

CURRICULUM VITAE

Shri Ram Yadav

Professor

Department of Biosciences & Bioengineering,
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Research Expertise and Interest

- Plant Developmental Biology
- Molecular Genetics and Functional Genomics
- Understanding Mechanism of Fibrous Root System Establishment
- Genome Editing for Improved Plant Architecture and Quality Traits

Professional Experience and Employment

(1) **Professor** (2025 onwards) at Department of Biosciences and Bioengineering, Indian Institute of Technology, Roorkee, Uttarakhand, INDIA.

(2) **Associate Professor** (2020-2025) at Department of Biosciences and Bioengineering, Indian Institute of Technology, Roorkee, Uttarakhand, INDIA.

(3) **Assistant Professor** (2014-2020) at Department of Biotechnology, Indian Institute of Technology, Roorkee, Uttarakhand, INDIA.

(4) **Post-doctoral Research** (2009-2014): Post-doctoral researcher with Prof. Yrjö Helariutta at Institute of Biotechnology, University of Helsinki, FINLAND.

Educational Qualifications

(1) **Ph.D.** (2003-2009) at Department of Microbiology and Cell Biology (MCB), Indian Institute of Science (IISc), Bangalore, INDIA. **Thesis supervisor:** Prof. Usha Vijayraghavan

(2) **Master of Science (M. Sc.) in Biotechnology** (2000-2002): 1st rank with 72.7% marks from Department of Biotechnology, University of Jammu, Jammu, Jammu & Kashmir, INDIA.

(3) **Bachelor of Science (B. Sc.) in Botany, Zoology, Chemistry** (1997-2000) from Udai Pratap Autonomous Degree College Varanasi, Uttar Pradesh, INDIA with 72% marks.

Achievements, fellowships and recognition

- (1) Elected Fellow (2024) of the National Academy of Sciences, India (**FNASc**), by NASI, India
- (2) International mobility funds (Explore #6) from **University of Montpellier**, France
- (3) SERB-STAR award (2021-2024) by Science and Engineering Research Board, **SERB**, India
- (4) Member of Indian National Young Academy of Science (2018-2022) by **INyas**, India
- (5) INSA Medal for Young Scientist (2015) by **INSA**, New Delhi, India
- (6) NASI-Young Scientist Platinum Jubilee Award (2015) by **NASI**, Allahabad, India
- (7) Innovative Young Biotechnologist Award (2014), by **DBT**, New Delhi India
- (8) Prof. Tuneo Yamada Prize (2006) Indian Society of Developmental Biologist, INDIA
- (9) Junior/Senior Research Fellowship (JRF/SRF) in 2003/2005 in Life Science from **CSIR-UGC**, India
- (10) Qualified Graduate Aptitude test for Engineering (**GATE-2003**) in Life Science
- (11) **Gold medal** for 1st position in M.Sc. Biotechnology, Jammu University, J & K, India

Research Accomplishments

Peer-reviewed International Journal papers: 31; Patents: 05; Book chapter: 02

(h-index: 18; i-10 index: 26; Total citations: 2715;

Source: Google Scholar (<https://scholar.google.com/citations?user=VDKH34IAAAAJ&hl=en>)

Conferences and workshops/Seminars: 38/8; Invited talk: 23 (Abroad: 05; Inland: 18)

Supervision: Ph.D. thesis: Completed: 06; Ongoing: 10,

Post-doctoral research: 02,

M.Sc. dissertation: 10; B. Tech dissertation: 11; Project JRF/SRF: 15

Research Publications

(31) Tripathi, D. K., Corpas, F. J., and **Yadav, S. R.** (2024) Plant root biology under a changing environment. *Planta*: 260, Article number: 129. (**Impact factor: 4.8**)

