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**1) Research Articles Published**

- Dileep Kumar G D, Abdul Fiyaz R, Chaitanya Kasarla, Sahithi M, **D Shivani**, Sundaram R M. 2024. Evaluation and molecular characterization of 3K rice (*Oryza sativa*) germplasm subset for blast resistance. Indian Journal of Agricultural Sciences,94(12):1279-1284
- Dileep Kumar GD, Abdul Fiyaz R, Chaithanya K, K P Viswanatha, **Shivani D**, Payal P, Sathwik B, Kousik M.B.V.N, Rapaka Percy VS, Bharath Kumar M, Sahithi M, Raghuwanshi KS, Vivek Pandurang Chimote, Laha GS, Aravind Kumar J, K Basavaraj, L V Subba Rao, R. M. Sundaram. Introgression of genes associated with yield enhancement and resistance against bacterial leaf blight and blast diseases into an elite rice variety, 'Jaya' through marker assisted backcrossing. The Plant Genome, **Revised & Submitted**
- **Darmagaru Shivani**, Abdul Fiyaz R , Farzana Jabeen , J Aravind Kumar, Chaithanya K , Dileep Kumar G D , T Arivelarasan , L V Subba Rao, Supriya, Shoba Venkatanagappa and R M Sundaram. Genome-Wide Association Studies (GWAS) for Identifying SNPs & Candidate Genes Associated with Grain Quality Traits in Rice (*Oryza Sativa* L.). Plant Molecular Biology Reporter, **Revised & Submitted**
- **Darmagaru Shivani**, Abdul Fiyaz R , Farzana Jabeen , J Aravind Kumar, Chaithanya K , Dileep Kumar G D , L V Subba Rao, Supriya, Shoba Venkatanagappa and R M Sundaram. Genome-Wide Association Study for Yield and Yield related traits reveals Marker–Trait Associations in Germplasm lines of Rice. Journal of Agricultural Science and Technology, **Revised & Submitted**
- R. Abdul Fiyaz, D. Shivani, K. Chaitanya, K. Mounika, M. Chiranjeevi, G.S. Laha, B.C. Viraktamath, L.V.Subba Rao, R.M.Sundaram. 2022. Genetic Improvement of Rice for Bacterial Blight Resistance: Present Status and Future Prospects. Rice Science, 29 (2):118- 132.
- D. Shivani, C Naga Neeraja, C.H. Cheralu and V. Gouri Shankar. 2021. Multivariate analysis and character association studies for yield and nutritional characters in swarna and type 3 RIL population of rice (*Oryza sativa* L.). Journal of Cereal Research, 13 (2):180-187
- Mounika, D Shivani, Farzana Jabeen, Kasarla Chaithanya, Chiranjeevi, Subba Rao, Raman Meenakshi Sundaram and Abdul Fiyaz.. 2021. Multivariate analysis and character association for agromorphological traits in elite rice germplasm .Journal of Cereal Research, 13(3):270-278
- Shivani, Farzana Jabeen, K Chaithanya, Koushik, Dileep, Punniakoti, K Supriya, RM Sundaram, J Aravind Kumar and R Abdul Fiyaz.. 2021. Assessment of genetic diversity of rice germplasm using microsatellite markers. The Pharma Innovation, 10(5):1393-1397
- Shivani, D., Farzana Jabeen, K. Supriya, R. M. Sundaram, J. Aravind Kumar, and R. Abdul Fiyaz. " (2021): 25-29. 2021. Genetic variability, heritability and genetic advance for yield and its component traits in germplasm lines of rice (*Oryza sativa* L.)..The Journal of Research, PJTSAU, 49(1&2):25-29
- D. Shivani, K. Suman, P. Madhubabu, Ramya Rathod, C. Cheralu, V. Gouri Shankar and C.N. Neeraja. 2020. Parental polymorphism in iron- and zinc-rich rice varieties (swarna and type 3) using SSR markers. Applied Biological Research , 22(1):69-75

