



Dr. Ashok Kumar

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PERSONAL PROFILE

Father's Name : **Sant Lal**

Date of birth: **07-01-1981**

Nationality: Indian Caste : Schedule Caste

Permanent Address: Dr. Ashok Kumar
Vill. & Post. – Piyari; Police Station – Chaubeypur
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ACADEMIC QUALIFICATIONS

- **Ph.D. (2010)** in Botany from **Banaras Hindu University**, Varanasi, India.

Thesis Title: “*Evaluation of some higher plant essential oils against fungi causing deterioration of some herbal raw materials during storage*”.

- **M.Sc. (2004)** in Botany from **Banaras Hindu University**, Varanasi, India.
- **B.Sc. (2002)** from **University of Allahabad**, Allahabad, India.

OTHER QUALIFICATIONS

NET (JRF)–CSIR, June 2004 and December 2004.

AWARDS / FELLOWSHIPS

- **Junior Research Fellowship (JRF)** from CSIR, New Delhi, India.
- **Senior Research Fellowship (SRF)** from CSIR, New Delhi, India.
- “**Certificate of Merit Award**” in 31st Annual Conference of Indian Botanical Society (IBS-2008)
- “**Best Paper Award**” in Annual Meeting of Indian Phytopathological Society (IPS-2006)
- **Shikshak Samman** in 2021 by Govt. of Uttar Pradesh & Siddharth University.

TEACHING EXPERIENCE

1. **Two years (2009-2011)** in Department of Botany, Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur (C.G.)
2. **Eleven years (March 2011 - Nov. 2022)** in Dr. Bhimrao Ambedkar Government Degree College, Maharajganj-273303, Uttar Pradesh.
3. **One year (Nov. 2022 – at present)** in DDU Gorakhpur University, Gorakhpur (U.P.)

SPECIALIZATION

- **Plant Pathology and Plant Protection**
- **Microbial Ecology and Ecopathology**

RESEARCH AREA / ACTIVITIES IN RESEARCH

- **Bioprospecting of angiospermic plants**
- **Biological pest management**
- **Plant Pathology / Post-harvest Pathology**
- **Food and stored product management**

PATENT - ONE

Title: “*A novel plant essential oil synergistic composition and its preparation*”

Patent No.: **472431**

Application No.: **233/DEL/2011**

Filed on: **February 1, 2011**

Applicant: *Banaras Hindu University*

RESEARCH PROJECT : ONE

Title of Project : Survey of higher plants of Gorakhpur region as botanical pesticides against fungal and insect pests deteriorating edible commodities.

Funding Agency : “Research and Development” Scheme of Government of Uttar Pradesh

Duration of Project : Three Years **Amount of Project (Rs.) :** 388000/-

RESEARCH PAPERS / ARTICLES (Published/Accepted)

(A) International: 23

1. **Ashok Kumar**, Nawal Kishor Dubey, Sharad Srivastava (2013). Antifungal evaluation of *Ocimum sanctum* essential oil against fungal deterioration of raw materials of *Rauvolfia serpentina* during storage. *Industrial Crops and Products*, 45, 30-35. (Impact factor: 6.449; Citation : 29)
2. **Ashok Kumar**, Ravindra Shukla, Priyanka Singh, Bhanu Prakash, Nawal Kishore Dubey (2011). Chemical composition of *Ocimum basilicum* L. essential oil and its efficacy as a preservative against fungal and aflatoxin contamination of dry fruits. *International Journal of Food Science & Technology*, 46, 1840–1846. (Impact factor: 3.713; Citation : 34)
3. **Ashok Kumar**, Ravindra Shukla, Priyanka Singh, C.S. Prasad and N.K. Dubey. (2010). Efficacy of extract and essential oil of *Lantana indica* Roxb. Against food contaminating moulds and aflatoxin B1 production. *International Journal of Food Science and Technology*, 45, 179–185. (Impact factor: 3.713; Citation : 25)
4. **Ashok Kumar**, Ravindra Shukla, Priyanka Singh, N.K. Dubey (2009). Biodeterioration of some herbal raw materials by storage fungi and aflatoxin and assessment of *Cymbopogon flexuosus* essential oil and its components as antifungal. *International Biodeterioration & Biodegradation*, 63: 712-716. (Impact factor: 4.907; Citation : 69)
5. **Ashok Kumar**, Ravindra Shukla, Priyanka Singh, N.K. Dubey (2010). Chemical composition, antifungal and antiaflatoxigenic activities of *Ocimum sanctum* L. essential oil and its safety assessment as plant based antimicrobial. *Food and Chemical Toxicology*, 48, 539-543. (Impact factor: 5.572; Citation : 241)

