

CURRICULUM VITAE

Dr. Anand Kumar Chaudhari

M.Sc., Ph.D.

Assistant professor of Botany,
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Research gate: <https://www.researchgate.net/profile/Anand-Chaudhari-5>

Google scholar: <https://scholar.google.co.in/citations?user=EKyeADEAAAJ&hl=en>

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(Total citations: 797; h-index: 18; i10-index: 25; Research Interest Scores: 483.6)

BIO:

Dr. Anand Kumar Chaudhari, currently serves as an **assistant Professor of Botany and Research leader** at **Department of Botany, Government Girls' P.G. College, Ghazipur, India**. He received his **Bachelor degree in Botany (Hons.), Zoology, and Chemistry in 2013**, master **degree in Botany in 2015**, and **Ph.D. degree in Botany in 2021** from **Banaras Hindu University, Varanasi** through a fully-funded National research **fellowship (Life Science) from the Council of Scientific and Industrial Research (CSIR), New Delhi, India**. He has completed his Ph.D. Thesis entitled **“Fungal and mycotoxin contamination of stored maize samples and their control by some higher plant products”** and his research interests are related to the “Protection and preservation of fresh as well as stored food products (cereal commodities) from microbial (fungal and mycotoxin), insects, and non-microbial mediated deterioration using botanicals (especially essential oils and their bioactive compounds) and their nano-encapsulated formulations”. Dr. Chaudhari is an experienced food scientist with over **51 research publications (papers have been cited 796 times, with an h-index of 18 and i10-index of 25)** in the journal of **International repute** viz., Food Chemistry, Food Control, Food & Chemical Toxicology, Food & Bioprocess Technology, International Journal of Biological Macromolecules, Carbohydrate Polymers, Ecotoxicology & Environmental Safety, LWT-Food Science & Technology, International Journal of Food Science & Technology, Pesticide Biochemistry & Physiology, Food Bioscience, Environmental Science & Pollution Research, Journal of Food Science, Natural Product Research, Journal of Food Science & Technology, Frontiers in Microbiology, and Plant Biosystems. He is also a life **member of Indian Botanical Society (IBS, India)**. Owing to the recognition of his research works, he has been awarded with **"Best Scientific paper presentation Award"** in an International seminar on “Trends in Biochemical and Biomedical Research (TBBR)” conducted by Department of Biochemistry, Banaras Hindu University and **"Certificate of Merit award"** in a National seminar of Indian Botanical Society conducted by Department of Botany, University of Calicut, India.

ACADEMIC QUALIFICATIONS:

Degree	Institutions	Years
Ph.D. in Botany;	Banaras Hindu University, Varanasi	2021
M.Sc. in Botany	Banaras Hindu University, Varanasi	2015
B.Sc. in Botany (Hons.), Zoology & Chemistry	Banaras Hindu University, Varanasi	2013
Intermediate	Rashtriya Inter College, Sherpur, Mirzapur	2008
High School	Intermediate College, Mathana, Mirzapur	2006

TEACHING EXPERIENCE:

Institution	Position	From	To	Teaching experience	
				UG	PG
Government Girls' P. G. College, Ghazipur, Uttar Pradesh, India	Assistant Professor	04.08.2021	To date	1 Y, 50 D	1 Y, 50 D

AREA OF SPECIALIZATION/ AWARDS/ ACHIEVEMENTS:

➤ **FELLOWSHIPS AND AWARDS:**

- CSIR-SRF, January 02, 2019-January 01, 2022
- CSIR-JRF (Life Sciences): June, 2016, AIR-129, Roll no. 367462
- CSIR-UGC-JRF (Life Sciences): Dec., 2015, AIR-99, Roll no. 370828
- GATE (Life Sciences): March, 2016, Roll No. XL16S85058141
- **Best Scientific presentation award in International conference on “Trends in Biochemical and Biomedical Research (TBBR-2018)”**, Department of Biochemistry, Banaras Hindu University, Varanasi -221005.
- **Certificate of Merit award** for best paper presentation in **“All India Botanical conference (November 6-8, 2019)”**, held at University of Calicut, Calicut, India.