(30) Kumar, A., Verma, K., Kashyap, R., Joshi, J. J., Sircar, D., and **Yadav, S. R.** (2024) Auxin-responsive ROS homeostasis genes display dynamic expression pattern during rice crown root primordia morphogenesis. *Plant Physiology and Biochemistry*: 206, 108307. (**Impact factor: 6.5**)

(29) Ray, R., Singh, S. S., **Yadav, S. R.**, and Sircar, D. (2024) A nondestructive asymptomatic early disease prediction method employing ROS-induced differential volatile emissions from dry rot-infected potatoes. *Plant Physiology and Biochemistry*: 208, 108532. (**Impact factor: 6.5**)

(28) Demiwal, P., Tayade, S., **Yadav, S. R.**, and Sircar, D. (2024) A metabolomics perspective on root-derived plant immunity and phytohormone interaction. *Physiologia Plantarum*: 176, e14150. (**Impact factor: 6.4**)

(27) Demiwal, P., Nabi, S. U., Mir, J. I., Verma, M. K., **Yadav, S. R.**, Roy, P., and Sircar, D. (2024) Methyl jasmonate improves resistance in scab-susceptible Red Delicious apple by altering ROS homeostasis and enhancing phenylpropanoid biosynthesis. *Plant Physiology and Biochemistry*: 207, 108371. (**Impact factor: 6.5**)

(26) Garg, T., Yadav, M., Mushahary, K. K. K., Kumar, A., Pal, V., Singh, H., Jain, M., and **Yadav S. R.** (2023) Spatially activated conserved auxin-transcription factor regulatory module controls *de novo* root organogenesis in rice. *Planta*: 258, Article number: 52. (**Impact factor: 4.8**)

(25) Bourdon, M., Lyczakowski, J.J., Cresswell, R., Amsbury, S., Vilaplana, F., Guen, M.L., Follain, N., Wightman, R., Su, C., Alatorre-Cobos, F., Ritter, M., Liszka, A., Terrett, O.M., **Yadav, S.R.**, Vatén, A., Nieminen, K., Eswaran, G., Alonso-Serra, J., Müller, K.H., Iuga, D., Miskolczi, P.C., Kalmbach, L., Otero-Perez, S., Mähönen, A.P., Bhalerao, R., Bulone, V., Mansfield, S., Hill, S., Burgert, I., Beaugrand, J., Benitez-Alfonso, Y., Dupree, R., Dupree, P., and Helariutta, Y. (2023) Ectopic callose deposition into woody biomass modulates the nano-architecture of macrofibrils. *Nature Plants*: 9, 1530–1546. (**Impact factor: 17.352**)

(24) Singh, H., Singh, Z., Kashyap, R. and **Yadav S.R.** (2023) Lateral root branching: evolutionary innovations and mechanistic divergence in land plants. *New Phytologist*: 238, 1379-1385. (Invited Tansley Insight). (**Impact factor: 10.323**)

(23) Tripathi, D.K., **Yadav, S.R.**, Mochida, K., and Tran, LSP (2022) Plant growth regulators: true managers of plant life. *Plant and Cell Physiology*: 63, 1757-1760. (Editorial) (**Impact factor: 4.937**)

(22) Singh, Z.[#], Singh, H.[#], Garg, T., Mushahary, K.K.K, and **Yadav S.R.** (2022) Genetic and Hormonal Blueprint of Shoot-Borne Adventitious Root Development in Rice and Maize. *Plant and Cell Physiology*: 63, 1806–1813. (**Impact factor: 4.937**) [#]Joint first author

(21) Garg, T.[#], Singh, Z.[#], Chennakesavulu, K., Mushahary, K.K.K, Dwivedi, A.K., Varapparambathu, V., Singh, H., Singh, R.S., Sircar, D., Chandran, D., Prasad, K., Jain, M., and **Yadav S.R.** (2022) Species-specific function of conserved regulators in orchestrating rice root architecture*. *Development*: 149, dev200381. (**Impact factor: 6.868**) [#]Joint first author.

