agronomy; Annals of Botany; Australian Journal of Botany; BMC Genomics; BMC Plant Biology; Bioinformatics; Critical Reviews in Biotechnology; DNA Research; Environmental and Experimental Botany; Environmental Pollution; Environmental Science: Nano; Environmental Science & Technology; FEBS Letters; Frontiers in Plant Science; Functional & Integrative Genomics; Genetics and Molecular Biology; GM Crops & Food: Biotechnology in Agriculture and the Food Chain; Genome Biology; Journal of Agronomy and Crop Science; Journal of Chromatography A; Journal of Experimental Botany; Journal of Hazardous Materials; Journal of Plant Growth Regulation; Journal of Plant Physiology; Journal of Plant Research; Land Degradation & Development; Molecular Biology Reports; Molecular Genetics and Genomics; Molecular Plants, Molecular Plant-Microbe Interactions; Mycorrhiza; Nature Communications; New Phytologist; Pedosphere; Photosynthetica; Physiological and Molecular Plant Pathology; Physiologia Plantarum; Phytochemistry; Planta; Plant Biotechnology Journal; Plant Cell; Plant, Cell & Environment; Plant & Cell Physiology; Plant Cell Reports; Plant Cell, Tissue and Organ Culture; Plant Communications; Plant Genome; Plant Journal; Plant Molecular Biology; Plant Molecular Biology Reporter; Plant Physiology; Plant Physiology and Biochemistry; Plant Science; Plant Signaling & Behavior; PloS Genetics; PloS One; Proceedings of the National Academy of Sciences; Renewable &

Sustainable Energy; Rice; Science of the Total Environment; Scientific Reports; Symbiosis; Theoretical and Applied Genetics; Tree Genetics & Genomes; Trends in Plant Science.

- **For funding agencies:** National Science Foundation-USA, United State-Israel Binational Science Foundation, the United States-Israel Binational Agricultural Research & Development Fund (BARD), French National Research Agency, ERA-CAPS-German Research Foundation, Academy of Sciences of the Czech Republic, National Science Centre of Poland, International Foundation for Science, Biotechnology Panel of Israeli Ministry of Agriculture and Rural Development, AgreenSkills programme (INRA-France), Research Foundation Flanders (Belgium), National Center of Science and Technology Evaluation (Kazakhstan), Millenium Science Initiative (Chile).

7. RESEARCH GRANTS & FUNDING

A total of ~\$US1.6 million (my share) has been secured as PI or co-PI since joining Texas Tech University from 09/01/2020, out of which **~\$850,000** (my share) was obtained in FY2024.

