Publications

1. Aakash, N. S. S., Barik, B. R., Sahu, C., & Palai, J. B. (2026). Effect of Greenseeker-based nitrogen management on yield and yield traits of summer rice cultivars. Crop Research, 61(1).
2. Acchukatla, M., Thogati, R. C., Chakravarthy, P. K., Padhy, C., Pattanayak, K. P., & Peter, Y. S. (2025). Assessment of economic viability and production dynamics of chilli cultivation in Guntur District, Andhra Pradesh. Annals of Agri-Bio Research, 30(2), 141–149.
3. Adhikary, R., & Pal, A. (2025). Unveiling hydromorphic soil formation dynamics in Andem, Gabon: A soil survey approach. Indian Journal of Agricultural Research, 59(3), 489–495.
4. Adhikary, R., Choudhury, S. J., & Shankar, T. (2024). Real-time soil nutrient monitoring using NPK sensors: Enhancing precision agriculture. International Journal of Experimental Research and Review, 45, 197–202.
5. Adhikary, R., Pine, S., Choudhury, S. J., Sungheetha, A., R. S. R., & Ghantasala, G. S. P. (2024). A modular CNN framework for hierarchical mango grading and quality assessment. 2024 3rd Odisha International Conference on Electrical Power Engineering, Communication and Computing Technology (ODICON), 1–6. https://doi.org/10.1109/ODICON62106.2024.10797503
6. Ahmadi, M., Fakhari, R., Nungula, E. Z., Maitra, S., & Gitari, H. (2025). Judicious use of weed-suppressive living mulches reduces not only reliance on herbicides but also optimizes potato yield. International Journal of Biological Sciences, 12(1), 15–25.
7. Alex, A., Kizha, A. R., George, A. K., Bick, S., Wang, J., Klein, S., Louis, L. T., Li, L., Perera, P., & Manohar, K. A. (2024). Carbon footprint of the predominant mechanized timber harvesting methods in the Northeastern US. Cleaner and Circular Bioeconomy, 9, 100097. https://doi.org/10.1016/j.clcb.2024.100097
8. Atapattu, A. J., Babalola, O. O., Udumann, S. S., Maitra, S., Nuwarapaksha, T. D., et al. (2025). Enhanced efficiency fertiliser (EEF) intervention for climate change resilience. In Innovations in Climate Resilient Agriculture (pp. 447–464).
9. Atta, K., Mondal, S., Gorai, S., Singh, A. P., Kumari, A., Ghosh, T., Roy, A., Hembram, S., Gaikwad, D. J., Mondal, S., Bhattacharya, S., Jha, U. C., & Jespersen, D. (2023). Impacts of salinity stress on crop plants: Improving salt tolerance through genetic and molecular dissection. Frontiers in Plant Science, 14.
10. Bhatt, R., Hossain, A., Majumder, D., Chandra, M. S., Ghimire, R., Shahzad, M. F., et al. (2024). Prospects of artificial intelligence for sustainability of sugarcane production in the modern era of climate change. Journal of Agriculture and Food Research, 18, 101519.
11. Bhattacharya, U., Naskar, M. K., Kumari, V. V., Sarkar, S., Bandyopadhyay, P., et al. (2025). Synergistic influence of minimum tillage and integrated nutrient schedules on crop performance, nutrient uptake, profitability and soil microbial diversity in a rice–lentil system. BMC Plant Biology, 25(1), 1324.
12. Bulle, A. M., Gitari, H. I., Maitra, S., & Gweyi, J. O. (2025). Vulnerability of shallow groundwater to nitrate and pesticide pollution. International Journal of Bioresource Science, 12(1), 101–117.
13. Chappa, L. R., Nungula, E. Z., Makwinja, Y. H., Ranjan, S., Sow, S., Alnemari, A. M., et al. (2024). Outlooks on major agroforestry systems. In Agroforestry (pp. 21–48).
14. Chappa, L. R., Nungula, E. Z., Ngaiza, V. V., Makwinja, Y. H., Mwadalu, R., Maitra, S., et al. (2025). Microbial remediation of fluoride-contaminated water. In Fluorides in Drinking Water: Source, Issue, and Mitigation Strategies (pp. 255–282).

15. Cheruto, G., Nungula, E. Z., Nyawira, L., Chappa, L. R., Kahuthia-Gathu, R., et al. (2025). Agroforestry tree species: Acacia tortilis—biology, importance, agroforestry production and biotechnology application. In Tree Biology and Biotechnology (pp. 145–161).
