

Publications

Research article:

- Chand, N., Dixit, R., **Kumar, P.**, Tyagi, K., Kapoor, N., Singh, N., Vikram, P., & Malik, S. (2024). Co-expression network analysis for identification of candidate genes regulating phosphorus use efficiency in wheat (*Triticum aestivum* L.). *Plant Science Today*. <https://doi.org/10.14719/pst.3328> (N.R.:6.9/I.F.:0.5)
- Malyaj R. Prajapati, **Pankaj Kumar**, Reetesh Pratap Singh, Ravi Shanker, Jitender Singh, Mahesh Kumar Bharti, Rajendra Singh, Harshit Verma, L.K. Gangwar, Shailendra Singh Gaurav, Neelesh Kapoor, Satya Prakash, Rekha Dixit. (2024). De novo transcriptome assembly, annotation and SSR mining data of *Hellula undalis* (Fabr.) (Lepidoptera: Pyralidae), the cabbage webworm. *Journal of Genetic Engineering and Biotechnology*. 22(3), 100393, ISSN 1687-157X, <https://doi.org/10.1016/j.jgeb.2024.100393>. (N.R.:9.50/I.F.:3.6)
- Malyaj R Prajapati, Shivani Gupta, Jitender Singh, **Pankaj Kumar** & V. K. Baranwal. (2024). First report of cucumber mosaic virus (CMV) naturally infecting amaryllis (*Hippeastrum hybridum*) in India. *J Plant Pathol*. 106(1), 295–296 (N.R.:8.2/I.F.:2.2)
- Neelesh Kapoor, Ankit Agrawal, Prafulla Kumar, Ravindra Kumar, Rakesh Sengar, Lokesh Gangwar, **Pankaj Kumar**, Rekha Dixit. (2024). Exploring the impact of biogenic zinc oxide nanoparticles derived from Lantana camara L. on alleviating heat stress in wheat. *Research Square*. DOI: 10.21203/rs.3.rs-4508592/v1 (Under Review) (I.F.:3.0)
- Varsha Dharmesh, Mahesh Kumar Bharti, **Pankaj Kumar** and Jitender Singh. (2023). Identification, Characterization and gene expression of ZIP gene family in *Phaseolus vulgaris*. *Research Square*. DOI: <https://doi.org/10.21203/rs.3.rs-3062780/v1>
- M. R. Prajapati, **Pankaj Kumar**, Ravi Shanker., Reetesh Pratap Singh, Rajendra Singh, Mahesh Kumar Bharti, Jitender Singh., Neelesh Kapoor, L. K. Gangwar, S. S. Gaurav, Rekha Dixit, & Satya Prakash. (2023). De novo assembly and annotation of *Hellula undalis* (Fabr.) (Lepidoptera: Pyralidae) transcriptome. *Research Square*. DOI: <https://doi.org/10.21203/rs.3.rs-3136152/v1> (N.R.:8.80/I.F.: 2.6)
- Malyaj R Prajapati, Jitender Singh, **Pankaj Kumar**, Rekha Dixit. (2023). De novo transcriptome analysis and identification of defensive genes in garlic (*Allium sativum* L.) using high-throughput sequencing. *Journal of Genetic Engineering and Biotechnology*. 21(1), 56, (N.R.:9.50/I.F.:3.6)
- Malyaj R Prajapati, Jitender Singh, **Pankaj Kumar**, Ravindra Kumar, and V. K. Baranwal (2023). Identification of a novel member of the *alphaendornavirus* genus in *Plantago ovata* through transcriptome dataset mining. *South African Journal of Botany*. 157, 135-137. (N.R.:9.10/I.F.: 2.7)