NAME (PD/PI; co-PD/co-PI)	SUPPORTING AGENCY AND AGENCY ACTIVE AWARD/PENDING PROPOSAL NUMBER	TOTAL \$ AMOUNT	EFFECTIVE AND EXPIRATION DATES	% OF TIME COMMITTED (CREDIT/ALLOCATION)	TITLE OF PROJECT
PI: Lam-Son Phan Tran Co-PI: Henry T. Nguyen, Ljiljana Paša-Tolić, Kevin J. Zemaitis, Hung Tran, Mostafa Abdelrahman	DE-FOA-0003453 (Preproposal submitted)	\$15,000,000	01/01/2026 to 12/31/2030	10% (20% allocation of credit)	Decoding rhizobiome potential of biofuel sorghum: Enhancing resilience and nutrient acquisition under hot semi-arid climates
PI: Luis Herrera-Estrella Co-PIs: Lam-Son Phan Tran , Hung Tran, Victor A. Albert, Francesca Cotrufo	NSF 23-511: Biology Integration Institutes (BII) (Full proposal under preparation for February 18, 2025 deadline)	\$15,000,000	01/01/2026 to 12/31/2031	10% (20% allocation of credit)	BII: IEMI: Institute for Extremophyte-Microbe Interactions Life at the Extremes: Investigating the co-evolution of extremophilic plants and their rhizosphere microbiomes in the Earth's harshest ecosystems
PI: Gunvant, Patil Co-PIs: Lam-Son Phan Tran , Hong Zhang	United Soybean Board (Pending)	\$140,915	10/01/2025-09/30/2026	2% (10% allocation of credit)	Redefining the effects of beneficial microorganisms on nitrogen fixation and nutrient uptake in soybean to provide sustainable solutions to reduce chemical fertilizers use (3 rd year)
PI: Lam-Son Phan Tran Co-PIs: Aarti Gupta	United Soybean Board (Pending)	\$140,600	10/01/2025-09/30/2026	5% (100% allocation of credit to the lab)	Resilient root: Leveraging plant growth promoting bacteria in soybean to combat dual drought and heat stress (2 nd year)
PD: Lam-Son Phan Tran Co-PDs: Madhusudana Janga, Mostofa Mohammed	USDA-AFRI (Pending)	\$650,000	03/01/2024 to 02/29/2028	8%	Silicon-mediated enhancement of heat tolerance in cotton
PD: Damar Lopez-Arredondo Co-PDs: Luis Herrera-Estrella, Lam-Son Phan Tran	USDA-AFRI (Pending)	\$650,000	01/01/2024 to 12/31/2026	3%	Harnessing microalgae diversity to discover novel bioherbicides and nematicides with new modes of action for sustainable agriculture
PI: Lam-Son Phan Tran Co-PI: Chien Van Ha	BASF-TTU Project Revolution (Current)	\$385,668	01/01/2025 – 12/31/2027	5% (100% fund remains in the lab)	Development of a new technology for gene editing via pollen transformation in cotton