16. Das, S., Chandrasekhar, K., Mishra, D., Mitra, B., Mohapatra, P., & Chakravarthy, P. K. (2025). Evaluating advertising effectiveness on consumers' online shopping behaviour across regional and spatial contexts: A light gradient boosting machine approach. Journal of Applied Bioanalysis, 11(S2), 147–163. http://doi.org/10.53555/jab.v11si2.517
17. Das, S., Choudhury, S., & Adhikary, R. (2024). Neural network-based prediction of sensor data for enhanced decision-making in smart agriculture. 2nd International Conference on Signal Processing, Communication, Power and Embedded Systems (SCOPES). https://doi.org/10.1109/SCOPES64467.2024.10991941
18. Das, S., Maitra, S., Sagar, L., Balaji, M., Pavan, A., Sairam, M., & Bochalaya, R. S. (2025). Effect of split nitrogen application on yield attributes and grain yield of pearl millet (Pennisetum glaucum L.). Crop Research, 60(1–2), 12–17.
19. Das, S., Shukla, G., Roy, B., Das, S., Manohar, K. A., & Chakravarty, S. (2025). Optimization of in vitro propagation protocol for conservation and sustainable production of Hygrophila auriculata (Schumach.) Heine in an Indian sub-humid region. National Academy Science Letters. https://doi.org/10.1007/s40009-025-01828-7
20. Das, S., Singh, M., Shukla, G., Manohar, K. A., & Chakravarty, S. (2022). Effect of growing media on rooting of stem cuttings and growth performance of Hygrophila auriculata (Schumach.) Heine under different shade conditions in the foothill area of Eastern Himalaya. Pleione, 16(2), 154–165.
21. Dey, J. K., Saren, B. K., Das, A., et al. (2026). Analysis of the maize–legume cropping system in the lower Indo-Gangetic Plains of Eastern India: Energy efficiency, carbon footprint and farm profitability. Food and Energy Security, 15(1), e70210. https://doi.org/10.1002/fes3.70210
22. Dey, P., Pattanaik, D., Dash, D., Singhal, R. K., Gaikwad, D. J., Baig, M. J., Kumar, R., Lone, A. A., & Rahimi, M. (2025). Mechanisms of low light stress in rice: Current insights and future directions. Plant Growth Regulation, 105, 1949–1968.
23. Dey, P., Pattanaik, D., Mohapatra, D., Saha, D., Dash, D., Mishra, A., Priyadarshinee, L., Singh, A., Swain, P., Baig, M. J., Kherawat, B. S., Chung, S.-M., Kumar, M., Badu, M., Singhal, R. K., Gaikwad, D. J., Khan, N. M., Manohar, S., & Kesawat, M. S. (2024). Gasotransmitters signaling and their crosstalk with other signaling molecules under diverse stress conditions in plants. South African Journal of Botany, 169, 119–133.
24. Gaikwad, D. J., Sahu, C., Prasanth, S., Divya, B., Atta, K., Jaswanth, D. S., & Mahapatra, A. (2024). Hydroponics vs soil: An in-depth assessment of morpho-physiological traits in spinach (Spinacia oleracea). Science Digest, 1, 6.
25. Gaikwad, D. J., Ubale, N. B., Pal, A., Singh, S., Ali, M. A., & Maitra, S. (2022). Abiotic stresses impact on major cereals and adaptation options: A review. Research on Crops, 23(4), 896–915.
26. Gitari, H. H., Nungula, E. Z., Chappa, L. R., Raza, M. A., Ranjan, S., Sow, S., et al. (2024). Agroforestry for climate security. In Agroforestry (pp. 319–344).
27. Gouda, H. S., Singh, Y. V., Shivay, Y. S., Biswas, D. R., Bana, R. S., Poornima, S., et al. (2024). Root parameters and water productivity of rice and wheat in a rice–wheat cropping system as influenced by enriched compost and crop establishment methods. Journal of Agriculture and Food Research, 18, 101317.
28. Gumo, P., Gitari, H., Sakha, M., Masso, C., Baijukya, F., Maitra, S., et al. (2025). Organic mulch and compost synergy revitalizes soil multifunctionality for resilient

agroecosystems. International Journal of Experimental Research and Review, 49, 81–101.
29. Hemasree, K. R., Maitra, S., Ray, S., Sairam, M., Gudla, S. R., & Amith, S. (2025). Impact of sulphur and zinc fertilisation on yield, quality, nutrient uptake and economics of cowpea (Vigna unguiculata L.) cultivation. Farming & Management, 10(2), 115–123.
30. Hemasree, K. R., Sairam, M., Maitra, S., Ray, S., Maheswari, N., Gaikwad, D. J., et al. (2025). Effects of sulphur and zinc on growth and productivity of summer cowpea under conditions of Southern Odisha. Crop Research, 60.
31. James, A., & Manohar, K. A. (2022). Reviewing the adaptability of pure and mixed Norway spruce forests to climate change in Central Europe. Journal of Agricultural Science and Technology, 9(1–2), 70–74.
32. Jantua, J., Mahapatra, A., Kalasare, R. S., Duvvada, S. K., & Ghose, B. (2025). Assessment of selective herbicide mixtures for effective weed management in transplanted kharif rice (Oryza sativa L.) in South Odisha. Crop Research, 60, 82–89.
