

Dr. Yalaka Nandini

Research Papers, Books, Book Chapters, Manuals, Patents/Designs, Trainings, Seminars/Webinars, Workshops, and Conferences

Research Papers

1. **Nandini Y**, Kumar A, Kadam DM, Singh I, Shrivastava AK, and Pimpale AR. 2025. Performance assessment of L and J shaped rotary blade for measuring the mean weight diameter of black soil under laboratory condition. *International Journal of Agriculture Extension and Social Development*, 8(2):269–276.
2. **Nandini Y**, Shrivastava AK, Kumar A, and Namdeo R. 2023. Effect of operational parameter on the bulk density of the rotary blades (L and J-shape blade). *Biological Forum*, 15(10):912–917.
3. **Nandini Y**, Moses SC. 2022. Development and performance evaluation of manual multi-crop inclined plate planter. *Agricultural Engineering Today*, 46(3):34–38.
4. **Nandini Y**, Shrivastava AK. 2021. A review of different types of autonomous agriculture machines. *The Pharma Innovation Journal*, 10(12):880–884.
5. **Nandini Y**, Moses SC, Aalam RN. 2018. Design of manually operated multi-crop inclined plate planter for farm women. *International Journal of Current Microbiology and Applied Sciences*, 7(6):931–940.
6. **Nandini Y**, Devojee B, Nagababu G, Manoj K, Hemakumar HV. 2018. Analysis, estimation and mapping of irrigation water quality index of Bapatla Mandal, Guntur district, Andhra Pradesh, India using surfer software. *International Journal of Chemical Studies*, 6(3):810–818.
7. Kumar A, **Nandini Y**, Kadam DM, Namdeo R, Singh I, Shrivastava AK, and Pimpale AR. 2025. Optimization of the performance parameters of hoe type ridger under laboratory condition of vertisol (black soil) using response surface technique. *International Journal of Agriculture Extension and Social Development*, 8(2):278–288.
8. Kumar A, **Nandini Y**, Shrivastava AK. 2025. Performance assessment of rotavator under vertisols field conditions in Jabalpur. *Plant Archives*, 25(1):1378–1381.
9. Kumar A, Shrivastava AK, **Nandini Y**, Rohit N. 2023. Development of profilemeter for measuring displacement and disturbance of soil by ridger. *Biological Forum*, 15(10):706–710.
10. Kumar A, Shrivastava AK, **Nandini Y**, Namdeo R. 2023. Performance evaluation of trailed type disc harrow on vertisols field condition. *International Journal of Statistics and Applied Mathematics*, 8(6):329–333.
11. Namdeo R, Shrivastava AK, Kumar A, **Nandini Y**. 2022. Optimization of the performance parameters of the L-shaped rotary blade for the development of a plastic mulching machine. *The Pharma Innovation*, 11(12):5944–5953.
12. Devojee B, Nagababu G, Manoj K, **Nandini Y**, Hemakumar HV. 2018. Assessment and mapping of irrigation water quality index of Bapatla Mandal, Guntur District, Andhra Pradesh, India. *International Journal of Current Microbiology and Applied Sciences*, 7(01):1914–1920.
13. Kadam DM, Kumar A, Shrivastava AK, Singh I, **Nandini Y**, Parihar DS. 2020. Assessment of efficiency of tractor operated axial flow thresher for paddy crop by evaluating the operational and performance parameters. *Journal of Pharmacognosy and Phytochemistry*, 9(1):2353–2360.
14. Kadam DM, Shrivastava AK, Guru PK, Namdeo R, Kumar A, **Nandini Y**. 2021. Performance evaluation of tractor operated hydro mechanical offset rotavator for intra row weeding in orchards. *The Pharma Innovation Journal*, 10(5):1730–1735.
15. Kadam DM, Shrivastava AK, Deshmukh G, Kumar A, Chetan CR, **Nandini Y**, Singh I. 2019. Evaluation of power weeder and comparative study of power weeder with manually operated rotary weeders and manual weeding method. *Journal of Pharmacognosy and Phytochemistry*, 8(5):2528–2533.

16. Kadam DM, Shrivastava AK, Verma DK, Tiwari KB, Kumar A, Singh I, **Nandini Y**, Panse R, Rajak SK. 2020. Feasibility testing and evaluation of manually operated paddy drum seeder in vertisol of central India. *International Journal of Chemical Studies*, 8(2):2887–2893.
17. Namdeo R, Shrivastava AK, Kumar A, Guru PK, Patel M, Paliwal R, **Nandini Y**, Singh I. 2025. Development and evaluation of precise seed metering unit for soybean. *Plant Archives*, 25(2).