- Ravi Shanker, Malyaj R Prajapati, Reetesh Pratap Singh, Rajendra Singh, Jitender Singh, **Pankaj Kumar**. (2023). Isolation, molecular characterization of indigenous *Metarhizium anisopliae* (Metchnikoff) isolate, using ITS-5.8s rDNA region and its efficacy against the *Helicoverpa armigera* (Hubner) (Lepidoptera: Noctuidae). *Egyptian Journal of Biological Pest Control*. **33**, 23 (N.R:8.40/I.F.: 2.1)
- Shruti, Anil Sirohi, Pankaj Kumar, Jitender Singh, Mukesh Kumar and U.P. Shahi. (2023). Optimizing agro-morphological traits of lentil genotypes in response to drought and salt stress. *The Pharma Innovation Journal*, **12(7)**, 750-753 (N.R:5.23)
- Ankit Agrawal, Neelesh Kapoor, Anil Sirohi, **Pankaj Kumar**, Rekha Dixit, Lokesh Kumar Gangwar, Prafulla Kumar. (2023). Green synthesis, optimization, and characterization of zinc oxide nanoparticle using *Lantana camara* L. leaf extract. *The Pharma Innovation Journal*. **12(8)**, 1843-1850 (N.R:5.23)
- Malyaj R Prajapati, Jitender Singh, **Pankaj Kumar**, and Virendra Kumar Baranwal. (2022). Genome sequence of a papaya ringspot virus from khejri (*Prosopis cineraria*) transcriptome from India. *Acta virologica*. **66**, 374-377. (N.R:7.70/I.F.: 1.82)
- Prajapati, M. R., Singh, J., **Kumar, P.**, & Baranwal, V. K. (2023). First report of blackberry virus E (BVE) infecting garlic (*Allium sativum* L.) in India. *Journal of Plant Pathology*, **105(1)**, 353-354. (N.R:8.2/I.F.:2.2)
- Saxena, V., Bharti, M. K., **Kumar, P.**, Singh, J., & Patel, V. B. (2023). Effect of zinc uptake on alcohol dehydrogenase, protein and mineral contents of hydroponically grown chickpea (*Cicer arietinum*). *Journal of Plant Nutrition*, **46(6)**, 867-876. (N.R:8.10/I.F.:1.6)
- Malyaj R Prajapati, Aakansha Manav, Pankhuri Singhal, Venkidusamy K. Sidharthan, Ujjwal Sirohi, Mukesh Kumar, Mahesh Kumar Bharti, Jitender Singh, **Pankaj Kumar**, Ravindra Kumar and V. K. Baranwal. (2022). Complete Genomic RNA Sequence of Tuberose Mild Mosaic Virus and Tuberose Mild Mottle Virus Acquired by High-Throughput Sequencing. *Pathogens* **11(8)**, 861. (N.R:9.70/I.F.:3.3)
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- Manav, Aakansha, Prajapati, M. R., Jitender Singh, Amit Kumar, **Pankaj Kumar**, R. P. Pant, and V. K. Baranwal. "First report of natural infection by two potyviruses on amaryllis (*Hippeastrum hybridum*) plants from India." *Virus Disease*, **32(4)**, 830-833. (N.R:5.83/I.F.:2.2)