33. Kanchan, Arshad, A., Manohar, K. A., Shukla, G., Singh, M., Chakravarty, S., & Roy, S. (2024). Cultivating sustainability: Exploring diverse agroforestry practices in West Bengal. SATSA Mukhapatra – Annual Technical, 28, 236–249.
34. Krishna, T. G., Maitra, S., Kalasare, R. S., Ray, S., Mahto, R. K., & Sairam, M. (2024). Influence of location-specific nutrient management and plant stand on growth, productivity and nutrient uptake of irrigated rabi maize (Zea mays L.). Research on Crops, 25(4).
35. Krishna, T. G., Maitra, S., Sairam, M., Maheswari, N., Hemasree, K. R., & Ray, S. (2024). Precision nutrient management and plant stand influence growth and productivity of maize under North Eastern Ghat Region of Odisha, India. International Journal of Bioresource Science, 11(2), 191–204.
36. Kumar, P. S. M., Mahapatra, A., Maitra, S., & Masina, S. R. (2022). Effect of foliar application of nutrients on growth and productivity of rabi maize (Zea mays L.). Crop Research, 57, 161–165.
37. Kumar, S., Mehazabeen, A., Vishnuprabu, S., Aishwarya, B., & Srinivasan, G. (2025). An economic analysis of agricultural crop diversification in high rainfall zone of Tamil Nadu. International Journal of Environmental Sciences, 11(16).
38. Mahapatra, A., Bhambri, M. C., Saha, S., Munda, S., & Tiwari, N. (2022). Effects of rice herbicides on soil enzymes (fluorescein diacetate and dehydrogenase activity) of succeeding toria sown with stubble mulch and minimum tillage. Indian Journal of Natural Sciences, 13, 42643–42646.
39. Mahapatra, A., Bhambri, M. C., Saha, S., Munda, S., & Tiwari, N. (2022). Effects of rice herbicides on soil enzyme β-glucosidase and microbial biomass carbon of succeeding toria sown with stubble mulch and minimum tillage. Indian Journal of Natural Sciences, 13, 42686–42690.
40. Mahapatra, A., Kalasare, R. S., Palai, J. B., Duary, S., Sahu, C., & Rout, D. S. (2023). Review and outlook of weed management in millets. Journal of Applied Biology and Biotechnology, 11, 1–10.
41. Mahapatra, A., Saha, S., Munda, S., Satapathy, B. S., Meher, S., & Jangde, H. K. (2023). Bio-efficacy of herbicide mixtures on weed dynamics in direct wet-seeded rice. Indian Journal of Weed Science, 55, 18–23.
42. Mahapatra, A., Singh, S., Kalasare, R. S., Pradhan, P. R., & Sahu, C. (2021). Weeds in finger millet and their management: A retrospect. International Journal of Botany Studies, 6, 1995–1999.

43. Maheswari, N., Maitra, S., Sairam, M., Ray, S., Sagar, L., Santosh, D. T., et al. (2025). Impact of real-time nitrogen management on the performance of maize–cowpea intercropping system. Crop Research, 60.
44. Mahto, R. K., Kalasare, R. S., Sairam, M., Maitra, S., Mondal, T., Ray, S., et al. (2025). Effect of fertilizer doses and foliar application of primary nutrients on growth and yield of grain sorghum (Sorghum bicolor L.) under South Odisha agro-climatic conditions. Crop Research, 60.
45. Maina, E. W., Mugwe, J., Musila, R., Maitra, S., & Gweyi-Onyango, J. (2025). Phosphorus uptake and use efficiencies of two upland rice (Oryza sativa L.) varieties under varying phosphorus rates and seasons. International Journal of Experimental Research and Review, 49, 1–14.
46. Maitra, S., Hadole, M. V., & Tiwari, K. N. (2024). Impact of drip irrigation and plastic mulching on yield and economics of cucumber (Cucumis sativus L.). Research on Crops, 25(3).
47. Maitra, S., Ray, S., Sagar, L., Sairam, M., Pramanick, B., Gitari, H., Santosh, D. T., et al. (2025). Cropping system approach in climate-resilient food crop production. In Climate-Smart Agricultural Technologies: Approaches for Field Crops.
48. Maitra, S., Sain, S., Sairam, M., Shankar, T., Ray, S., Banerjee, M., & Malik, G. C. (2024). Impact of rabi maize–legume intercropping system on growth, yield and crop competition in maize. Research on Crops, 25(3).
49. Maitra, S., Sairam, M., Ray, S., Praharaj, S., Gouda, H. S., Gitari, H. I., Santosh, D. T., et al. (2025). Seed priming with endophytic microbiome enhances crop yield. In Microbial Inoculants (pp. 111–130).
