

A. Publication:

Research papers published in journals of NAAS rating:

1. **L. P. Balai**, S.M. Khardia, N. Singh S Indu Bala Sethi, and Sachin Sharma (2025). Status, crop losses, epidemiology, variability, and disease management of cumin blight: A review. *Journal of Spices & Aromatic Crops*.34 (1):1-14.
2. **L. P. Balai**, N. Singh and S. M. Khardia (2023). An updated review of *Alternaria* blight of pigeonpea [*Cajanus cajan* (L.) Mill sp.]. *Environment and Ecology*.41(4A):2507-2515.
3. **L. P. Balai** and S. Kumar (2022). Integrated disease management of leaf spot of brinjal caused by *Alternaria alternata*: A Review. *Environment and Ecology*.40(2A): 440-450.
4. **L. P. Balai**, N. Singh and D. R. Sharma (2021). Impact on cluster frontline demonstrations on the productivity of mustard (*brassica juncea*). *International Journal of Bioresource and Stress Management*.12(4): 295-303.
5. **L. P. Balai**, R. B. Singh, A. Sinha and S. M. Yadav (2020). Evaluation of different fungicides and antagonists *In vitro* and *In vivo* condition against *Alternaria* blight of pigeonpea. *Legume Research-An International Journal*. 43(2):268-275.
6. **L. P. Balai**, R. B. Singh, A. Sinha and S. M. Yadav (2020). Biochemical variability study in genotype and isolate of *Alternaria* blight in pigeonpea. *Chemical Science Review and Letters*. 9(33): 24-33.
7. S. M. Yadav, V. Singh, R. Soni, **L. P. Balai** and S. L. Yadav (2017). Phenotyping of Tomato RILs for resistance to *Alternaria Solani* under poly house and field conditions. *Chemical Science Review and Letters*. 6 (22): 1092-1100.
8. **L. P. Balai**, A. Sinha, R. B. Singh and S. M. Yadav (2016). Cultural, morphological and pathogenic variability of *Alternaria tenuissima* causing blight in pigeonpea of Eastern Uttar Pradesh. *Indian Phytopathology*. 69 (1): 32-36.

9. **L. P. Balai**, R. B. Singh and S. M. Yadav (2013). Varietal screening and agronomical performance of pigeonpea genotypes/cultivars against Alternaria blight (*Alternaria tenuissima* Kunz ex Pers.) Wiltshire. *Journal of food legumes*. 26 (1and2): 54-56.
10. S. M. Yadav, R. K. Patil, A. K. Rai, **L. P. Balai** S. Singh and R. Niwas (2013). A survey: Occurrence of post harvest rots of aonla with new reported pathogen (*Penicillium funiculosum* Thom.). *Plant Pathology Journal*. 12 (2): 124-126.
11. M. Kumar, A. C. Shivran, R. Chouhan, K. S. Meena, K. C. Verma, R. D. Jat and **L. P. Balai** (2013). Production potential and economics of intercropping of castor with mungbean. *Environment and Ecology*. 31 (2C):1065-1068.
12. S. M. Yadav, R. K. Patil, S. Singh, **L. P. Balai** and A. K. Rai (2013). Use of botanical products for breakdown the parasitize of new recorded *Penicillium funiculosum* of Aonla. *Plant Pathology Journal*. 12 (2): 120-123.
13. S. M. Yadav, R. K. Patil, S. Singh, **L. P. Balai** and A. K. Rai (2013). Isolation, purification and pathogenicity of *Penicillium funiculosum* causing fruit rot of aonla. *Bioinfolet*. 10(2 A): 537-538.
14. S. M. Yadav, R. K. Patil, S. Singh, **L. P. Balai** and A. K. Rai (2013). Impact of inoculation methods on development of Penicillium fruit rot of Aonla (*Emblica officinalis* Gaertn.). *Environment and Ecology*. 31(2): 558-560.
15. **L. P. Balai**, R. R. Ahir and S. M. Yadav (2013). Varietal screening of brinjal genotypes against leaf spot of disease caused by *Alternaria alternata*. *Environment and Ecology*. 40(2A): 1276-1278.
16. **L. P. Balai** and R. R. Ahir (2011). Evaluation of plant extracts and biocontrol agents against leaf spot disease of Brinjal. *Indian Phytopathology*. 64(4): 378-380.
17. S. M. Khardia, **L. P. Balai** and Y. K. Ghilotia (2023). Influence of different PGRs and zinc levels biofortification on nutrient content and uptake in pearl millet under a hyper arid region. *The pharma innovation Journal*. 12 (10): 2566-2571.
18. S. M. Khardia, **L. P. Balai** and Y. K. Ghilotia (2022). Influence of plant growth regulators and zinc fertilization on growth & yield attribute of Pearlmillet [*Pennisetum glaucum* L.]. *The pharma innovation Journal*. 11 (4): 1990-1993.
19. D. Kachhawa, N. Singh, S. M. Meena, M. Singh, **L. P. Balai** and L. Berwal (2021). Impact of cluster frontline demonstration in productivity enhancement and dissemination of pigeon pea production technology in Dholpur, Rajasthan. *The pharma innovation Journal*. 10(6):1305-1308.