Patents / Design Registrations

1. Nandini Y, Shrivastava AK, Kumar A. 2024. Engine Operated Remote Controlled Sprayer cum Weeder Machine for Agricultural Purpose. Design No. 410555-001.
2. Kumar A, Shrivastava AK, Nandini Y, Namdeo R. 2024. Soil Profile Meter for Measuring the Profile of Ridges and Furrows of Soil. Design No. 410557-001.
3. Kumar A, Shrivastava AK, Namdeo R, Nandini Y. 2024. Tractor Operated Spiral Tiller. Design No. 410559-001.
4. Nandini Y, Kumar A, Reddy AP, Pimpale AR, Kumar RS. 2024. Single-Row Multi-Crop Inclined Plate Planter. Design No. 448953-001.
5. Kumar A, Shrivastava AK, Nandini Y, Namdeo R. 2024. Rotary Blade for Tiller Machine. Design No. 410558-001.

Books (Authored)

1. **Nandini Y**, Shrivastava AK. 2023. *Agricultural Technologies for Drudgery Reduction of Farm Women*. Blue Rose One Publications. ISBN 978-93-5704-649-7.
2. **Nandini Y**, Shrivastava AK. 2021. *Technical Performance of Combine Harvester (Case Study)*. Lambert Academic Publishing, Dodo Books Indian Ocean Ltd. ISBN 978-620-3-92808-2.
3. **Nandini Y**, Pramod A. 2020. *Workshop Technology and Instrumentation (Objective Type Book)*. Notion Press. ISBN 978-1-68509-353-2.
4. **Nandini Y**, Nagababu G, Manoj K, Devojee, Hemakumar HV. 2021. *Irrigation Water Quality Index (Evaluation and Mapping Book)*. Lambert Academic Publishing, Dodo Books Indian Ocean Ltd. ISBN 978-620-3-86395-6.
5. **Kumar A**, Nandini Y, Shrivastava AK, Singh I. 2025. *Practice Book on Farm Power Engineering (Multiple Choice Book)*. Scientific Publisher, Jodhpur, Rajasthan. ISBN 978-93-6346-435-9.
6. **Nandini Y**, Shrivastava AK, Kumar A. 2025. *Short Notes: Farm Machinery and Their Performance*. Scientific Publisher. ISBN 978-93-6346-488-9.

Book Chapters

1. Nandini Y, Praveen K, Shrivastava AK, Kumar A. 2022. Economic Analysis of Combine Harvester. In: *Compendium of Horticultural Sciences*. JPS Scientific Publications, India. ISBN 978-93-95967-00-6.
2. Nandini Y, Kumar A, Namdeo R, Singh I, Kadam DM, Muley S. 2025. Robotics and Automation in Agriculture. In: *Smart Technologies in Agricultural Production*. DvS Scientific Publication, pp. 44–81.
3. Kumar A, Nandini Y, Namdeo R, Singh I, Kadam DM, Muley S. 2025. Introduction to Smart Agriculture. In: *Smart Technologies in Agricultural Production*. DvS Scientific Publication, pp. 1–16.
4. Kadam DM, Nandini Y, Singh I, Kumar A, Muley S. 2025. Machine Learning and Artificial Intelligence in Agriculture. In: *Smart Technologies in Agricultural Production*. DvS Scientific Publication, pp. 122–156.
5. Namdeo R, Singh I, Nandini Y, Kumar A, Kadam DM, Muley S. 2025. Remote Sensing in Agriculture. In: *Smart Technologies in Agricultural Production*. DvS Scientific Publication, pp. 172–217.

6. Kadam DM, Singh I, Nandini Y, Kumar A, Muley S. 2025. Internet of Things (IoT) in Agriculture. In: Smart Technologies in Agricultural Production. DvS Scientific Publication, pp. 82–121.
7. Kadam DM, Kumar A, Nandini Y, Singh I, Muley S. 2025. Unmanned Aerial Vehicles (UAVs) in Agriculture. In: Smart Technologies in Agricultural Production. DvS Scientific Publication, pp. 218–235.
8. Singh I, Namdeo R, Nandini Y, Kadam DM, Kumar A, Muley S. 2025. Precision Farming Fundamentals. In: Smart Technologies in Agricultural Production. DvS Scientific Publication, pp. 236–267.
9. Kadam DM, Kumar A, Singh I, Nandini Y, Muley S. 2025. Precision Farming: Concepts and Applications. In: Smart Technologies in Agricultural Production. DvS Scientific Publication, pp. 157–171.