- Prajapati, M. R., Manav, A., Singh, J., Singh, M. K., Ranjan, K., Kumar, A., **P Kumar**, R Kumar & Baranwal, V. K. (2021). Identification of Garlic virus A infecting *Allium sativum* L. through next generation sequencing technology. *The Journal of Horticultural Science and Biotechnology*, 1-10. **(N.R:7.90/I.F.:1.7)**
- Shweta, Jitender Singh, Poonam Kashyap, **Pankaj Kumar**, R. Kumar, A. S. Panwar, and V. K. Baranwal. "Molecular identification of citrus greening bacterium associated with Kinnow Mandarin in Western Uttar Pradesh, India." *Indian Phytopathology*, 74(4), 1135-1141. **(N.R:5.97/I.F.:--)**
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- Singh, J., Thao Ngoc Truong, Dinh My An, Malyaj R Prajapati, Aakansha Manav, Quoc Nguyen Bao, Koushlesh Ranjan, Amit Kumar, **Pankaj Kumar**, Ravindra Kumar and V. K. Baranwal (2020). Complete Genome Sequence and Genetic Organization of a Garlic Virus D Infecting Garlic (*Allium sativum*) from northern India. *Acta Virologica*. 64(4):301-306 **(N.R:7.70/I.F.: 1.82)**
- Madhuri Gupta, Shivani khanna, Jyoti singh, Singh, J., **Pankaj Kumar** and Anil Sirohi (2020). Identification and Molecular cloning of abiotic stress tolerant gene(s) and stress induced biochemical changes in lentil (*Lens culinaris*). *Plant Cell Biotechnology and Molecular Biology*. 21(13-14), 74-85. **(N.R:5.20/I.F.: 0.363)**
- Annu Yadav, Himanshi, Shruti, Singh, J., **Pankaj Kumar**, Shivani Khanna, Anil Sirohi (2020). Identification and Expression Analysis of Stress Responsive Genes in Lentil (*Lens culinaris*). *Biotechnology Journal International*, 24(3), 24-34. <https://doi.org/10.9734/bji/2020/v24i330105> **(N.R:4.81/I.F.: --)**
- Surendra Upadhyay, Anamika Bhordia, Malayaj R. Prajapati, Himanshu Maurya, Karishma Kaushik, Harshit Verma, Amit Kumar, Singh, J., **Pankaj Kumar** and Ravindra Kumar (2020). Prevalence and antimicrobial resistance pattern of *E. coli* and *staphylococcus spp.* isolated from the clinical cases of cattle metritis. *Progressive Research*. 15 (1):55-57 **(N.R:4.32)**
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parameters. *South Asian Journal of Food Technology and Environment*, 4(1):631-642

(I.F.: 3.78)

- Goyal, M., Singh, J., **Pankaj Kumar** and Anil Sirohi (2017). Mechanistic insights into longan Brgenes and differential gene expression analysis with Longan embryogenic callus transcriptome. *POJ*, 10(05):219-231 (I.F.: 1)
- Singh, J., Khanna, S., Ranjan, K., Pant, R.P., **Pankaj Kumar**, Sirohi, A. and Baranwal, V. K. (2017). Evidence of Association of Begomovirus with the Yellow vein Disease of an Ornamental Plant Pot Marigold (*Calendula officinalis*) from Western Uttar Pradesh. *Journal of Pure and Applied Microbiology*. 11(3): 1609-1615 (N.R.:6.80/I.F.: 0.7)
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- Singh, J., Astha Singh, **Pankaj Kumar**, Anchal Rani, V. K Baranwal, Anil Sirohi (2013). Evidence of association of a monopartite Tomato Leaf Curl New Delhi Virus with Chilli leaf curl disease in Western Uttar Pradesh, India. *Vegetos*, **26 (2)**, 203-211 (N.R:5.68/I.F.:0.042)
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- D. Singh, A. Kumar, Ashok Kumar, P. Chauhan, V. Kumar, N. Kumar, A. Singh, N. Mahajan, P. Sirohi, S. Chand, B. Ramesh, J. Singh, **P. Kumar**, R. Kumar, R.B. Yadav and R. K. Naresh Marker