PI: Lam-Son Phan Tran Co-PI: Chien Van Ha	The Texas State Support Committee (25-425TX) and Cotton Incorporated (25-479) (Current)	\$25,650	01/01/2025 – 12/31/2025	3% (100% fund remains in the lab)	Nano-priming with ZnO-NPs to improve cotton drought tolerance and yield performance under field conditions (1 st year)
PI: Lam-Son Phan Tran Co-PI: Aarti Gupta	The Texas State Support Committee (24-921TX) (Current)	\$20,000	01/01/2025 – 12/31/2025	3% (100% fund remains in the lab)	Roles of plant growth-promoting bacteria in improving cotton growth and yield performance under high salinity (2 nd year)
PI: Chien Van Ha Co-PI: Lam-Son Phan Tran , Noureddine Abidi	The Texas State Support Committee (24-909TX) (Current)	\$25,000	01/01/2025 – 12/31/2025	3% (60% fund remains in the lab)	Enhancement of drought tolerance and reduction of fiber detachment force of cotton using co-application of acetic acid and ethanol (2 nd year)
PI: Gunvant, Patil Co-PIs: Luis Herrera-Estrella, Lam-Son Phan Tran	United Soybean Board (Current)	\$227,084	10/01/2024-09/30/2025	2% (15% allocation of credit)	Redefining the effects of beneficial microorganisms on nitrogen fixation and nutrient uptake in soybean to provide sustainable solutions to reduce chemical fertilizers use (2 nd year)
PI: Lam-Son Phan Tran Co-PIs: Aarti Gupta	United Soybean Board (Current)	\$124,798	10/01/2024-09/30/2025	5% (100% allocation of credit to the lab)	Resilient root: Leveraging plant growth promoting bacteria in soybean to combat dual drought and heat stress (1 st year)
PD: Henry Nguyen, Co-PD: Lam-Son Phan Tran	USDA-NIFA (2024-67013-41992) (Current)	\$490,000	07/01/2024 to 06/30/2027	3% (50% allocation)	Understanding and improvement of soybean tolerance to individual and combined cold and waterlogging stresses at early growth stage
PI: Lam-Son Phan Tran Co-PI: Chien Van Ha	The Texas State Support Committee (22-484TX) and Cotton Incorporated (22-618) (Current)	\$25,650	01/01/2024 – 12/31/2024	3% (100% fund remains in the lab)	Improvement of cotton growth and yield performance under drought stress with the employment of zinc oxide nanoparticles (Continuation for 3 rd year)
PI: Lam-Son Phan Tran Co-PI: Aarti Gupta	The Texas State Support Committee (24-921TX) (Current)	\$20,000	01/01/2024 – 12/31/2024	3% (100% fund remains in the lab)	Roles of plant growth-promoting bacteria in improving cotton growth and yield performance under high salinity (1 st year)
PI: Chien Van Ha Co-PI: Lam-Son Phan Tran , Noureddine Abidi	The Texas State Support Committee (24-909TX) (Current)	\$25,000	01/01/2024 – 12/31/2024	3% (60% fund remains in the lab)	Enhancement of drought tolerance and reduction of fiber detachment force of cotton using co-application of acetic acid and ethanol (1 st year)
PI: Damar Lopez-Arredondo Co-PIs: Luis Herrera-Estrella, Lam-Son Phan Tran	United Soybean Board (Project #2314-209-0501) (Finished)	\$131,956	10/01/2023-09/30/2024	2% (20% allocation of credit)	Genetic improvement of soybean to boost weed control and phosphorus nutrition (Continuation for 2 nd year)
PI: Mayank Gururani Co-PI: Lam-Son Phan Tran	United Arab Emirates University (UAEU) Program for Advanced Research, ID: 700027433) (Current)	\$95,000	04/01/2023-03/31/2025	5% (100% fund remains in UAEU)	Study on the mechanism of brassinosteroids regulating symbiotic nodulation in soybean
PI: Luis Herrera-Estrella Co-PIs: Lam-Son Phan Tran , Damar Lopez-Arredondo, Gunvant Patil, Yinping Jiao	United Sorghum Checkoff Program (A23-0146) (Current)	\$1,000,000	01/01/2023-12/31/2027	3% (15% allocation of credit)	An integrated research program to accelerate sorghum breeding and management for improving weed control, abiotic stress tolerance and grain quality
PI: Lam-Son Phan Tran Co-PI: Mohamad Golam Mostofa	The Texas State Support Committee (22-484TX) and Cotton Incorporated (22-618) (Finished)	\$25,650	01/01/2023 – 12/31/2023	3% (100% fund remains in the lab)	Improvement of cotton growth and yield performance under drought stress with the employment zinc oxide nanoparticles (Continuation for 2 nd year)

PI: Damar Lopez-Arredondo Co-PIs: Luis Herrera-Estrella, Lam-Son Phan Tran	United Soybean Board (Project #2314-209-0501) (Finished)	\$108,979	10/01/2022-09/30/2023	2% (20% allocation of credit)	Genetic improvement of soybean to boost weed control and phosphorus nutrition
PI: Lam-Son Phan Tran Co-PI: Mohamad Golam Mostofa	United Soybean Board (Project #2313-209-0101) (Finished)	\$112,474	10/01/2022-09/30/2023	5% (100% fund remains in the lab)	Combining chemical and genetic strategies for improvement of growth and yield potential in soybean under drought stress (continuation for 2nd year , project #2220-172-0148)
PI: Lam-Son Phan Tran Co-PI: Mohamad Golam Mostofa	United Soybean Board (Project #2220-172-0148) (Finished)	\$99,656	10/2021 – 03/2023	5% (100% fund remains in the lab)	Combining chemical and genetic strategies for improvement of growth and yield potential in soybean under drought stress (1st year)
PI: Lam-Son Phan Tran Co-PIs: Mendu Venugopal, Dampanaboina Lavanya	BASF-TTU Project Revolution (Finished)	\$138,818	11/2021 – 03/2023	5% (100% fund remains in the lab)	Genome editing to improve photosynthetic efficiency and biomass yield in soybean
PI: Lam-Son Phan Tran Co-PI: Mohamad Golam Mostofa	The Texas State Support Committee (22-484TX) and Cotton Incorporated (22-618) (Finished)	\$23,650	1/2022 – 12/2022	3% (100% fund remains in the lab)	Improvement of cotton growth and yield performance under drought stress with the employment of zinc oxide nanoparticles (1st year)

A total of ~\$US1.1 million was obtained between 02/2008 and 04/2020 as PI or co-PI, before joining Texas Tech University.