20. **L. P. Balai**, D. Singh and M. L. Meena (2020). Evaluation of technological gap and performance of low yield of tomato due to fruit borer. *International Journal of Plant Protection*.13 (2): 166-170.
21. **L. P. Balai**, D. R. Sharma, N. Singh, and S. M. Meena (2020). Assessment of technological gap and performance of management of common scab of potato. *International Journal of Plant Protection*.13 (2): 143-147.
22. **L. P. Balai**, N. Singh, D. R. Sharma, M. Singh and S. M. Meena (2020). Evaluation of cluster frontline demonstrations on production, productivity, profitability, adoption and horizontal spread of Chickpea (*Cicer arietinum* Linn) in Dholpur district of Rajasthan, India. *International Journal of Current Microbiology and Applied Science*.9(11): 3402-3413.
23. S. M. Khardia, Y K Ghilotia, **L. P. Balai** and I. B. Sethi (2020). Effect of plant growth regulators and zinc fertilization on growth of Pearl millet [*Pennisetum glaucum* (L.) R. Br. emend Stuntz]. *International Journal of Current Microbiology and Applied Science*. 9(12): 3161-3168.
24. **L. P. Balai**, D. Singh and M. L. Meena (2020). Assessment of technological gap and performance of integrated disease management approach for wilt in cumin. *International Journal of plant Protection*. 13(1):76-80.
25. D. Singh, M. K. Choudhary, M. L. Meena, **L. P. Balai** and C. Kumar (2018). Seed village programme: Ensuring livelihood security of small and seed spices farmers. *International Journal of Seed Spices*. 8(2):48-53.
26. D. Singh, M. K. Choudhary, M. L. Meena, **L. P. Balai** and C. Kumar (2017). Kharchia Wheat: King of saline environment. *Desert Environment Newsletter*. 19 (1-2): 11-12.
27. **L. P. Balai**, A. Sinha, R. B. Singh and S. M. Yadav (2017). Biochemical constituents of Alternaria blight of pathogens in pigeonpea. *Asian Journal of bio science*.12 (1): 1-7.
28. S. M. Yadav, V. Singh, M. Singh, **L. P. Balai** and R. Chand (2017). Evaluation of resistance for early blight caused by *Alternaria solani* (Ellis and Martin) Sorauer in tomato. *Asian Journal of Bio Science*. 12 (2): 87-99.
29. B. C. Nath, R. B. Singh and **L. P. Balai** (2013). Studies on status of leaf spot of groundnut in Chunar and nearby areas of Mirzapur district of Uttar Pradesh. *Trends in Biosciences*. 6 (1):86-87.
30. **L. P. Balai** and R. R. Ahir (2013). Survey and occurrence of leaf spot caused by *Alternaria alternata* (Fr.) Keissler Brinjal in Jaipur district. *Advances in Life sciences*.2(1):71-72.
31. **L. P. Balai** and R. B. Singh (2013). Losses caused due to Alternaria blight disease in the grain yield of pigeonpea. *Trends in Biosciences*. 6 (1):40-42.