(*A SPOTLIGHT was published on this work by Kidwai, M., Mishra, P., and Bellini, C (2023), *Trends in Plant Science*: 28, 128-130).

(20) Singh, H.[#], Singh, Z.[#], Zhu, T., Xu, X., Waghmode, B., Garg, T., Yadav, S., Sircar, D., De Smet, I., and **Yadav S.R.** (2022) Auxin-Responsive (phospho) proteome Analysis Reveals Key Biological Processes and Signaling Associated with Shoot-Borne Crown Root Development in Rice. *Plant and Cell Physiology*; 63, 1968–1979. (**Impact factor: 4.937**) [#]Joint first author

(19) Chennakesavulu, K., Singh, H., Trivedi, P.K., Jain, M. and **Yadav, S.R.** (2021) State-of-the-Art in CRISPR Technology and Engineering Drought, Salinity, and Thermo-tolerant crop plants. *Plant Cell Reports*, 41, 815–831. (**Impact factor: 4.964**)

(18) Neogy, A., Singh, Z., Mushahary, K.K.K, and **Yadav, S.R.** (2021) Dynamic cytokinin signaling and function of auxin in cytokinin responsive domains during rice crown root development. *Plant Cell Reports*: 40, 1367-1375. (**Impact factor: 4.570**)

(17) Singh, H., Bhat, J.A., Singh, V.P., Corpas., F.J., and **Yadav, S. R.** (2021) Auxin metabolic network regulates the plant response to metalloids stress. *Journal of Hazardous Materials*: 405; 124250. (**Impact factor: 14.224**)

(16) Yadav, A., Garg, T., Singh, H., and **Yadav, S.R.** (2020) Tissue-specific expression pattern of Calcium-dependent protein kinases-related kinases (CRKs) in rice. *Plant Signaling and Behavior*: 15: 1809846. (**Impact factor: 1.7**)

(15) Neogy, A. [#], Garg, T. [#], Kumar, A., Dwivedi, A. K., Singh, H., Singh, U., Singh, Z., Prasad, K., Jain, M. and **Yadav, S.R.** (2019) Genome-Wide Transcript Profiling Reveals an Auxin-Responsive Transcription Factor, OsAP2/ERF-40, Promoting Rice Adventitious Root Development. *Plant and Cell Physiology*: 60: 2343-2355. [#]Joint first author. (**Impact factor: 4.062**)

(14) Yan, D.[#], **Yadav, S. R.**[#], Paterlini, A., Nicolas, W. J., Petit, J. D., Brocard, L., Belevich, I., Grison, M. S., Vaten, A., Karami, L., El-Showk, S., Lee, J., Murawska, G. M., Mortimer, J., Knoblauch, M., Jokitalo, E., Markham, J. E., Bayer, E. M. and Helariutta, Y (2019) Sphingolipid biosynthesis modulates plasmodesmal ultrastructure and phloem unloading. *Nature Plants*: 5: 604-615. [#]Joint first author. (**Impact factor: 10.33**)

(13) Garg A, Singhanian T, Singh A, Sharma S, Rani S, Neogy A, **Yadav S. R.**, Sangal VK, and Garg N. (2019) Photocatalytic Degradation of Bisphenol-A using N, Co Codoped TiO₂ Catalyst under Solar Light. *Scientific Reports*: 9:765. (**Impact factor: 4.12**)

(12) **Yadav, S. R.**, Kumar, A., Neogy, A., and Garg, T. (2017) *OsMADS1/OsLHS1*: diversified regulatory functions in ensuring transition and completion of sexual reproduction in rice. *Proc Indian Natn Sci Acad* 83: 67-79 (Review). (**Impact factor: 0.921**)