8. AWARDS AND HONOURS

- Highly Cited Researcher 2024 (Thomson Reuters/Clarivate Analytics)
- Letter of Appreciation from the President of RIKEN for receiving Highly Cited Researcher 2024
- Highly Cited Researcher 2023 (Thomson Reuters/Clarivate Analytics)
- Letter of Appreciation from the President of RIKEN for receiving Highly Cited Researcher 2023
- The Texas Tech Parents Association's Barney E. Rushing, Jr., Faculty Distinguished Research Award – STEM, 2023
- Elected Fellow of *The National Academy of Sciences, India* (effective 01-January-2023)
- Highly Cited Researcher 2022 (Thomson Reuters/Clarivate Analytics)
- Letter of Appreciation from the President of RIKEN for receiving Highly Cited Researcher 2022
- Highly Cited Researcher 2021 (Thomson Reuters/Clarivate Analytics)
- Letter of Appreciation from the President of RIKEN for receiving Highly Cited Researcher 2021
- Highly Cited Researcher 2020 (Thomson Reuters/Clarivate Analytics)
- Letter of Appreciation from the President of RIKEN for receiving Highly Cited Researcher 2020
- Visiting Scientists Award from the Chinese Academy of Sciences for 2021
- Stanford University's lists of 2% scientists (both "career-long citation impact" and "citation impact during the single calendar year 2019") (PLoS Biology 18:e300098; <https://doi.org/10.1371/journal.pbio.3000918>)
- Elected Fellow of *The World Academy of Sciences (TWAS) for the advancement of science in developing countries* (effective 01-January-2020)

- Letter of Appreciation from the President of RIKEN for receiving Highly Cited Researcher 2019
- Highly Cited Researcher 2019 (Thomson Reuters/Clarivate Analytics)
- Letter of Appreciation from the President of RIKEN for receiving Highly Cited Researcher 2018
- Highly Cited Researcher 2018 (Thomson Reuters/Clarivate Analytics)
- Letter of Appreciation from the President of RIKEN for receiving Highly Cited Researcher 2016
- Highly Cited Researcher 2016 (Thomson Reuters/Clarivate Analytics)
- 10/2001-09/2003: JIRCAS Visiting Research Fellowship.
- 03/2001-09/2001: Postdoctoral fellowship from Japan Society for the Promotion of Science.
- 11/1998-11/2000: Postdoctoral fellowship from Science and Technology Agency, Japan.
- 09/1994-08/1997: Ph.D. scholarship from the Szent Istvan University and Ministry of Training and Education, Hungary.
- 04/1993: Honour Prize from the Hungarian Ministry of Environmental Protection on National Scientific Congress of University Students, Biotechnology Section, Szombathely, Hungary.
- 04/1993: Second Prize on National Scientific Congress of University Students, Biotechnology Section, Szombathely, Hungary.
- 12/1992: First Prize on Scientific Conference of Szent Istvan University's Students, Biotechnology Section, Godollo, Hungary.
- 08/1987-08/1994: Scholarship for Outstanding Achievement on University Admission Examination, awarded by the Vietnamese Government for B.Sc-M.Sc studies in Hungary.