6. **Ashok Kumar**, Ravindra Shukla, Priyanka Singh, A.K. Singh, N.K. Dubey (2009). Assessment of *Mentha arvensis* L. essential oil in controlling post harvest contamination of chickpea by fungi, insects and aflatoxin. *Journal of the Science of Food and Agriculture*, 89: 2643-2649. (Impact factor: 4.125; Citation : 87)
7. **Ashok Kumar**, Ravindra Shukla, Priyanka Singh, Chandra Shekhar Prasad and N.K. Dubey (2008). Assessment of *Thymus vulgaris* L. essential oil as a safe botanical preservative against post harvest fungal infestation of food commodities. *Innovative Food Science and Emerging Technology*. 9(4): 575-580. (Impact factor: 7.104; Citation : 309)
8. **Ashok Kumar** (2021). Chemical composition and efficacy of *Lantana camara* L. essential oil against post harvest invasion of chickpea by pulse beetle (*Callosobruchus chinensis* L.). *International Journal of Current Microbiology and Applied Sciences*. 10(05): 719-729.
9. **Ashok Kumar** and N.K. Dubey (2020). Assessment of *Mentha piperita* L. essential as green pesticide against fungal and insect infestation of chickpea. *International Journal of Current Microbiology and Applied Sciences*. 9(10): 3113-3126.
10. Sandeep Kumar Chandrakar, Mishri Lal, **Ashok Kumar** and Ravindra Shukla (2022). *Justicia adhatoda* L. mediated green synthesis of silver nanoparticles and assessment of their antioxidant, hydrogen peroxide sensing and optical properties. *Materials Technology*. 37(10): 1355-1365. (Impact factor: 3.297; Citation : 17)
11. Ravindra Shukla, **Ashok Kumar**, Priyanka Singh, N.K. Dubey (2009). Efficacy of *Lippia alba* essential oil and its monoterpene aldehyde constituents against fungi isolated from some edible legume seeds and aflatoxin B1 production. *International Journal of Food Microbiology*, 135: 165-170. (Impact factor: 5.911; Citation : 163)
12. Ravindra Shukla, **Ashok Kumar**, C. S. Prasad, Bhawana srivastava and N. K. Dubey (2008). Antimycotic and antiaflatoxigenic potency of *Adenocalymma alliaceum* Miers against fungi causing biodeterioration of stored food commodities and raw herbal drugs. *International Biodeterioration and Biodegradation*. 62:348-351. (Impact factor: 4.907; Citation : 84)
13. Ravindra Shukla, **Ashok Kumar**, C S Prasad, Bhawana Srivastava and N K Dubey (2009). Efficacy of *Acorus calamus* L. leaves and rhizome on mortality and reproduction of *Callosobruchus chinensis* L. (Coleoptera: Bruchidae). *Applied Entomology and Zoology*. 44 (2):241-247. (Impact factor: 1.403; Citation : 23)
14. Priyanka Singh, Bhawana Srivastava, **Ashok Kumar** and N. K. Dubey (2008). Fungal contamination of raw materials of some herbal drugs and recommendation of *Cinnamomum camphora* oil as herbal fungitoxicant. *Microbial Ecology*. 56(3): 555-560. (Impact factor: 4.552; Citation : 136)
15. Priyanka Singh, Bhawana Srivastava, **Ashok Kumar**, Rajesh Kumar, N.K. Dubey and Gupta R. (2008). Assessment of *Pelargonium graveolens* oil as plant based antimicrobial and aflatoxin suppressor in food preservation. *Journal of the Science of Food and Agriculture*. 88:2421-2425. (Impact factor: 4.125; Citation : 54)
16. Priyanka Singh, **Ashok Kumar**, N.K. Dubey (2009). Essential oil of *Aegle marmelos* as environmentally safe plant based antimicrobial for checking post harvest microbial infestations and aflatoxin contamination of food commodities. *Journal of Food Science*. 74: 302-307. (Impact factor: 3.693; Citation : 59)
17. C.S. Prasad, Ravindra Shukla, **Ashok Kumar** and N K Dubey (2010). In vitro and in vivo antifungal activity of *Cymbopogon martini* and *Chenopodium ambrosioides* essential oils and

their synergism against dermatophytes. *Mycoses*, 53:123-129. (Impact factor: 4.931; Citation : 93)