- (11) Siligato, R., Wang, X., **Yadav, S.R.**, Lehesranta, S., Ma, G., Ursache, R., Sevilem, I., Zhang, J., Gorte, M., Prasad, K., Wrzaczek, M., Heidstra, R., Murphy, A., Scheres, B. and Mähönen, A.P. (2016) MultiSite Gateway compatible cell type-specific gene inducible system for plants. *Plant Physiology*: 170: 627-641. **(Impact factor: 6.841)**
- (10) Furuta-Miyashima, K[#], **Yadav, S.R.**[#], Lehesranta, S[#], Belevich, I., Miyashima, S., Heo, J., Vaten, A., Lindgren, O., De Rybel, B., Van Isterdael, G., Somervuo, P., Lichtenberger, R., Rocha, R., Thitamadee, S., Tähtiharju, S., Auvinen, P., Beeckman, T., Jokitalo, E. and Helariutta, Y. (2014) Arabidopsis NAC45/86 direct sieve element morphogenesis culminating in enucleation. *Science*: 345: 933-937. [#]Joint first author. **(Impact factor: 33.61)**
- (9) Dettmer, J., Ursache, R., Campilho, A., Miyashima, S., Belevich, I., O'Regan, S., Mullendore, D.L., **Yadav, S.R.**, Lanz, C., Papagni, A., Schneeberger, K., Weigel, D., Stierhof, Y., Moritz, T., Knoblauch, M., Jokitalo, E. & Helariutta, Y. (2014) CHOLINE TRANSPORTER LIKE1 (CHER1) is required for sieve plate development to mediate long distance cell-to-cell communication. *Nature Communication*: 10;5:4276. **(Impact factor: 11.47)**
- (8) **Yadav, S. R.** and Helariutta, Y. (2014) Programmed Cell Death: New Role in Trimming the Root Tips. *Current Biology*: 24: R374-R376 (Dispatch). **(Impact factor: 9.571)**
- (7) **Yadav, S. R.**[#], Yan, D[#], Sevilem, I. and Helariutta, Y. (2014) Plasmodesmata mediated intercellular signaling during plant growth and development. *Front in Plant Sci*: 5:44 (Review). [#]Joint first authors. **(Impact factor: 3.95)**
- (6) Lucas, W.J.[#], Groover, A.[#], Lichtenberger, R.[#], Furuta, K.[#], **Yadav, S. R.**[#], Helariutta, Y.[#], He, X.Q.[#], Fukuda, H.[#], Kang, J.[#], Brady, S.M.[#], Patrick, J.W.[#], Sperry, J.[#], Yoshida, A.[#], López-Millán, A.F.[#], Grusak, M.A.[#] and Kachroo, P.[#] (2013) The Plant Vascular System: Evolution, Development and Functions. *J. Integr. Plant Biol.*: 55: 294-388. [#]Joint first author. **(Impact factor: 3.367)**
- (5) Khanday, I.[#], **Yadav, S. R.**[#], and Vijayraghavan, U. (2013) Rice *OsLHS1/OsMADS1* controls floret meristem specification by coordinated regulation of transcription factors and hormone signaling pathways. *Plant Physiology*: 161: 1970-1983. [#]Joint first author. **(Impact factor: 7.39)**
- (4) Vatén, A., Dettmer, J., Wu, S., Stierhof, Y., Miyashima, S., **Yadav, S.R.**, Roberts, C.J., Campilho, A., Bulone, V., Lichtenberger, R., Lehesranta, S., Mähönen, A. P., Kim, J.Y., Jokitalo, E., Sauer, N., Scheres, B., Nakajima, K., Carlsbecker, A., Gallagher, K.L. Helariutta, Y. (2011) Callose Biosynthesis Regulates Symplastic Trafficking During Root Development. *Developmental Cell*: 21: 1144-55. **(Impact factor: 14.03)**
- (3) **Yadav, S. R.**, Khanday, I., Majhi, B. B., Veluthambi, K and Vijayraghavan, U. (2011) Auxin-responsive *OsMGH3*, a common target of *OsMADS1* and *OsMADS6* controls rice floret fertility. *Plant and Cell Physiology*: 52: 2123-2135. **(Impact factor: 4.7)**
- (2) **Yadav, S. R.**, Bishopp, A. and Helariutta, Y. (2010) Plant development: early events in lateral root initiation. *Current Biology*: 20: R843-R845 (Dispatch). **(Impact factor: 10.025)**
- (1) **Yadav, S. R.**[#], Prasad, K[#]. and Vijayraghavan, U. (2007) Divergent Regulatory *OsMADS2* Functions Control Size, Shape and Differentiation of the Highly Derived Rice Floret Second-Whorl Organ. *Genetics*: 176: 283-294. [#]Joint first author. **(Impact factor: 4.00)**