50. Maitra, S., Sairam, M., Sagar, L., Ray, S., Santosh, D. T., Gaikwad, D. J., et al. (2025). Alley cropping: A sustainable agroforestry system for enhancing productivity, soil health and biodiversity. In Plant Biotechnology and Sustainable Agriculture: Bridging the Gap for Global…
51. Maitra, S., Santosh, D. T., Jena, J., Behera, S. D., Ray, S., Sairam, M., Palai, J. B., et al. (2025). Understanding plant responses to abiotic stress through systems biology. In Systems Biology in Crop Improvement (pp. 59–100).
52. Maity, B., Sairam, M., Ray, S., Maitra, S., Dash, B., & Guchhait, D. (2025). Evaluation of polyhalite as a potassium and sulphur source for improving the growth and productivity of summer groundnut (Arachis hypogaea L.). Crop Research, 60, 357–362.
53. Majumder, S., Shankar, T., Maitra, S., Kumar, A., Gudade, B., et al. (2024). Effect of nutrient omission plot technique-based nutrient management in rabi rice (Oryza sativa) on crop productivity, nutrient uptake and soil health. Indian Journal of Agronomy, 69(4), 357–363.
54. Malik, H. N., Naik, U., Sahoo, U., Panda, A., Phonglosa, A., Bhattacharya, R., & Rahman, F. H. (2021). Influence of micronutrient management on growth and yield attributes in pigeonpea (Cajanus cajan L. cv. PRG176) in Kalahandi District of Odisha. Journal of Experimental Agriculture International, 43(2), 86–93. https://doi.org/10.9734/jeai/2021/v43i230649
55. Malo, M. O., Ladu, J. L. C., Mukeka, J., Maitra, S., Gitari, H., & Gweyi-Onyango, J. (2024). Spatial distribution of soil organic carbon stocks and soil total nitrogen in Central Equatorial State, South Sudan. International Journal of Bioresource Science, 11(2), 181–190.
56. Manepalli, S. B., Tomar, S., Gaikwad, D. J., & Maitra, S. (2022). Abiotic stress signaling in plants and transgenic technology as a triumph: A review. Journal of Applied Biology and Biotechnology, 10, 5–13.

57. Mangaraj, S., Pradhan, S. R., Pattnayak, B. R., Mishra, P., Sethi, D., & Maitra, S. (2025). Climate-smart millet cultivation: A promising option for next-generation agriculture. In Climate-Smart Agricultural Technologies: Approaches for Field Crops.
58. Manohar, K. A., Pandey, A., Sarkar, B. C., Sharma, S. S., & Shukla, G. (2022). Emerging impressions of ethno-medicinal plants and nutraceuticals. Indian Journal of Natural Sciences, 13(72), 42681–42685.
59. Manohar, K. A., Shukla, G., Louis, L. T., Kizha, A. R., Husen, A., & Chakravarty, S. (2024). Influence of hydro, mechanical, and chemical seed treatments on germination and seedling growth of Saraca asoca (Roxb. De Wilde). Seeds, 3(1), 88–102. https://doi.org/10.3390/seeds3010007
60. Manohar, K. A., Sivasankarreddy, K., Shukla, G., Chakraborty, M., Roy, B., & Chakravarty, S. (2025). Optimization of an enhanced micropropagation protocol of Stevia rebaudiana for mass production in an Indian sub-humid region. Sugar Tech, 1–16.
61. Mehazabeen, A., & Srinivasan, G. (2024). A study on flow of market information in the supply chain of banana in Andhra Pradesh. Indian Journal of Natural Sciences, 15(83), 7421–7424.
62. Mehazabeen, A., & Srinivasan, G. (2025). Cost analysis on supply chain of banana in Andhra Pradesh, India. Indian Journal of Applied & Pure Biology, 40(2), 1013–1020.
63. Meher, S., Saha, S., Tiwari, N., Mahapatra, A., Jena, J., & Mohan, M. (2024). Efficacy of broad-spectrum herbicide mixtures on weed flora in wet direct-seeded rice (Oryza sativa L.) in the east coast plain region of India. Research on Crops, 25, 228–234.
64. Mishra, A., Kalasare, R. S., Sarkar, S., Barik, B. R., Adhikary, R., & Gupta, V. K. (2024). Effect of different levels of potash on growth, yield attributes and yields of transplanted kharif rice (Oryza sativa L.) in Southern Odisha. International Journal of Experimental Research and Review, 44, 257–265.
65. Misra, B., Mahapatra, A., Mondal, T., Sahu, C., Singh, S., Kalasare, R. S., Gupta, V. K., & Rout, D. S. (2025). Optimizing herbicide use: Can drone technology revolutionize weed management in rice? Plant Science Today, 12, 1–13.
66. Mondal, D., Nath, S., Shankar, T., Dash, B., & Palai, J. B. (2025). Comparative performance of foliar spray of urea and nano urea on productivity and nitrogen uptake of rice (Oryza sativa L.) in Southern Odisha. Crop Research, 60(5–6). https://doi.org/10.31830/2454-1761.2025.cr-1048
67. Moulick, D., Hossain, A., Barek, V., Chowardhara, B., Mukherjee, A., et al. (2024). Heavy metal stress in the agro-environment: Consequences, adaptations and remediation. International Journal of Environmental Science and Technology, 21(14), 9297–9340.