- D. Shivani, C. Cheralu, C. N. Neeraja, and V. Gouri Shankar. 2019. Path coefficient analysis for grain iron and zinc concentrations and grain yield components in Swarna x Type 3 RIL population of rice. International Journal of Chemical studies ,7(3):4679-4682
- D. Shivani, C. Cheralu, C. N. Neeraja, and V. Gouri Shankar. 2018. Grain Zinc and Iron Association Studies in Swarna X Type 3 RIL Population of Rice. International Journal of Current microbiology and Applied Sciences ,7(5):708-714
- D. Shivani, C. Cheralu, and C. N. Neeraja. Character Association Analysis for Yield, Yield Attributes in Swarna X Type3 RIL Population of Rice. International Journal of Pure and Applied Bioscience,6 (2):222-226.

## 2) Books published

- D Shivani, Ayesha and Kavitha Reddy. Key notes on Plant breeding. Akinik Publications. 2019. 978-93-5335-572-2.
- Abdul Fiyaz R, Aravind Kumar J, M Chiranjeevi, U Chaitanya, D Shivani, K Chaitanya, L V Subba Rao and R M Sundaram. Compendium of Rice Genetic stocks Registered in India (ICAR-IIRR). ICAR-IIRR. 2021.

## 3. Book Chapters

- B Usha Kiran, Darmagaru Shivani, Divya Ambati et al.. Adaption of Next-Generation Breeding Tools in the Improvement of Minor Oilseed Crops : Status and Prospectus. Breeding Climate Resilient and Future Ready Oilseed Crops. SPRINGER NATURE 2025.
- D. Shivani. Self-incompatibility: Molecular basis and Advances in Genetics and Plant Breeding. AKINIK, 2019.
- D. Shivani and A. Kavitha Reddy. Polygenic resistance breeding and the constrains in breeding for polygenic resistance. Advances in Genetics and Plant Breeding. AKINIK, 2019
- D. Shivani. Steps in gene tagging and mapping. Advances in Genetics and Plant Breeding. AKINIK, 2019.
- Ramya Rathod, D. Shivani. Genetics and Genomic approaches to cope with climate impacts and developing climate resilient agriculture. Advances in Multidisciplinary and Current Research. WESER BOOKS. 2019.

## 4. Popular Articles

S.No.	Author(s),	Title of Article	Platform/Publication Name
1.	R. Abdul Fiyaz, K Chaitanya, D. Shivani	Rice bran oil- Ruchiki ruchu mariyu aarogyaniki aathmabanduvu	Vyavasayam
2.	D. Shivani, V.G. Ishwarya Lakshmi	Steps in gene tagging and mapping	Agrobios
3.	Divya K, V.G. Ishwarya Lakshmi, d. Shivani	Development of heterotic pools in germplasm/genetic stocks and inbreds, their improvement for increasing heterosis	Agrobios
4.	D. Shivani, V.G. Ishwarya Lakshmi	Polygenic resistance breeding and the constrains in breeding for polygenic resistance	Agrobios
5.	V.G. Ishwarya Lakshmi, Divya K, Shivani D	Space Breeding	Agrobios
6.	D. Shivani & Babith Raj Goud	Carbon sequestration and Crabon trading	Agrobios
7.	D. Shivani	Udajani suchika – Poshakala labyatha	Vyavasaya Padipantalu

8.	D. Shivani	Varilo azolla vaade vidhanam-prayojanalu	Vyavasaya Padipantalu
9.	D. Shivani	Aamudam pantanu aashinche thegulu	Vyavasaya Padipantalu
10.	D. Shivani, T. Ravi Teja, Ramya Rathod	Pathi pantanu aashinche pindi nalli yajamanyam	Vyavasaya Padipantalu

## 6. Products Developed

S.No.	Product Name	Brief Description	Status (e.g., Prototype, Market Launch)	Date Developed
1.	DRR Dhan 77 (IET 28636)  (Associated Research Scholar at ICAR-IIRR)	High Yielding Aerobic Rice Variety.  Early duration, Non lodging, Non shattering. Resistant to leaf blast and neck blast.  Most suitable for aerobic direct seeded in Bihar, Jharkhand, Gujarat and Tamil Nadu	Market Launch	2024