32. **L. P. Balai**, R. B. Singh and S. M. Yadav (2013). Sowing time and plant population on the disease intensity of Alternaria blight of pigeonpea. *Indian journal of plant protection*. 41 (4): 326-331.
33. **L. P. Balai** and R. R. Ahir (2013). Role of temperature and relative humidity on mycelial growth of Alternaria alternata infecting brinjal. *Trends of Biosciences*.6: 307-308.
34. **L. P. Balai** and R. B. Singh (2013). Survey for the disease status intensity of Alternaria blight of pigeonpea in Eastern part of Uttar Pradesh and adjoining districts of Western Bihar. *The Bioscan*.8(1):63-66.
35. **L. P. Balai**, R. B. Singh and S. M. Yadav (2013). Integration management of Alternaria blight of pigeonpea with some fungicides and antagonists in pot condition. *The Bioscan*. 8(3):881-886.
36. N. K. Jatav, K. S. Shekhawat and **L. P. Balai** (2013). Chemical control of wilt of brinjal (*Solanum melongena* L.) caused by *Fusarium oxysporium f. sp. melongenae* (Schlecht) Mutuo and Ishigami. *Trends in Bioscience*. 6 (6): 781-783.
37. S. Behera, R. B. Singh and **L. P. Balai** (2013). Efficacy of fungicides on *in vitro* growth of pigeonpea against stem canker. *Trends in Biosciences*. 6(2):190-191.
38. J Singh, R. B. Singh and **L. P. Balai** (2013). Grain yield loss in mungbean due to web blight. *Trends in Biosciences*. 5(2): 147-148.
39. J. Singh, R. B. Singh and **L. P. Balai** (2013). Manipulation of sowing dates and inter-rows spacing an eco friendly management of mungbean (*Vigna radiata*) web blight, *Trends in Biosciences*. 5 (2):152-153.
40. S. M. Yadav, R. K. Patil, **L. P. Balai** and A. K. Rai (2012). Eco-chemical management of a new fungal rot (*Penicillium funiculosum* Thom.) of Aonla. *The Bioscan*. 7(4):649-651.
41. **L. P. Balai**, R. R. Ahir, R. B. Singh and R. K. Singh (2010). Chemical Control of Leaf Spot of Brinjal caused by *Alternaria alternata*. *Indian Journal of Plant Pathology*. 24 (1/2):109-113.

(B) Book chapters:

- I. B. Sethi, M. Jajoria, S. Kumar, N.K. Braod, **L.P. Balai**, L.K Jat, H. R Mali and S. Muralia (2019). Watershed Management, Environmental Issues and Sustainable Agriculture, Weser Books Zittau, Germany. **Pg. 56-72.**
- II. I.B. Sethi, M. Jajoria, S. Kumar, N.K. Broad, **L.P. Balai**, L.K. Jat, H. R Mali and S. Muralia (2019). Crop Planning for Erratic and Aberrant, Weather Conditions, modern approaches in crop improvement, Weser Books Zittau, Germany. **Pg 1-7.**

(C) Booklet:

1. लक्ष्मण प्रसाद बलाई, नवाब सिंह (2021). मशरूम उत्पादन लाभकारी व्यवसाय, कृषि विज्ञान केन्द्र, धौलपुर, प्रसार शिक्षा निदेशालय, श्री कर्ण नरेन्द्र कृषि विश्वविद्यालय, जोधनेर.1-80.

2- **L.P. Balai, and D. Singh (2014).** Commercial cultivation of oyster mushroom. KVK, Pali Marwar, CAZRI, Jodhpur (Raj.). 1-28.