68. Munda, S. C., Maitra, S., Gaikwad, D. J., Duvvada, S. K., Sairam, M., Santosh, T. D., & Ray, S. (2025). Influence of growing media and nutrient levels on growth and yield of lettuce (Lactuca sativa L.) in hydroponics. Crop Research, 60, 185–190.
69. Mwadalu, R., Ndufa, J., Maitra, S., Gweyi-Onyango, J., & Gitari, H. (2024). Review of scientific advances and importance of biochar for agricultural and industrial uses. International Journal of Bioresource Science, 11(2), 259–273.
70. Mwakidoshi, E. R., Alenazi, M. M., Muui, C., Muindi, E. M., Maitra, S., Alotaibi, M., et al. (2026). Optimized economic returns of potato cultivated under inorganic fertilizer coupled with organic soil amendments: An impetus for resource-constrained smallholder farmers. Potato Research, 69(2), 40.
71. Mwakidoshi, E. R., Alotaibi, M., Alenazi, M. M., Muui, C., Muindi, E. M., Maitra, S., et al. (2026). Augmenting sustainable potato growth and mineral uptake under

integrated organic and inorganic soil amendments. Journal of Crop Improvement, 1–36.
72. Ngaiza, V. V., Nungula, E. Z., Chappa, L. R., Maitra, S., & Gitari, H. I. (2025). Revisiting the potential use of biochar amendment in agricultural soils: A review. International Journal of Bioresource Science, 12(1), 119–133.
73. Ngaiza, V. V., Nungula, E. Z., Chappa, L. R., Maitra, S., & Gitari, H. I. (2025). Impacts of soil degradation on the severity of soil-borne diseases and sustainable management strategies: A review. World Scientific Research, 13(1), 7–20.
74. Ngowi, N. J., Nungula, E. Z., Maitra, S., Karuma, A. N., Nasar, J., & Gitari, H. I. (2025). Geospatial evaluation of soil and land suitability for sustainable maize cultivation. International Journal of Bioresource Science, 12(1), 1–14.
75. Nongmaithem, A., & Mahapatra, A. (2022). Resource conservation technologies in rice cultivation. Indian Journal of Natural Sciences, 13, 43209–43214.
76. Nongmaithem, A., Mahapatra, A., Kalasare, R. S., & Barman, S. (2024). Crop establishment methods and herbicide mixtures induced weed dynamics, productivity, and profitability of summer rice. Journal of Applied Biology & Biotechnology, 12, 248–255.
77. Nori, M., Masina, S., Sagar, M., Sumit, R., Hemasree, K. R., Roman Kumar, M., et al. (2025). Influence of precision nitrogen management in rabi maize and cowpea intercropping system under varied planting proportions in South Odisha.
78. Nungula, E. Z., Chappa, L. R., Ngaiza, V. V., Maitra, S., & Gitari, H. I. (2025). Potentials of azolla–cyanobacteria symbiosis as a biofertilizer in lowland rice production systems: A review. World Scientific Research, 13(1), 21–30.
79. Nungula, E. Z., Chappa, L. R., Ranjan, S., Sow, S., Alnemari, A. M., Seleiman, M. F., et al. (2024). Ecosystem services through agroforestry systems and its sustainability. In Agroforestry (pp. 223–254).
80. Palai, J. B., Malik, G. C., Maitra, S., Banerjee, M., Ray, S., & Sairam, M. (2024). Assessing the effects of integrated nutrient management on groundnut root growth and post-harvest soil properties in brown forest soil of South Odisha. International Journal of Experimental Research and Review, 45(Spl Vol), 301–312. https://doi.org/10.52756/ijerr.2024.v45spl.024
81. Palai, J. B., Malik, G. C., Maitra, S., et al. (2026). Seed inoculation with Rhizobium and integrated nutrient management influences the productivity of groundnut and their residual impact on finger millet. Scientific Reports. https://doi.org/10.1038/s41598-026-38775-2
82. Parhi, A., Chakravarthy, P. K., Pattanayak, K. P., & Subudhi, R. N. (2024). Beyond the balance sheet: Synergising financial sustainability and information disclosure index with ESG performance metrics in Indian corporations. International Journal of Applied Science and Engineering, 12(2), 213–230. https://doi.org/10.30954/2322-0465.2.2024.8
83. Parhi, A., Chakravarthy, P. K., Routray, S. K., & Agarwalla, R. (2025). Post-pandemic sustainable advancements in machine learning and deep learning techniques for stock market analysis: A systematic review. Proceedings of the International Conference on Sustainable Computing, LNEE Vol. 1530, 823–843. Springer Nature. https://link.springer.com/chapter/10.1007/978-981-95-6063-9_53
84. Parvaz, W., Goswami, S., Pal, P., Banerjee, A., Giri, P., & Maitra, S. (2025). Effect of phosphorus and biofertilizer inoculation on growth, yield and post-harvest soil nutrient status of rabi maize (Zea mays L.) in coastal areas of West Bengal. Crop Research, 60.