18. Priyanka Singh, Ravindra shukla, **Ashok Kumar**, Bhanu Prakash and N.K. Dubey (2010). Effect of *Citrus reticulata* and *Cymbopogon citratus* essential oils on *Aspergillus flavus* growth and aflatoxin production on *Asparagus racemosus*. *Mycopathologia*, 170:195–202. (Impact factor: 3.785; Citation : 73)
19. Priyanka Singh, Ravindra shukla, **Ashok Kumar**, Bhanu Prakash and N.K. Dubey (2010). Chemical profile, antifungal, antiaflatoxigenic and antioxidant activity of *Citrus maxima* Burm. and *Citrus sinensis* (L.) Osbeck essential oils and their cyclic monoterpene, *DL*-limonene. *Food and Chemical Toxicology*, 48, 1734-1740. (Impact factor: 5.572; Citation : 339)
20. Bhanu Prakash, Ravindra shukla, Priyanka Singh, **Ashok Kumar** and N.K. Dubey (2010). Efficacy of chemically characterized *Piper betle* L. essential oil against fungal and aflatoxin contamination of some edible commodities and its antioxidant activity. *International Journal of Food Microbiology*, 142, 114-119. (Impact factor: 5.911; Citation : 201)
21. Ravindra Shukla, Priyanka singh, Bhanu Prakash, **Ashok Kumar**, Prashant Kumar Mishra and Nawal Kishore Dubey (2011). Efficacy of essential oils of *Lippia alba* (Mill.) N. E. Brown and *Callistemon lanceolatus* (Sm.) Sweet and their major constituents on mortality, oviposition and feeding behaviour of pulse beetle, *Callosobruchus chinensis* L. *Journal of the Science of Food and Agriculture*, 91:12, 2277-83. (Impact factor: 4.125; Citation : 73)
22. Priyanka Singh, Bhawana Srivastava, **Ashok Kumar**, N. K. Dubey, Rajesh Gupta and Tanu. (2008) Efficacy of essential oil of *Amomum subulatum* as a novel aflatoxin suppressor. *Journal of Herb, Spices & Medicinal Plants*. 14(3-4):208-218. (Impact Factor: 0.909; Citation : 12)
23. Rajesh Kumar, Ashok Kumar, C S Prasad and Raju Samant (2008). Insecticidal Activity Aegle marmelos (L.) Correa Essential Oil Against Four Stored Grain Insect Pests. *Internet Journal of Food Safety*, 10:39-49. (Citation : 73)

(B) National: 10

1. N.K. Dubey, Ravindra shukla, **Ashok Kumar**, Priyanka Singh, Bhanu Prakash (2010). Prospects of botanical pesticides in sustainable agriculture. *Current Science*, 98(4): 479-480. (Impact factor: 1.102; Citation : 187)
2. N.K. Dubey, **Ashok Kumar**, Priyanka Singh and Ravindra Shukla. (2008). Microbial contamination of raw materials: a major impediment preventing India from becoming a herbal giant. *Current Science*. 95(6):717-718. (Impact factor: 1.102; Citation : 62)
3. N K Dubey, Bhawana Srivastava and **Ashok Kumar** (2008). Current status of plant products as botanical pesticides. *Journal of Biopesticides*, 1 (2): 182-186. (Impact Factor: 0.39; Citation : 239)
4. N K Dubey, Ravindra Shukla, **Ashok Kumar** and C S Prasad (2009). Ethnobotany - Problems and Prospects in Indian Context. *Proceedings of National Academy of Science*. 79 (4): 346-349. (Impact factor: 1.40)
5. N K Dubey, Bhawana Srivastava, **Ashok Kumar** and Pratima Kapur (2010). Surveillance needed to protect the indigenous economic bio-diversity. *Indian Journal of Forestry*. 33(1):81-83. (Citation : 04)
6. **Ashok Kumar** and N K Dubey (2020). Assessment of antifungal, antiaflatoxigenic and antioxidant efficacy of *Ocimum canum* Sims. essential oil and E-citral as phytopreservative against *Aspergillus flavus*, a toxigenic food spoiling mould. *Journal of Plant Science & Research*. 7(02): 196.