Cited by	VIEW ALL	
	All	Since 2020
Citations	35969	21224
h-index	96	80
i10-index	263	246

9. STATISTICS ON PAPERS, BOOKS AND REPORTS

(1) Web of Science

<https://www.webofscience.com/wos/author/record/397751>

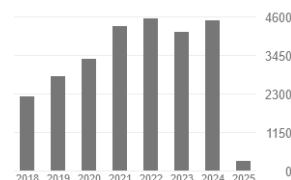
(2) Google Scholar (as of 01/22/2025):

https://scholar.google.com/citations?hl=en&user=PA-FRFsAAAAJ&view_op=list_works&sortby=pubdate

(3) ORCID: <https://orcid.org/0000-0001-9883-9768>

(4) Scopus Author ID: 7102277565

<https://www.scopus.com/authid/detail.uri?authorId=7102277565>



PUBLICATIONS

I. Patents

Ha CV, **Tran LP**, Herrera-Estrella L, Christian M (2025). U.S. Pat. App. No. **PCT/US2023/027600 (TTU Ref. No. 2022-082**, filed on 01/07/ 2025, 25%/each)

Ha CV, **Tran LP**, Herrera-Estrella L, Christian M (2022). U.S. Provisional Pat. App. No. **63/388,878** (filed on 07/13/ 2022, 25%/each)

II. Research papers (*corresponding author/co-corresponding author)

2024

1. Le TD, Ha CV, Nguyen KH, Chu HD, Zhu C, Li W, Watanabe Y, Kojima M, Takebayashi Y, Sakakibara H, Mochida K, ***Tran LP** (2024). Altering endogenous cytokinin content by GmCKX13 as a strategy to develop drought-tolerant plants. **Plant Stress** **11**:100678.
2. Gupta A, Li L, Zhu C, Xu K, Jia K, Miao Y, Li W, ***Tran LP** (2024). Differential modulation of hormonal pathways by strigolactone and karrikin signaling. **Plant Growth Regul** **104**:1197–1205.
3. Ma X, Zhang B, Xiang X, Li W, Li J, Li Y, ***Tran LP**, Yin H (2024). Characterization of *Bacillus pacificus* G124 and its promoting role in plant growth and drought tolerance. **Plants** **13**:2864.
4. Zhang P, Liu F, Abdelrahman M, Song Q, Wu F, Li R, Wu M, Herrera-Estrella L, ***Tran LP**, Xu J (2024). ARR1 and ARR12 modulate arsenite toxicity responses in *Arabidopsis* roots by transcriptionally controlling the actions of *NIP1;1* and *NIP6;1*. **Plant J** **120**:1536-51.
5. Urfan M, Rajput P, Mahajan P, Sharma S, Hakla HR, Kour V, Khajuria B, Chowdhary R, Lehana PK, Karlupia N, Abrol P, ***Tran LSP**, Choudhary SP (2024). The deep learning-crop platform (DL-CRoP): for species-level identification and nutrient status of agricultural crops. **Research** **7**:0491.
6. Sun L, Zhang P, Li W, Li R, Ju Q, ***Tran LP**, Xu J (2024). The bifunctional transcription factor NAC32 modulates nickel toxicity responses through repression of root-nickel compartmentalization and activation of auxin biosynthesis. **J Hazard Mater** **325**:135925.
7. Mahmud A, Islam MdN, Islam AKMA, Islam MM, Ghosh UK, Hossain MS, Sheikh A, Rahman MHS, ***Tran LP**, Khan MAR (2024). Evaluation of yield-attributing parameters in Aus rice for enhancing productivity. **Plant Genetic Resources: Characterization and Utilization** **22**:368-77.
8. Alyammahi O, Kappachery S, Sasi S, Ghosh R, Venkatesh J, Varghese N, Abdelrahman M, ***Tran LP**, Gururani MA (2024). Ectopic expression of the potato *StD26* encoding a ribosomal protein S27 enhances salt tolerance in *Arabidopsis thaliana*. **J Plant Growth Regul** (DOI: <https://doi.org/10.1007/s00344-023-11175-w>).
9. Yi F, Li Y, Song A, Shi X, Hu S, Wu S, Shao L, Chu Z, Xu K, Li L, ***Tran LP**, Li W, Cai Y (2024). Positive roles of the Ca²⁺ sensors GbCML45 and GbCML50 in improving cotton Verticillium wilt resistance. **Mol Plant Pathol** **25**:e13483.
10. Anik TR, Chu HD, Ahmed MS, Ha CV, Gangurde SS, Khan MAR, Le TD, Le DT, Abdelrahman M, ***Tran LP** (2024). Genome-wide characterization of the glutathione S-