85. Pattanayak, S., Jena, S., Das, P., Roul, P. K., Maitra, S., Mohanty, S., & Swain, D. K. (2025). Innovative crop establishment strategies vis-à-vis weed management practices

can improve nutrient uptake and soil nutrient balance in the rice–green gram cropping system.

86. Paul, P., Meher, S., Mahapatra, A., & Das, S. (2025). Impact of herbicide application on weed flora, yield attributes and soil microbial population in rabi maize (Zea mays L.). Crop Research, 60, 324–329.
87. Pine, S., R. S. R., Adhikary, R., Mishra, S., Sungheetha, A., & Ghantasala, G. S. P. (2024). Design and synthesis of state transition graph-based sequential multiplier for fast computing operation. 2024 3rd Odisha International Conference on Electrical Power Engineering, Communication and Computing Technology (ODICON), 1–6. https://doi.org/10.1109/ODICON62106.2024.10797535
88. Pramanick, B., Singh, S. V., Maitra, S., Celletti, S., & Hossain, A. (2025). Correction to: Climate-smart agricultural technologies—approaches for field crops production systems. In Climate-Smart Agricultural Technologies: Approaches for Field Crops.
89. Pramanick, B., Singh, S. V., Maitra, S., Celletti, S., & Hossain, A. (2025). Climate-smart agricultural technologies.
90. Prasad, C. V. S., Barik, B. R., Majumder, S., Biswas, T., & Pramanik, P. (2025). Growth and yield response of rice-fallow maize (Zea mays L.) to varying nitrogen and phosphorus levels in Odisha. Crop Research, 60.
91. Prasad, N. D., Pattanayak, K. P., Hudgi, N., Mehazabeen, A., Kumar, A., & Sahoo, D. K. (2026). Modelling the cashew value chain in Gajapati and Rayagada using financial modelling tools: A comparative study of small and large farmers. International Conference on Cognitive, Green and Ubiquitous Computing (IC-CGU), 1–6.
92. Priya, G. S., Maitra, S., Sairam, M., & Ray, S. (2025). Spatial arrangement in pearl millet–groundnut intercropping system influences productivity, competition and economics. International Journal of Experimental Research and Review, 47, 108–119.
93. Quamruzzaman, A. K. M., Uddin, M. N., Akter, L., Islam, F., Gaber, A., Maitra, S., et al. (2024). Study on genetic diversity and its relation to heterosis in eggplant hybrids for green, high-yielding and pest/disease-tolerant cultivars. Vegetos, 1–11.
94. Ravali, D., Singh, S., Azad, A. K., Kaleel, I., Mahapatra, A., Pradhan, P. R., Kotnala, A., & Singh, A. N. (2023). Influence of varied nitrogen quantities on the growth, harvest index, and economic viability of barley. Biological Forum – An International Journal, 15, 234–238.
95. Ray, S., Adhikary, R., Masina, S., Divya, S., & Sameer, S. (2025). Carbon sequestration and its effect on soil quality and crop productivity. Tropical Agriculture, 102(3), 424–440.
96. Ray, S., Barik, B. R., Majumder, S., Sinha, A., Reddy, M. D., Sagar, L., & Sarkar, S. (2024). Assessment of crop water requirement using FAO CROPWAT 8.0 for groundnut in South Odisha. Plant Science Today, 11(3), 552–556.
97. Ray, S., Hemasree, K. R., Maheswari, N., Maity, B., Sairam, M., Santosh, D. T., et al. (2025). Optical sensing and site-specific nutrient management for sustainable precision agriculture. International Journal of Bioresource Science, 12, 135–146.
98. Ray, S., Maitra, S., Masina, S., & Maity, B. (2025). Effect of precision nitrogen management and plant stimulants on growth and yield in a rabi maize–summer groundnut cropping system. Crop Research, 60, 299–307.
99. Ray, S., Maitra, S., Sairam, M., & Lalichetti, S. (2025). Impact of maize–groundnut intercropping system on growth and yield as influenced by phosphorus, potassium and sulphur fertilisation. Crop Research, 60, 308–316.
100. Ray, S., Maitra, S., Sairam, M., Sameer, S., Sagar, L., Divya, B., & Gitari, H. I. (2025). The nexus between intercropping systems, ecosystem services and sustainable agriculture: A review. Research on Crops, 26(1).

101. Reddy, Y., Gaikwad, D. J., Sairam, M., Maitra, S., Anuradha, N., & Patro, T. (2026). The role of PEG in inducing osmotic stress by restricting water uptake in foxtail millet (Setaria italica L.). Tropical Agriculture, 103(1), 32–47.