7. **Ashok Kumar** and N K Dubey (2020). Assessment of *Mentha piperita* L. essential oil as green pesticide against fungal and insect infestation of chickpea. *International Journal of Current Microbiology and Applied Sciences*. 09(10): 3113-3126.
8. **Ashok Kumar** (2021). Chemical composition and efficacy of *Lantana camara* L. essential oil against postharvest invasion of chickpea by pulse beetle (*Callosobruchus chinensis* L.). *International Journal of Current Microbiology and Applied Sciences*. 10(05): 719-729.
9. **Ashok Kumar** and Sanyogita Kumari (2022). Detection of aflatoxigenic *Aspergillus flavus* isolates in raw materials of some Indian medicinal plants. *International Journal of Current Microbiology and Applied Sciences*. 11(12): 103-110.
10. **Ashok Kumar**, Sanyogita Kumari and N. K. Dubey (2023). Assessment of *Ocimum canum* Sims. essential oil as phytopreservative against fungal deterioration of vasicine of stored herbal raw materials of *Justicia adhatoda* L. *Journal of Postharvest Technology*. Accepted

BOOK : ONE

Title : *Efficacy of essential oils on fungal deterioration of herbal drugs*

Publisher : Lambert Academic Publishing, Germany

ISBN : 978-3-659-38346-5

BOOK CHAPTERS : 05

1. N K Dubey, **Ashok Kumar**, Priyanka Singh and Ravindra Shukla (2010). Exploitation of natural in eco-friendly management of plant pests. In U. Gisi et al (eds) Recent Developments in Management of Plant Diseases. pp 181-198. ISBN- 978 1 4020 8803-2, **Springer Dordrecht Heidelberg London, New York. (Citation : 19)**
2. **Ashok Kumar**, Priyanka Singh and N.K. Dubey (2010). Botanicals in agricultural pest management. (Management of fungal plant pathogens) Edited by Arun Arya and Analia Edith Perello. PP. 14-27, ISBN- 978-1-84593-603-7, **CAB International**, UK.
3. N.K. Dubey, Ravindra Shukla, **Ashok Kumar**, Priyanka Singh and Bhanu Prakash (2011). Global scenario on application of natural products in Integrated Pest Management Programme. In: Dubey NK (ed) Natural products in plant pest management. PP 1-20, **CAB International**, UK. ISBN- 978 1 84593 671 6 (Citation : 112)
4. Priyanka Singh, Ravindra Shukla, **Ashok Kumar**, Bhanu Prakash, Shubhra Singh, Nawal Kishore Dubey (2012). Botanicals in control of microbial spoilage of food commodities. Sati, S (ed.) (*Contribution to the Mycological Progress*) Page 87-98. Daya Publishing House, New Delhi. ISBN: 978-81-7035-794-0
5. Rajiv Ranjan, Shalini Gupta and **Ashok Kumar** (2022). History and scope of microbiology. Sivakumar et al. (Ed.) (**Principles of Advanced Plant Pathology and Plant Diseases**) Thanuj International Publisher, Rasipuram, Tamil Nadu, India. ISBN – 978-93-94638-12-9

I₁₀ : 26

H Index : 23

Total Citation : 3239

TRAINING PROGRAMMES ATTENDED

1. **UGC Sponsored Orientation Programme** (Jan. 16-Feb. 12, 2013) organized by Academic Staff College, DDU Gorakhpur University, Gorakhpur.
2. **UGC Sponsored Refresher Course** (March 29-April 18, 2016) on *Ethics, Spirituality and Yoga* organized by Human Resource Development Centre, DDU Gorakhpur University, Gorakhpur.

3. **UGC Sponsored Refresher Course** (Feb. 03-23, 2016) on *Environmental Education* organized by Human Resource Development Centre, DDU Gorakhpur University, Gorakhpur.
4. **UGC Sponsored Short Term Course** (Sept. 01-07, 2012) organized by department of Botany, DDU Gorakhpur University, Gorakhpur.
5. **UGC Sponsored Short Term Course** (Nov. 14-20, 2014) organized by department of Botany, DDU Gorakhpur University, Gorakhpur.