Folder:

1. **L.P. Balai**, M. K. Chaudhary, M. L. Meena, D. Singh and M M Roy (2014). Integrated Pest Managements in mungbean crop. KVK, Pali Marwar, CAZRI, Jodhpur (Raj.). 1-4.

English Article:

1. **L.P. Balai** and N. Singh (2021). Adoption of innovative button mushroom grower: A success story of entrepreneurs. Just Agriculture e-ISSN: 25828223, 2(2): 65:1-8.
2. M. Singh, **L.P. Balai** and Prince (2020). Indigenous technical knowledge (ITKs) and its role in sustainable a Agriculture. Agrospheres: e-Newsletter ISSN(E) 2582-7022. 1 (2): 29-32.
3. D. Singh, **L.P. Balai**, M. K. Choudhury, M. L. Meena, and C. Kumar (2018). Successful intervention of plant protection strategies on farmer field success stories from KVK, Pali. Model training course on Eco-friendly integrated Pest management in arid crop at ICAR-CAZRI, Jodhpur, 5-8.
4. R. Niwas, D. Singh, S. M. Yadav and **L. P. Balai** (2013). Traditional wisdom for diseases treatment in animal husbandry. *Popular Kheti*. 1 (2): 30-38.
5. S. M. Yadav, R. K. Patil, S. Singh, **L. P. Balai** and R. Niwas (2013). Post-harvest diseases of horticultural crops and their management. *Popular Kheti*. 1 (3): 20-25.

Popular article (Hindi):

1. लक्ष्मण प्रसाद बलाई, सागर मल खारड़िया, एवं अर्जुन कुमार वर्मा (2024). चने के प्रमुख रोग एवं कीट एवं उनका प्रबंधन, खेती दुनिया, पटियाला, 8 (1):3.
2. सागर मल खारड़िया, लक्ष्मण प्रसाद बलाई एवं अर्जुन कुमार वर्मा (2023). अर्ध-शुष्क मैदानों के लिए एकीकृत कृषि (आईएफएस) प्रणाली मॉडल, खेती दुनिया, पटियाला,7(46):3.