- assisted selection and crop management for salt tolerance. *African Journal of Biotechnology* **10(66):14694-14698** (N.R:--/I.F.:0.6)
- K. Mehla, S. Chaudhary, A. Kumar, V. Kumar, P. Chauhan, S. Gupta, J. Singh, **P. Kumar**, V. Kumar, N. Kumar, Jindal, S. Kumar, V. Sharma, S. Chand, N. Mahajan, A. Singh, B. Ramesh and D. Singh (2011) Advances in DNA sequencing: Challenges and limitations of personal sequencing *African Journal of Agricultural Research*, **6(6): 1277-1280** (N.R:6.0/I.F.:--)
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 - Shishupal Singh, I. P. Singh, Satya Prakash, **Pankaj Kumar** and Sushil Kumar. (2010). Changes in physical-chemical composition associated with different stages of maturity of guava (*Psidium guajava* L.) fruits cv. Sardar. *Journal of Scientific and Applied Research* **1(2): 32-35**
 - **Pankaj Kumar**, P. K., & Deshmukh, P. S. (2008). Effect of moisture stress at different growth stages and role of growth regulators on biochemical parameters and osmotic adjustment in chickpea genotypes. *Vegetos* **21(2): 21-33**. (N.R:5.68/I.F.:0.042)
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 - **Kumar, P.**, Hiremath, S. M., & Chetti, M. B. (2006). Influence of growth regulators on dry matter production distribution and shelling percentage in determinate and semideterminate soybean genotypes. *Legume Research-An International Journal*, **29(3), 191-195**. (N.R:6.80/I.F.:0.8)
 - **Kumar, P.**, & Deshmukh, P. S. (2006). Sensitivity to moisture stress and growth regulators on yield and yield components of two chickpea genotypes at different growth stages. *Legume Research-An International Journal*, **29(3), 175-180**. (N.R:6.80/I.F.:0.8)
 - **Kumar, P.** A. N. K. A. J., Deshmukh, P. S., Sairam, R. K., Kushwaha, S. R., & Singh, T. P. (2006). Biochemical and phenological evaluation of chickpea genotypes differing in drought tolerance. *Indian Journal of Plant Physiology*, **11(2), 166**. (N.R:7.70/I.F.:1.5)
 - **Kumar, P.**, Hiremath, S. M., Deshmukh, P. S., & Kushwaha, S. R. (2002). Effect of growth regulators on growth yield and metabolism in soybean genotypes. *Indian Journal of Agricultural Research*, **36(4), 254-258**. (N.R:5.60/I.F.:--)
 - **Pankaj Kumar**, Hiremath, S. M., Desmukh, P. S. and Kushwaha, S. R, 2001. Studies on foliar application of growth regulators on biomass production harvest index and yield of soybean (*Glycine max* L.). *Ann. Agric. Res.* **22 (2): 221-224** (N.R:4.62/I.F.:--)

Lead Lectures

- De novo Assembly & Annotation of *Helicoverpa armigera* (Hubner) (Lepidoptera: Noctuidae) Infected with *Metarhizium anisopliae*. International workshop on “Advancing Next Generation in South Asian Region: A Residential Workshop for International and Local Attendees” 6th-10th May 2024, ICGEB, Sri Lanka.
- Identification and Characterization of Microbial Pathogens in Agriculture Through High-Throughput Sequencing. International Workshop on Molecular Diagnostics in Microbiology and Diseases. 11th-12th December, 2023, ICGEB, Binh Dinh, Vietnam.
- Biofortification of Food Crops: Present status and Future perspectives. Faculty Training Integrating Molecular and Bioinformatic Tools for Advancing Agriculture & Allied Sciences 26th Oct- 08th Nov. 2023. COE, UP-CST, SVPUAT, Meerut.
- Primer Designing. Faculty Training Integrating Molecular and Bioinformatic Tools for Advancing Agriculture & Allied Sciences 26th Oct- 08th Nov. 2023. COE, UP-CST, SVPUAT, Meerut.
- De novo transcriptome analysis and identification of defensive gene in garlic (*Allium sativum* L.) using high-throughput sequencing. Plant-Beneficial function perdition of *Bacillus subtilis* species through NGS technology. 06TH -13TH NOVEMBER, 2022, ICGEB, SFAX, TUNISIA.
- Throughput Sequencing Genome Annotation and its Tool. Fourteen days training programme on “NEW AGE TECHNOLOGYIES FOR ANIMAL PRODUCTION AND VETERINARY PRACTICES. 21th November-04th December, 2022. ICAR-IG-NAHEP Project. CoVAS, SVPUAT, Meerut.
- Biofortification of Food Crops: Present status and Future perspectives, 15- Days Training & Skill Development Programme on Food Science & Technology Oct 16-30, 2021, CCSU, Meerut.
- Micronutrient Biofortification of food Crops: Present Status and Future Perspectives, ASEAN-INDIA WORKSHOP PROGRAMME 20th 28th SEPTEMBER, 2019, IGIB, New-Delhi.