102. Rout, R. K., Mahapatra, A., Shankar, T., Adhikari, R., Panda, M., & Sial, A. K. (2022). Effect of straw mulching and nitrogen doses on nutrient status, yield and economics of rabi maize. International Journal of Plant & Soil Science, 34, 413–420.
103. Rout, R. K., Mahapatra, A., Shankar, T., Adhikari, R., Panda, M., & Sial, A. K. (2022). Growth and productivity of maize in response to straw mulch and nitrogen management. Crop Research, 57, 156–160.
104. Sagar, L., Maitra, S., Masina, S., & Ray, S. (2025). Influence of different nutrient management strategies on growth, yield and greenhouse gas emissions of irrigated rice. International Journal of Experimental Research and Review, 49, 1–9.
105. Sagar, L., Maitra, S., Singh, S., & Sairam, M. (2023). Impact of precision nutrient management on rice growth and productivity in Southern Odisha. Agricultural Science Digest, 43(6), 812–816.
106. Sagar, L., Maitra, S., Singh, S., & Sairam, M. (2023). Impact of precision nutrient management on dry matter accumulation and partitioning of rice in Southern Odisha. Agricultural Science Digest, 43(6), 729–734.
107. Sagar, L., Maitra, S., Singh, S., & Sairam, M. (2024). Advanced strategies for optimization of primary nutrients requirement in rice: A review. Plant Science Today, 11(1), 353–365.
108. Sagar, L., Maitra, S., Singh, S., Sairam, M., & Pavan, A. (2024). Evaluation of nutrient levels, optical sensors and decision support tools for nitrogen optimization in rice during dry season. Agricultural Science Digest, 44(4), 651–656.
109. Sagar, L., Sairam, M., & Reddy, M. D. (2025). Estimation of irrigation requirement and schedule in Southern Odisha for major rabi cereal crops using FAO CROPWAT 8.0 model. Indian Journal of Agricultural Research, 59(1), 62–66.
110. Sagar, L., Sairam, M., Reddy, M. D., & Sindhu, L. (2024). Calibration and validation of CERES-rice model using varied transplanting dates and seedling ages of RNR 15048 and assessing high temperature sensitivity in the North Eastern Ghat region of Odisha. Mausam, 75(3), 869–876.
111. Saha, S., Bhattacharya, U., Ghosh, P. K., Ghosh, A., & Maitra, S. (2025). Influence of phosphorus and seaweed extract on growth, yield and economics of kharif pigeon pea (Cajanus cajan L.) in coastal saline West Bengal. Crop Research, 60.
112. Sahoo, U., Gaikwad, D. J., Banerjee, M., Malik, G. C., & Maitra, S. (2023). Artificial media for soilless cultivation. In S. Maitra, D. J. Gaikwad, & D. T. Santosh (Eds.), Advances in Agricultural Technology (pp. 29–45). Griffon, Canada.
113. Sahoo, U., Maitra, S., Dey, S., Vishnupriya, K. K., Sairam, M., & Sagar, L. (2023). Unveiling the potential of maize–legume intercropping system for agricultural sustainability: A review. Farming and Management, 8(1), 1–13.
114. Sahoo, U., Maitra, S., Sairam, M., & Sagar, L. (2023). Potential and advantage of pearl millet–legume intercropping system: A review. International Journal of Bioresource Science, 10(1), 99–106.
115. Sahoo, U., Malik, G. C., Banerjee, M., Maitra, S., & Sairam, M. (2024). Effect of ready mix application of herbicide on weed dynamics and productivity of maize in lateritic belt of West Bengal. Agricultural Science Digest, 44(3), 505–511.
116. Sahoo, U., Malik, G. C., Banerjee, M., Maitra, S., Sairam, M., & Bairagya, M. D. (2024). Growth and productivity of maize (Zea mays L.) as influenced by precision nutrient management and intercropping cowpea (Vigna unguiculata L.) under hot and sub-humid region of Odisha. Agricultural Science Digest, 44(4), 625–631.

117. Sahoo, U., Malik, G. C., Banerjee, M., Sahoo, B., & Maitra, S. (2022). Application of nanotechnology in agriculture in India. Indian Journal of Natural Sciences, 13(72), 44422–44429.
118. Sahu, C., Gaikwad, D. J., Munda, S. C., Gupta, V. K., & Nihal, R. (2025). Insect pest management of lettuce (Lactuca sativa) in hydroponics. Journal of Entomological Research, 49, 128–132.
119. Sahu, C., Gaikwad, D. J., Nanda, S., Dash, G. K., Maitra, S., Munda, S. C., & Mullapudi, S. (2025). Comparative performance of lettuce cultivars Batavia and Romain in nutrient film technique under hydroponics system. Crop Research, 60, 61–67.
120. Sairam, M., Maitra, S., Ray, S., Maity, B., & Pradhan, P. (2025). Influence of need-based nutrient management on yield and nutrient use efficiency of rabi maize (Zea mays L.) under sandy loam soils of Odisha, India. Farming & Management, 10(1).