- transferase gene family in *Phaseolus vulgaris* reveals insight into the roles of their members in responses to multiple abiotic stresses. **Plant Stress** 11:100489.
11. Nguyen KH, Li Z, Wang C, Ha CV, Tran CD, Abdelrahman M, Pham HX, Trung KH, Khanh TD, Chu HD, Mostofa MG, Watanabe Y, Wang Y, Miao Y, Mochida K, Pal S, Li W, ***Tran LP** (2024). Cytokinin and MAX2 signaling pathways act antagonistically in drought adaptation of *Arabidopsis thaliana*. **Plant Stress** 11:100484.
 12. Zhao Y, Liu S, Liu H, Wang F, Dong Y, Wu G, Li Y, Wang W, **Tran LP**, Li W (2024). Multi-objective ecological restoration priority in China: Cost-benefit optimization in different ecological performance regimes based on planetary boundaries. **J Environ Manage** 356:120701.
 13. Wu R, Liu Z, Sun S, Qin A, Liu H, Zhou Y, Li W, Liu Y, Hu M, Yang J, Rochaix J-D, An G, Herrera-Estrella L, **Tran LP**, Sun X (2024). Identification of bZIP transcription factors that regulate the development of leaf epidermal cells in *Arabidopsis thaliana* by single-cell RNA sequencing. **Int J Mol Sci** 25:2553.
 14. Sulieman S, Ha CV, Le DT, Abdelrahman M, Tran CD, Watanabe Y, Tanaka M, Ulhassan Z, Sheteiwy MS, Gangurde SS, Mochida K, Seki M, ***Tran LP** (2024). Comparative transcriptome analysis of respiration-related genes in nodules of phosphate-deficient soybean (*Glycine max* cv. Williams 82). **Plant Stress** 11:100368.
 15. Tian L, Wang J, Chen H, Li W, ***Tran LP**, Tian C (2024). Integrative multi-omics approaches revealed that Asian cultivated rice domestication influenced its symbiotic relationship with arbuscular mycorrhizal fungi. **Pedosphere** 34: 315-27.
 16. Xie X, Liu Y, Chen G, Turatsinze AN, Yue L, Ye A, Zhou Q, Wang Y, Zhang M, Zhang Y, Li Z, **Tran LP**, Wang R (2024). Granular bacterial inoculant alters the rhizosphere microbiome and soil aggregate fractionation to affect phosphorus fractions and maize growth. **Sci Total Environ** 912:169371.
 17. Sultana S, Rahman MM, Das AK, Haque MA, Rahman MA, Islam SMN, Ghosh PK, Keya SS, ***Tran LP**, Mostofa MG (2024). Role of salicylic acid in improving the yield of two promising mung bean genotypes under waterlogging stress through the modulation of antioxidant defense and osmoprotectant levels. **Plant Physiol Biochem** 206:108230.
 18. Rahman MM, Mostofa MG, Keya SS, Ghosh PK, Abdelrahman M, Anik TR, Gupta A, ***Tran LP** (2024). Jasmonic acid priming augments antioxidant defense and photosynthesis in soybean to alleviate combined heat and drought stress effects. **Plant Physiol Biochem** 206:108193.

2023

19. Rahman MM, Das AK, Sultana S, Ghosh PK, Islam MR, Keya SS, Ahmed M, Nihad SAI, Khan MAR, Lovell MC, Rahman MA, Ahsan SM, Anik TR, Fnu P, ***Tran LP**, Mostofa MG (2023). Biochar potentially enhances maize tolerance to arsenic toxicity by improving physiological and biochemical responses to excessive arsenate. **Biochar** 5:71.
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