Book Chapter

- (2) Chennakesavulu, K., Techet, A., Thiaw, M.R.N., Tran, H.L., Bergougnoux, V., **Yadav, S.R.** and Gantet, P. (2024) Rice, a model plant for post-embryonic root developmental biology. *Plant Roots: The Hidden Half*, fifth edition, edited by Tom Beeckman and Amram Eshel. Chapter 10, 167-184.

(1) Seville, I., **Yadav, S.R.**, and Helariutta, Y. (2015) Plasmodesmata - channels for intercellular signaling during plant growth and development. *Methods Mol Biol.*: 1217:3-24.

Patents

(5) **Yadav, S. R.**, Sircar, D., Mushahary, K.K.K., Demiwal, P. Title of invention: A method for improved rice line with deeper penetrating roots, larger grains, and increased amino acid content. Indian Patent Application No.: **202311089997**; Application date: **29/12/2023**.

(4) Vatén, A., Dettmer, J., Miyashima, S., **Yadav, S. R.**, Campilho, A., Bulone, V., Lichtenberger, R., Lehesranta, S., Mähönen, A. P., Carlsbecker, A., Helariutta Y., Furuta, K. Title of Invention: POLYPEPTIDE: US Patent; **US 2016/0002659 A1**; Publication Date: **01/07/2016**.

(3) Vatén, A., Dettmer, J., Miyashima, S., **Yadav, S. R.**, Campilho, A., Bulone, V., Lichtenberger, R., Lehesranta, S., Mähönen, A. P., Carlsbecker, A., Helariutta Y., Furuta, K. (2014) Title of Invention: MUTANT CALLOSE SYNTHASE: Canada Patent; **CA2856621 A1**; Publication Date: **06/06/2013**.

(2) Vatén, A., Dettmer, J., Miyashima, S., **Yadav, S. R.**, Campilho, A., Bulone, V., Lichtenberger, R., Lehesranta, S., Mähönen, A. P., Carlsbecker, A and, Helariutta Y (2013) Use of cal3-d mutations in engineering plant metabolism and architecture. Finnish Patent: **FI20116212**; **2013**; Awarded.

(1) Vatén, A., Dettmer, J., Miyashima, S., **Yadav, S. R.**, Campilho, A., Bulone, V., Lichtenberger, R., Lehesranta, S., Mähönen, A. P., Carlsbecker, A., Helariutta Y., Furuta, K. Title of Invention: POLYPEPTIDE: World Intellectual Property Organization Patent; **WO2013079796 A1**; Publication Date: **06/06/2013**.

Research collaborations

(A) International collaborations

- (1) Prof. Pascal Gantet, University of Montpellier, France
- (2) Dr. Stefan Jouannic, Research and Development Institute (IRD) Montpellier, France
- (3) Dr. Mikael Lucas, Research and Development Institute (IRD) Montpellier, France
- (4) Prof. Ive De Smet, VIB-UGent Center for Plant Systems Biology, Belgium

(A) National collaborations

- (1) Prof. Kalika Prasad, IISER Pune, Pune
- (2) Prof. Mukesh Jain, JNU, New Delhi
- (3) Prof. Divya Chandran, RCB, Faridabad
- (4) Prof. Nand K. Singh, MNNIT, Prayagraj
- (5) Prof. Durgesh K. Tripathi, Amity University, Noida