3. **लक्ष्मण प्रसाद बलाई**, नवाब सिंह, सागर मल खारडिया, माघो सिंह, शिव मूरत मीणा, ईंदू बाला सेठी, निरजन कुमार बरोड, लोकेश कुमार जाट व सुरेश कुमार (2023). बाजरे की फसल में लगने वाले प्रमुख रोग, कीट एवं उनका प्रबंधन, खेती दुनिया, पटियाला, 7(37):7 व 10.
4. **लक्ष्मण प्रसाद बलाई** व सागर मल खारडिया (2023). कपास की फसल में लगने वाले प्रमुख रोग एवं उनका समेकित रोग प्रबंधन खेती दुनिया, पटियाला, 7(36): 3 व 6.
5. **लक्ष्मण प्रसाद बलाई**, नवाब सिंह, माघो सिंह, निरजन कुमार बरोड, सागर मल खारडिया (2023). मूंग के प्रमुख रोग एवं प्रबंधन, खेती दुनिया, पटियाला, 7(35):6 व 10.
6. अरविन्द कुमार यादव, **लक्ष्मण प्रसाद बलाई** एवं राकेश सम्मौरिया (2023). पाले से फसलों का बचाव, खेती 10 फरवरी 2023, 36.
7. **लक्ष्मण प्रसाद बलाई**, माघो सिंह, नवाब सिंह, शिव मूरत मीणा, ईंदू बाला सेठी, निरजन कुमार बरोड, लोकेश कुमार जाट (2022). ग्वार की फसल में लगने वाले प्रमुख रोग एवं उनके प्रबंधन के उपाय, खेती दुनिया, पटियाला, 6 (30) 8.
8. **लक्ष्मण प्रसाद बलाई** व सागर मल खारडिया (2022). ट्राइकोडर्मा का भूमि जनित रोगों में उपयोग, खेती दुनिया, पटियाला, 6(33): 3.
9. **लक्ष्मण प्रसाद बलाई**, राकेश सम्मौरिया एवं अरविन्द कुमार यादव (2022). बटन मशरूम का उत्पादन एक लाभदायक व्यवसाय, एग्री एक्सपो-2022 (किसान मेला) कृषि स्मारिका, प्रसार शिक्षा निदेशालय, श्री कर्ण नरेन्द्र कृषि विश्वविद्यालय, जोबनेर (जयपुर) राज.:19-25
10. **लक्ष्मण प्रसाद बलाई**, एम. पी. यादव, ए. के. यादव एवं एस. एस. शेखावत (2021). ढिंगरी मशरूम की व्यवसायिक खेती. कृषि स्मारिका, प्रसार शिक्षा निदेशालय, श्री कर्ण नरेन्द्र कृषि विश्वविद्यालय, जोबनेर (जयपुर) राज.: 32-37.
11. **लक्ष्मण प्रसाद बलाई**, एम. पी. यादव एवं ए. के. यादव (2021). दूधिया मशरूम की खेती गर्मीयों में आय का उत्तम स्रोत. जोबनेर कृषि, प्रसार शिक्षा निदेशालय, श्री कर्ण नरेन्द्र कृषि विश्वविद्यालय, जोबनेर (जयपुर) राज.:4 (मई) :2-5.
12. निरंजन कुमार बरोड, इन्दु बाला सेठी, सुरेश कुमार, **लक्ष्मण प्रसाद बलाई** एवं लोकेश कुमार जाट (2021). कैसे करें गाजर घास का एकीकृत नियंत्रण, मॉडर्न खेती, 19 (6): 27-30.
13. **लक्ष्मण प्रसाद बलाई**, नवाब सिंह, माघो सिंह व शिव मूरत मीणा (2020). अरहर की वैज्ञानिक खेती, खेतीदुनिया, पटियाला, 4(28): 5.
14. **लक्ष्मण प्रसाद बलाई**, नवाब सिंह, माघो सिंह, ईंदू बाला सेठी, निरजन कुमार बरोड, लोकेश कुमार जाट (2020). तिल की फसल में लगने वाले प्रमुख रोग एवं उनका प्रबंधन, खेती दुनिया, पटियाला, 4(32):4.
15. **लक्ष्मण प्रसाद बलाई**, नवाब सिंह व माघो सिंह, (2020). आदर्श पोषण वाटिका घर के आंगन में उगाएँ पोषक तत्वों से भरपूर पूरी तरह ऑर्गेनिक, खेती दुनिया, पटियाला, 4(35): 12.

Honours and Awards:

1. Certificate of Appreciation for World Environment Day Celebrations June 2022 as a faculty coordinator by conducting and completing the green activities on campus. Mahatma Gandhi National Council of Rural Education, Dept. of higher education, ministry of education, Govt. of India in June 2022.

2. Certificate of Appreciation for his significant contribution in strengthening of NSS activity. COA, Kishangarhbas-Alwar on 26 January 2022.
3. Excellence in Extension Award for his outstanding contribution in the field of plant pathology. ICAAAS-2021 at Society for Scientific Development in Agriculture & Technology on December 2021.
4. Young Scientist Award for his outstanding contribution in the field of plant pathology. ICAAAS-2021 at Society for Scientific Development in Agriculture & Technology, Meerut (UP) on July 2021.
5. Certificate of Appreciation for Proactive implementation of Scheduled Caste Sub plan. ICAR-Directorate of Rapeseed- Mustard Research, Sear, Bharatpur (Raj.)-321303.
6. Certificate of appreciation for proactive role in the implementation of DBT sponsored Biotech Kisan project of LARI, New Delhi. ICAR-Indian Agricultural Research Institute New Delhi-110 012 (INDIA) in 2019-21.
7. Award of UGC Rajiv Gandhi National Junior and Senior Research Fellowship. UGC in 2009 to 2013.
8. Award of UGC Research Fellowship. BHU, Varanasi in 2008 to 2009.