➤ **OTHER ACADEMIC ACTIVITIES**

- **Complete Faculty Induction Programme (FIP) from HRDC, DDU Gorakhpur University, Gorakhpur (August 25, 2022 to September 23, 2022), and obtained “Grade A”**

➤ **PAPERS PUBLISHED IN JOURNALS**

- Carbohydrate Polymers (**Elsevier, Impact Factor: 10.723**)
- Food Chemistry (**Elsevier, Impact Factor: 9.231**)
- International Journal of Biological Macromolecules (**Elsevier, Impact Factor: 8.025**)
- Ecotoxicology and Environmental Safety (**Elsevier, Impact Factor: 7.129**)
- Food Control (**Elsevier, Impact Factor: 6.652**)
- Frontiers in Microbiology (**Frontiers, Impact Factor: 6.064**)
- LWT-Food Science and Technology (**Elsevier, Impact Factor: 6.056**)
- Food and Bioprocess Technology (**Springer, Impact Factor: 5.581**)
- Food and Chemical Toxicology (**Elsevier, Impact factor: 5.572**)
- Food Bioscience (**Elsevier, Impact Factor: 5.318**)
- Environmental Science and Pollution Research (**Springer, Impact Factor: 5.190**)
- Pesticide Biochemistry and Physiology (**Elsevier, Impact Factor: 4.966**)
- Journal of Food Science and Technology (**Springer, Impact Factor: 3.117**)
- Journal of Food Science (**Wiley, Impact Factor: 3.693**)
- Natural Product Research (**Taylor & Francis, Impact Factor: 2.488**)
- International Journal of Food Science & Technology (**Wiley, Impact Factor: 3.612**)
- Plant Biosystems (**Taylor & Frances, Impact Factor: 1.781**)
- International Journal of Pest Management (**Taylor & Frances, Impact Factor: 1.766**)
- Archives of Phytopathology & Plant Protection (**Taylor & Frances, Impact Factor: NA**)
- Biocatalysis and Agricultural Biotechnology (**Elsevier, Impact Factor: NA**)

➤ **LIST OF 10 BEST PUBLICATIONS:**

1. **Chaudhari, A. K., Das, S., Singh, B .K., & Dubey, N. K. (2022).** Green facile synthesis of cajuput (*Melaleuca cajuputi* Powell.) essential oil loaded chitosan film and evaluation of its effectiveness on shelf-life extension of white button mushroom. **Food Chemistry**, 401, 134114. (**IF: 9.231**). ISSN: 0308-8146
2. **Chaudhari, A. K., Singh, V. K., Das, S., Kujur, A., Deepika., & Dubey, N. K. (2022).** Unveiling the cellular and molecular mode of action of *Melaleuca cajuputi* Powell. essential oil against aflatoxigenic strains of *Aspergillus flavus* isolated from stored maize samples. **Food Control**, 138, 109000. (**IF: 6.652**). ISSN: 0956-7135.