121. Sairam, M., Maitra, S., Ray, S., Pradhan, P., & Maity, B. (2025). Evaluating nutrient uptake and efficiency in maize through precision nutrient management strategies. International Journal of Experimental Research and Review, 48, 92–102.
122. Sairam, M., Maitra, S., Sagar, L., Biswas, T., Bárek, V., Brestic, M., & Hossain, A. (2025). Application of precision nutrient tools for optimization of fertilizer requirements and assessment of growth and productivity of maize (Zea mays L.) in the northeastern region. Journal of Agriculture and Food Research, 21, 101958.
123. Sairam, M., Ray, S., Padhi, D. P., Dayal, P. A. S., Santosh, D. T., & Maitra, S. (2025). Growth, productivity and quality of gerbera cultivars under forced- and open-ventilated polyhouse conditions. Research on Crops, 26(4).
124. Samui, S., Lalichetti, S., Shankar, T., Manohar, K. A., Adhikary, R., Maitra, S., & Praharaj, S. (2022). Growth and productivity of rabi maize as influenced by foliar application of urea and nano-urea. Crop Research, 57(3), 136–140.
125. Sanabam, T. D., Bharati, P. J., Suprava, N., Ashirbachan, M., & Dinkar, G. (2025). Crop performance, weed dynamics and economics of summer groundnut as influenced by paddy straw mulching and levels of phosphorus in Southern Odisha. Plant Science Today. https://doi.org/10.14719/pst.3127
126. Sanabam, T., Palai, J. B., Duvvada, S. K., Ray, S., Dey, J. K., Neeraja, A., & Swathi, N. (2025). Energy and carbon budget of summer groundnut under paddy straw mulching and phosphorus levels in South Odisha. Crop Research, 60(5–6). https://doi.org/10.31830/2454-1761.2025.cr-1058
127. Santosh, D. T., Maitra, S., Sairam, M., & Gaikwad, D. J. (2024). Onion growth, yield and water productivity as influenced by irrigation levels under drip irrigation and plastic mulch. Research on Crops, 25(4).
128. Santosh, D. T., Mandal, D., Dayal, P. A. S., Sairam, M., Gaikwad, D. J., Ray, S., et al. (2025). Influence of drip fertigation on growth, yield and quality attributes of broccoli under polyhouse and open field conditions. Research on Crops, 26(4).
129. Santosh, D. T., Pholane, L. P., Maitra, S., Mandal, D., Sairam, M., et al. (2025). Effects of drip fertigation and plastic mulch on growth and productivity of okra. Research on Crops, 26(3).
130. Santosh, D. T., Upreti, P., Maitra, S., Sairam, M., & Gaikwad, D. J. (2025). Impact of fertigation and plastic mulch on yield, economics and fruit quality of guava. Crop Research, 60(1), 35–44.
131. Sanyal, S., Adhikary, R., & Choudhury, S. (2024). Revolutionizing lemon grading: An automated CNN-based approach for enhanced quality assessment. International Journal of Information Technology, 16(7), 4155–4166. https://doi.org/10.1007/s41870-024-01829-7

132. Satapathy, S. N., Mandal, S. M. A., Adhikary, R., Patra, C., Lenka, B., Tripathy, B., Badu, M., Acharya, S., & Mohapatra, S. K. (2023). Which adult diet is better? Comparative analyses of carbohydrate- and protein-rich diets on growth and reproduction of Chrysoperla zastrowi sillemi (Esben-Petersen). Journal of Asia-Pacific Entomology.
133. Singh, A., Pandey, H., Pal, A., Chauhan, D., Pandey, S., Gaikwad, D. J., Sahu, C., & Atta, K. (2023). Linking the role of melatonin in plant stress acclimatization. South African Journal of Botany, 159, 179–190.
134. Singh, S., Venugopalan, M. V., & Mahapatra, A. (2024). Technological advancement for revival of organic cotton sector in India: Policy and roadmap. International Journal of Agricultural Invention, 9, 95–104.
135. Syamili, M. S., Manohar, K. A., & Aftab, F. K. (2022). Kerala homegardens as a source of timber. Journal of Agricultural Science and Technology, 9(1–2), 63–69.
136. Tomar, S., Babu, M. S., Gaikwad, D. J., & Maitra, S. (2021). A review on molecular mechanisms of wheat (Triticum aestivum L.) and rice (Oryza sativa L.) under abiotic stresses with special reference to drought and heat. International Journal of Agriculture, Environment and Biotechnology, 14, 215–222.
137. Vishnuprabu, S., Mehazabeen, A., & Srinivasan, G. (2025). A study on marketing efficiency and constraints faced by horse gram growers in Krishnagiri District, Tamil Nadu, India. Journal of Experimental Agriculture International, 47(3), 18–25.
138. Yoshitha, S., Sagar, L., & Reddy, M. D. (2025). Management of weeds in summer maize (Zea mays L.) by pre and post emergence herbicides. Plant Science Today, 12(1), 1–6.