Manuals

1. Rajaiah P, Nandini Y. 2017–2018. Engineering Drawing Practical Manual. PJTSAU.
2. Avinash K, Nandini Y, Rohit N, Manish P, Shrivastava AK. 2024. Operational Manual for Soil-Bin Test Set-Up. Manual No. DFAE/CAE/JNKVV/2024/01, JNKVV, Jabalpur.

Leaflet

1. Nandini Y, Kumar A, Kadam DM, Reddy APK, Joseph B. 2026. Laser Weeding Technology. Agriculture Forum for Technical Education of Farming Society, pp. 01–11. Reg. No.: COOP/2023/KOTA/201080/26/98.

Trainings

1. 2026 — Kaveri Drone Academy: Training on Remote Pilot Certificate Course.
2. 2026 — The Society for Agriculture, Allied Sciences and Technology (SAAST), Odisha: Winter School Training Programme, Application of Artificial Intelligence in Agriculture and Allied Sciences (AGRIIntelligence-2026).
3. 2022 — CSIR-Central Mechanical Engineering Research Institute, Durgapur, West Bengal: Hands-on training on high-end scientific equipment usage towards design, development and testing of agricultural machinery with an industrial approach.
4. 2018 — Jain Irrigation Systems Ltd., Hyderabad: Design and installation of drip irrigation and sprinkler systems at field level.
5. 2017 — Central Institute of Agricultural Engineering, ICAR, Coimbatore, Tamil Nadu: Entrepreneurship training programme for rural farm machinery center.
6. 2017 — Acharya N. G. Ranga Agricultural University, RARS Nandhyal, Kurnool dist., A.P.: Experiential Learning Program (ELP) on advanced implements and machinery.

Seminars / Webinars Attended

1. Brainstorming session on Precision Agriculture: Perspectives and Strategies for Enhancing Resource Use Efficiency in Semi-Arid Regions, Water Technology Centre, PJTSAU — 21-08-2019 (1 day).
2. National webinar on Intellectual Property Rights in Agriculture Sector, NAHEP, Swami Keshwanand Rajasthan Agriculture University, Bikaner — 17-07-2020 (1 day).
3. Webinar on English Language for Professional Growth, JNKVV, Jabalpur — 17-07-2020 (1 day).
4. National webinar on Role of Agricultural Mechanization in Doubling Farmers' Income, College of Horticultural Engineering and Food Technology, Devihosur, Haveri, Karnataka — 21-09-2020 (1 day).
5. Spatial Data Use in Agriculture, NAHEP-CAAST-CSDA, College of Agricultural Engineering, JNKVV, Jabalpur — 08-02-2021 to 12-02-2021 (5 days).

6. National Conclave on Research and Deep Technologies for Sustainable Bharat 2047, Engineering Staff College of India (ESCI), Research Heights Foundation, Hyderabad — 28-02-2026 to 01-03-2026 (2 days).

Workshops / Trainings Attended

1. Training cum Workshop on Conservation Agriculture, College of Agriculture, JNKVV, Jabalpur — 06-05-2020 (1 day).
2. Workshop on Intellectual Property Right Awareness, Vaugh Institute of Agriculture Engineering and Technology, SHUATS — 16-11-2016 (1 day).
3. International Workshop on Sustainable Agricultural Mechanization: Prospects and Challenges for Indian Agriculture, SHUATS and Asian Institute of Technology — 29-03-2017 (1 day).
4. Training on Thesis Writing and Online Thesis Evaluation, JNKVV, Jabalpur — 03-03-2021 (1 day).
5. National-Level Workshop 2.0 on Statistical Data Analysis Using SPSS, Department of Agricultural Economics, SRM College of Agricultural Sciences, SRM Institute of Science and Technology, Baburayanpettai — 23-03-2026 (1 day).

Conferences / Papers Presented

1. International Conference on Global Initiatives in Research, Innovation and Sustainable Development of Agriculture and Allied Sciences (GIRISDA-2022), Guru Kashi University, Talwandi Sabo, Punjab — "Advances in Autonomous Agricultural Technologies" (Oral presentation), 06-06-2022 to 08-06-2022 (3 days).
2. National Conference on Production, Processing and Marketing of Millets: Issues & Solutions, JNKVV, Jabalpur — "Performance evaluation of mechanical weeder for jowar millet crop" (Poster presentation), 01-03-2023 to 02-03-2023 (2 days).
3. National Conference on Digital and Engineering Technologies for Precision Agriculture and Value Addition — 26-02-2018 to 27-02-2018 (2 days).