Editorial Responsibility

- (1) Editorial Board member for *Plant Growth Regulation* (Springer)
- (2) Guest editor for *Plant and Cell Physiology* (Oxford University Press).
- (3) Guest editor *Planta* (Springer)

Conferences and Workshops

(A) Invited Lectures

- (16) **Yadav, S. R.** Species-specific functional innovations of conserved regulators during rice root branching. 3rd Rice Congress 2024 at ICAR-National Rice Research Institute, Cuttack, India, (December 2024)
- (15) **Yadav, S. R.** Genome-engineering of rice for altered root architecture and improved yield and nutrition. DST-SERB Genome Editing Workshop-2024, ICAR-National Rice Research Institute, Cuttack, INDIA (August, 2024)
- (14) **Yadav, S. R.** Species-specific functional innovations of conserved regulators during adventitious root formation. EMBO ISPP-2024 Satellite meeting, IISER Bhopal, INDIA, (January, 2024)
- (13) **Yadav, S. R.** Species-specific functional innovations of conserved regulators during branching. National Bioengineering Conference 2023 (NBC-2023), NIT Rourkela, INDIA, (November, 2023)
- (12) **Yadav, S. R.** Species-specific functional innovations of conserved regulators during tissue trans-differentiation and branching. International Symposium on Rice Functional Genomics (ISRFG-2023) at University of Agriculture Sciences, Bangalore, INDIA, (November, 2023)
- (11) **Yadav, S. R.** Genetic reprogramming during tissue trans-differentiation and species-specific functional innovations of conserved regulators in plants. Current Trends and Future Prospects of Plant Biology (CTFPPB-2023) at University of Hyderabad, INDIA, (February, 2023)
- (10) **Yadav, S. R.** Species-specific function of conserved cell fate determinants in orchestrating rice root architecture. International Conference on Arabidopsis Research (ACAR 2022), Belfast, IRELAND (June, 2022)
- (9) **Yadav, S. R.** Conserved regulators with species-specific function in orchestrating rice fibrous root system. Basic Science and Technology for Sustainable Development (BSSD-2022), BARC, INDIA, (September, 2022)
- (8) **Yadav, S. R.** Functional genomics of rice adventitious root development. Plant-Microbe Interaction and their implication in Agriculture at NIT, Rourkela, INDIA, (November, 2020)
- (7) **Yadav, S. R.** Functional genomics of rice adventitious root development. Developing tools for sustainable crop development, Durham University, UNITED KINGDOM, (May, 2020)
- (6) **Yadav, S. R.** Functions of AP2-domain domain containing transcription factors during adventitious root development in rice. Innovations and Translational Dimensions: Food, Health and Environmental Biotechnology” (Biosangam-2020), MNNIT, Allahabad, INDIA, (February, 2019)
- (5) **Yadav, S. R.** Genome-wide transcript profiling reveals an auxin-responsive transcription factor promoting adventitious root formation in rice. Page No.: 34; International Symposium on Auxins and Cytokinins in Plant Development (ACPD-2018), Prague, CZECH REPUBLIC, (July, 2018).
- (4) **Yadav, S. R.** A hormonal-responsive AP2-domain domain containing transcription factor promotes adventitious root formation in rice. Innovations and Translational Dimensions: Food, Health and Environmental Biotechnology” (Biosangam-2018), Page No., 11, MNNIT, Allahabad, INDIA, (March, 2018).
- (3) **Yadav, S. R.** Phloem Cell Differentiation and Symplastic Molecular Trafficking in *Arabidopsis* Roots (Arabidopsis-2016), Page no., 14, IISER, Mohali, INDIA. (March 2016).
- (2) **Yadav, S. R.** Phloem sieve element differentiation in *Arabidopsis* roots in “International Conference on Molecular Signalling: Recent Trends in Biomedical and Translational Research” Page no., 95, IIT, Roorkee, Uttarakhand, INDIA, (December, 2014).