SEMINAR & SYMPOSIA ATTENDED

1. **“Certificate of Merit Award”** in 31st Annual Conference of Indian Botanical Society (IBS) and International Symposium on Plant Biology and Environment : Changing Scenario (Dec. 17-19, 2008) organized by Department of Botany, University of Allahabad.
2. **“Best Paper Award”** in Annual Meeting of Indian Phytopathological Society (IPS) and Symposium on Microbial Diversity and Plant health Problems (Dec 18-19/2006), DDU Gorakhpur University, Gorakhpur.
3. Poster presentation in XXXth Annual Conference of Indian Botanical Society (IBS) and National seminar on Emerging Trends in Plant Science: Biodiversity, Biotechnology & Environmental Conservation (Nov. 28-30/2007), Jiwaji University, Gwalior.
4. National Conference on Biofunctions, Biodiversity and Plant Resource Utilization. (Jan. 30-31/2009) DDU Gorakhpur University, Gorakhpur.
5. National Symposium on Current Challenges in Plant Sciences: Gene to Ecosystem (Mar. 24-25, 2009), Centre of Advanced Study in Botany, Banaras Hindu University, Varanasi.
6. International Conference on Mycology and Plant Pathology Biotechnological Approaches (February 27-29, 2012), Centre of Advanced Study in Botany, Banaras Hindu University, Varanasi.
7. National Seminar on Recent Trends in Microbiology (March 15, 2014), Department of Industrial Microbiology, DDU Gorakhpur University, Gorakhpur.
8. **XXXVI** All India Conference of the Indian Botanical Society on Plant Wealth and Human Welfare (October 18-20, 2013), Department of Botany, DDU Gorakhpur University, Gorakhpur.
9. National Conference on Microbes in Extreme Environments : Diversity and Translational Applications (MEEDTA 2015) dated October 30-31, 2015 organized by Department of Botany & Microbiology, School of Life Sciences, H.N.B. Garhwal University, Srinagar.
10. **XXXI** Annual Conference of Indian Botanical Society and International Symposium on Plant Biology and Environment : Changing Scenario (December 17-19, 2008), Department of Botany, University of Allahabad.
11. National Conference on Underutilized Plants, Food Security & Climate Link (January 20-21, 2017), Department of Botany, DDU Gorakhpur University, Gorakhpur.
12. National Workshop on Scientific Paper Writing and Effective Communication (September 17-18, 2016), Department of Biotechnology, DDU Gorakhpur University, Gorakhpur.
13. National Seminar on Land Use Management in Perspective of Eco-development (with Special Reference to Eastern Uttar Pradesh) November 19-20, 2015, Department of Geography, DDU Gorakhpur University, Gorakhpur.
14. National Seminar on Conservation of Natural Resources and its Management (October 25-26, 2016), Faculty of Science, M.M.M. P.G. College, Bhatpar Rani, Deoria, U.P.
15. National Conference on Science for Rural India 2016 (January 30-31, 2016), B.R.D. P.G. College, Deoria, U.P.
16. National Seminar on Disaster Management in India (January 18-19, 2016), Faculty of Commerce, Ramabai Government Girls Degree College, Akbarpur, Ambedkar Nagar, U.P.

17. National Seminar on Globalization and Indian Agriculture : Perspective and Prospects (November 06-07, 2015), Department of Economics, Digvijay Nath Post Graduate College, Gorakhpur, U.P.
18. National Seminar on Population Pressure on Food Grain Dominated Agriculture and Agro-industrial Prospects in India (February 09-10, 2019), Department of Geography, Babu Post Graduate College, Pipiganj, Gorakhpur, U.P.
19. National Seminar on Human Security and Human Rights (February 11-12, 2017), Department of Defence and Strategic Studies, Babu Post Graduate College, Pipiganj, Gorakhpur, U.P.
20. National Seminar on Environmental Hazards and Sustainable Development in Perspective of Gandhian Thoughts (March 09-10, 2017), Department of Geography and Gandhi Studies Centre, Babu Post Graduate College, Pipiganj, Gorakhpur, U.P.
21. National Seminar on Social Media and National Security (December 08-09, 2018), Department of Defence and Strategic Studies, Babu Post Graduate College, Pipiganj, Gorakhpur, U.P.
22. National Seminar on Recent Trends of Education Culture and Arts for the Development of Yoga and Physical Education (February 01-02, 2020), Department of Physical Education, Deenanath Pandey Government Girls Post Graduate College, Deoria, U.P.
23. National Seminar on Samkaleen Bhartiya Paridrishya mein Uchcha Shiksha : Samasyaien aur Nidan (February 27-28, 2016), Swami Karpatri Ji Maharaj Government Post Graduate College, Raniganj, Pratapgarh, U.P.
24. 1st Uttar Pradesh Science Congress on Science for Shaping the Future of Uttar Pradesh (March 2-4, 2013), DDU Gorakhpur University, Gorakhpur.
25. Workshop on Foldscope : A Pocket Microscope (October 18, 2019), Department of Botany, Mahatma Gandhi Post Graduate College, Gorakhpur, U.P.

OTHER INSTITUTIONAL RESPONSIBILITIES

- **Co-ordinator : M.Sc. Food Technology, DDUGU, Gorakhpur**
- **Co-ordinator : Hotel Management and Catering Technology, DDUGU, Gorakhpur**
- **In-charge : Botanical Garden, DDUGU, Gorakhpur**
- **Assistant Proctor, DDUGU, Gorakhpur**



(Dr. Ashok Kumar)