Review Articles /Proceedings:

- Malyaj R. Prajapati, **Pankaj Kumar** and Jitender Singh. High throughput sequencing and annotation of *Hellula undalis* (Fabr.) (Lepidoptera: Pyralidae), in Proceedings of the 2nd International Online Conference on Agriculture, 1-15 November 2023, MDPI: Basel, Switzerland. **(I.F.:3.8)**
- **Pankaj Kumar**, Malyaj R. Prajapati. Proceedings of Faculty Training Integrating Molecular and Bioinformatic Tools for Advancing Agriculture & Allied Sciences. (2023). ISBN: 979-8891862357

- **Pankaj Kumar**, Vedika Dhiman, Shalja Panwar, Malyaj R Prajapati, Jitender Singh and L.K. Gangwar. (2023). Identification, Characterization and gene expression of ZIP gene family in Pulses. (page no. 442). International Conference on, "*Pulses: Smart Crops for Agricultural Sustainability and Nutritional Security*". Feb. 10-12, 2023 at NASC, New Delhi-110012
- Jitender Singh, Aastha Singh, **Pankaj Kumar**, Anchal Rani, V. K Baranwal, Anil Sirohi (2015) First report of mixed infection of Phytoplasma and Begomovirus in eggplant (*Solanum melongena*) in India. IPWG-2015, Mauritius Jan 14-17, 2015 Mollicutes
- Kumar S, **Kumar P**, Singh J, Prasad L, Kayastha AM. (2012). Properties and immobilization of Urease: A Review. In: Proceedings. National Symposium on Advances in Biotechnological Research in Agri-Horticulture Crops for Sustaining Productivity, Quality Improvement and Food Security, September 14-16, 2011; 74-75. ISBN938136135-5
- Sushil Kumar, Pooran Chand, Anil Sirohi, **Pankaj Kumar** and S.A.Kerkhi, 2011. Strategies to enhance yield potential of Brassica Hybrid research in India: Pest progress and present scenario. In: Proceedings. In: National Symposium on Advances in Biotechnological Research in Agri-Horticulture Crops for Sustaining Productivity, Quality Improvement and Food Security, September 14-16, 2011; 32-38. ISBN938136135-5
- Navin K. Verma, Rakhi Verma, **Pankaj Kumar** and S.S. Gaurav, 2011. Prospects and promises of Agronanotechnology for improving crop productivity, food security and economy. In: Proceedings. In: Proceedings. National Symposium on Advances in Biotechnological Research in Agri-Horticulture Crops for Sustaining Productivity, Quality Improvement and Food Security, September 14-16, 2011; 50-57. ISBN938136135-5
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- Amit Kr. Singh, **Pankaj Kumar**, Jitender Singh, Rosy Rani and Anchal Rani, 2011. Identification of Drought Tolerant Gene for Higher Productivity in Lentil (*Lens culinaris* Medik). In: Proceedings. In: Proceedings. National Symposium on Advances in Biotechnological Research in Agri-Horticulture Crops for Sustaining Productivity, Quality Improvement and Food Security, September 14-16, 2011; 127-140. ISBN938136135-5
- R.K. Naresh, Raj Kr. Gupta, R.S. Rathore, Ashok Kumar, **Pankaj Kumar**, U.P. Shahi, H.L. Singh, Yogesh Kumar and S.S. Tomar. Conservation Agriculture for Improving Food Security

through Integrated Crop and Resource Management in the Rice-Wheat System in Northwest India, September, 14-16, 2011; 176-189.

- Sushil Kumar, S.A. Kerkhi, Pooran Chand, Anil Sirohi, **Pankaj Kumar**, Sachin and Devi Singh, 2011. Genetic analysis of yield and quality parameters in Indian mustered (*Brassica juncea* (L.) Czern. & Coss.). In: Proceedings. National Symposium on Advances in Biotechnological Research in Agri-Horticulture Crops for Sustaining Productivity, Quality Improvement and Food Security, September 14-16, 2011; 194-201. ISBN938136135-5
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