(1) **Yadav, S. R.** Cell-Cell Communication during Vasacular Development in *Arabidopsis thaliana* Root. “International Symposium on Plant Biotechnology towards Tolerance to stresses and enhancing crop yield-2011” at Birla Institute of Technology, Ranchi, and Jharkhand, INDIA (September 2011).

(B) Presented as Posters

(22) **Yadav, S. R.** Transcriptional reprogramming during tissue trans-differentiation and species-specific functional innovations of conserved regulators. International conference on “Biological Transactions: From molecules to organisms (BTMO 2023)” at MCB, IISc, Bangalore, India. (January, 2023).

(21) **Rakshit, S. et al.** Rice crown root development: an interplay between regulatory factors. International Symposium on Rice Functional Genomics (ISRFG-2023) at University of Agriculture Sciences, Bangalore, INDIA, (November, 2023)

(20) **Verma, K. et al.** *OsAP2/ERF-40*, key regulator during adventitious root formation. International Symposium on Rice Functional Genomics (ISRFG-2023) at University of Agriculture Sciences, Bangalore, INDIA, (November, 2023)

(19) **Chennakesavulu, K. et al.** The *PLETHORA* genes orchestrate post-embryonic root system development in rice. International Symposium on Rice Functional Genomics (ISRFG-2023) at University of Agriculture Sciences, Bangalore, INDIA, (November, 2023)

(18) **Kumar, A. et al.** Auxin-*OsWOX10* regulatory module ensures de-novo and predetermined root organogenesis. International Symposium on Rice Functional Genomics (ISRFG-2023) at University of Agriculture Sciences, Bangalore, INDIA, (November, 2023)

(17) **Kashyap, R. et al.** Auxin signaling and its spatial restriction during crown root primordia development in rice. International Symposium on Rice Functional Genomics (ISRFG-2023) at University of Agriculture Sciences, Bangalore, INDIA, (November, 2023)

(16) **Singh, S. et al.** *PLETHORAs*: Master regulators of rice root system architecture. International Symposium on Rice Functional Genomics (ISRFG-2023) at University of Agriculture Sciences, Bangalore, INDIA, (November, 2023)

(15) **Mushahary, K. K. K. et al.** Functional innovations of *OsPLT2* in root branching in plants. International Symposium on Rice Functional Genomics (ISRFG-2023) at University of Agriculture Sciences, Bangalore, INDIA, (November, 2023)

(14) **Joshi, V. et al.** Auxin-responsive, dynamically expressed enzymatic antioxidant genes in rice crown root primordia morphogenesis. International Symposium on Rice Functional Genomics (ISRFG-2023) at University of Agriculture Sciences, Bangalore, INDIA, (November, 2023)

(13) **Kumar et. al.** Rice *WUSCHEL-RELATED HOMEODOMAIN FACTOR 10* is required for timely activation of crown root development programme. Current Trends and Future Prospects of Plant Biology (CTFPPB-2023) at University of Hyderabad, INDIA, (February, 2023)

(12) **Neogy, et al.** Dynamic response and functional significance of hormones during rice adventitious root development. Page No.: 101; International Symposium on Auxins and Cytokinins in Plant Development (ACPD-2018), Prague, CZECH REPUBLIC, (July, 2018).

(11) **Yadav, et al.** Genes regulated of auxin and cytokinin during rice adventitious root development. International Conference on Arabidopsis Research (ICAR 2018), Page no., 314, Turku, FINLAND, (June, 2018).

(10) **Singh, et al.** Dynamic Response and Functional Significance of Hormones During Rice Adventitious Root Development. Page no., 331, 4TH International Plant Physiology Congress, Lucknow, INDIA, (December 2018).

(9) **Garg, et al.** Hormonal regulation of crown root development in rice. International Conference of Plant Developmental Biology & 3rd National Arabidopsis Meeting, Page no., 203, NISER Bhubaneswar, INDIA (December 2017).

(8) **Yadav, et al.** Genome-wide identification, classification and expression analysis of CDPK-related kinases (CRKs) in plants. International Conference of Plant Developmental Biology & 3rd National Arabidopsis Meeting, Page no., 116, NISER Bhubaneswar, INDIA (December 2017).

(7) **Yadav, S. R.** A near-death experience during plant phloem sieve cell differentiation. “Young Investigator Meeting-2016” Page no., 114 at Manesar, Delhi-NCR, INDIA. (March 2016).

(6) **Yadav, S. R. et al.**, Phloem Sieve Element differentiation in Arabidopsis: A Near-Death Experience. “MCB75: from Molecules to Organisms-2015” Page no., 124, at MCB, IISc, Bangalore, INDIA (December 2015).

(5) **Yadav, S. R. et al.**, Regulation of plasmodesmatal gating during symplastic molecular trafficking in vascular tissues of Arabidopsis root. “3rd International Conference on Plant Vascular Development-2013” at Rantapuisto Conference Center, Helsinki, FINLAND (July 2013).

(4) **Yadav, S. R. et al.**, Symplastic cell-cell communication during root vascular development in *Arabidopsis*. “EMBO Conference on Plant Development and Environmental Interactions-2012” at Matera, ITALY (July 2012).

(3) **Yadav, S. R. et al.**, Symplastic Cell-Cell Communication during Vascular Development in *Arabidopsis* Root. “International Conference on Plant Vascular Development 2010” at The Ohio State University, Columbus, OH, USA (July 2010).

(2) **Yadav, S. R.** and Vijayraghavan, U. OsMADS1 as a transcriptional regulator of rice floral organ fate affects auxin and cytokinin signaling pathways. Developmental Biology: 319: A151. Presented at “Society for Developmental Biology 67th Annual Meeting” at University of Pennsylvania, Philadelphia, PA, USA (July 2008).

(1) **Yadav, S. R.** and Vijayraghavan, U. Role of *OsMADS1* as a regulator of cell differentiation and floral organ fate in rice floret. “International Symposium on Cellular Signaling during Development” at Agharkar Research Institute, Pune, INDIA (November 2006).

Invited Seminars

(8) **Invited seminar** on “Species-specific functional innovations of conserved regulators during tissue trans-differentiation and branching” at Research and Development Institute IRD Montpellier, France, on Jun 13, 2024.

(7) **Invited resource person** for career progression planning for new scientists at Forest Research Institute (Deemed to be University), Dehradun on Jan 05, 2024.

(6) **Invited seminar** on “Molecular genetics in plant growth and development” at School of Biotechnology, Jammu University, Jammu, on May 26, 2023.

(4) **Invited seminar** on “Species-specific functional innovations of conserved regulators during tissue trans-differentiation” at National Centre for Biological Sciences (NCBS), Bangalore, Dec 19, 2022.

- (4) Invited seminar on “Species-specific functional innovations of conserved regulators during tissue trans-differentiation” at Indian Institute of Science (IISc), Bangalore, on Dec 16, 2022.
- (3) Invited seminar on “Species-specific function of conserved cell fate determinants in orchestrating rice root architecture” at National Institute of Plant Genome research (NIPGR), New Delhi, on Jul 07, 2022.
- (2) Invited seminar on “Species-specific function of conserved cell fate determinants in orchestrating rice root architecture” at The Sainsbury Laboratory, University of Cambridge, United Kingdom, on Jun 16, 2022.
- (1) Invited seminar on “Species-specific function of conserved cell fate determinants in orchestrating rice root architecture” at Regional Centre for Biotechnology (RCB), Faridabad, on Apr 22, 2022.