3. **Chaudhari, A. K.**, Singh, V. K., Das, S., Deepika., & Dubey, N. K. (2022). Fabrication, characterization, and bioactivity assessment of chitosan nanoemulsion containing allspice essential oil to mitigate *Aspergillus flavus* contamination and aflatoxin B₁ production in maize. **Food Chemistry**, 372, 131221. (IF: 9.231). ISSN: 0308-8146
4. **Chaudhari, A. K.**, Singh, V. K., Das, S., & Dubey, N. K. (2021). Nanoencapsulation of essential oils and their bioactive constituents: A novel strategy to control mycotoxin contamination in food system. **Food and Chemical Toxicology**, 149, 112019. (IF: 5.572). ISSN: 0278-6915
5. **Chaudhari, A. K.**, Singh, V. K., Kedia, A., Das, S., & Dubey, N. K. (2021). Essential oils and their bioactive compounds as eco-friendly novel green pesticides for management of storage insect pests: prospects and retrospects. **Environmental Science and Pollution Research**, 28, 18918-18940. (IF: 5.190). ISSN: 1614-7499
6. **Chaudhari, A. K.**, Singh, A., Singh, V. K., Dwivedy, A. K., Das, S., Ramsdam, M. G., & Dubey, N. K. (2020). Assessment of chitosan biopolymer encapsulated α -Terpineol against fungal, aflatoxin B₁ (AFB₁) and free radicals mediated deterioration of stored maize and possible mode of action. **Food Chemistry**, 311, 126010. (IF: 9.231). ISSN: 0308-8146
7. **Chaudhari, A. K.**, Singh, V. K., Das, S., Prasad, J., Dwivedy, A. K., & Dubey, N. K. (2020). Improvement of *in vitro* and *in situ* antifungal, AFB₁ inhibitory and antioxidant activity of *Origanum majorana* L. essential oil through nanoemulsion and recommending as novel food preservative. **Food and Chemical Toxicology**, 143, 111536. (IF: 5.572). ISSN: 0278-6915
8. **Chaudhari, A. K.**, Singh, V. K., Das, S., Singh, B. K., & Dubey, N. K. (2020). Antimicrobial, Aflatoxin B₁ Inhibitory and Lipid Oxidation Suppressing Potential of Anethole-Based Chitosan Nanoemulsion as Novel Preservative for Protection of Stored Maize. **Food and Bioprocess Technology**, 13, 1462-1477. (IF: 5.581). ISSN: 1935-5149
9. **Chaudhari, A. K.**, Singh, V. K., Dwivedy, A. K., Das, S., Upadhyay, N., Singh, A., & Dubey, N. K. (2020). Chemically characterised *Pimenta dioica* (L.) Merr. essential oil as a novel plant based antimicrobial against fungal and aflatoxin B₁ contamination of stored maize and its possible mode of action. **Natural Product Research**, 34, 745-749. (IF: 2.488). ISSN: 1478-6427
10. **Chaudhari, A. K.**, Dwivedy, A. K., Singh, V. K., Das, S., Singh, A., & Dubey, N. K. (2019). Essential oils and their bioactive compounds as green preservatives against fungal and mycotoxin contamination of food commodities with special reference to their nanoencapsulation. **Environmental Science and Pollution Research**, 26(25), 25414-25431. (IF: 5.190). ISSN: 1614-7499

➤ **FULL LIST OF PUBLICATIONS:**

➤ **RESEARCH ARTICLES:**

1. **Chaudhari, A. K.**, Das, S., Singh, B. K., & Dubey, N. K. (2022). Green facile synthesis of cajuput (*Melaleuca cajuputi* Powell.) essential oil loaded chitosan film and evaluation of

- its effectiveness on shelf-life extension of white button mushroom. **Food Chemistry**, 401, 134114. (IF: 9.231). ISSN: 0308-8146
2. **Chaudhari, A. K.**, Singh, V. K., Das, S., Kujur, A., Deepika., & Dubey, N. K. (2022). Unveiling the cellular and molecular mode of action of *Melaleuca cajuputi* Powell. essential oil against aflatoxigenic strains of *Aspergillus flavus* isolated from stored maize samples. **Food Control**, 138, 109000. (IF: 6.652). ISSN: 0956-7135.
 3. **Chaudhari, A. K.**, Singh, V. K., Das, S., Deepika., & Dubey, N. K. (2022). Fabrication, characterization, and bioactivity assessment of chitosan nanoemulsion containing allspice essential oil to mitigate *Aspergillus flavus* contamination and aflatoxin B₁ production in maize. **Food Chemistry**, 372, 131221. (IF: 9.231). ISSN: 0308-8146
 4. Das, S., **Chaudhari, A. K.**, Singh, V. K., & Dubey, N. K. (2022). High speed homogenization assisted encapsulation of synergistic essential oils formulation: Characterization, *in vitro* release study, safety profile, and efficacy towards mitigation of aflatoxin B₁ induced deterioration in rice samples. **Food and Chemical Toxicology**. 113443 (IF: 5.572). ISSN: 0278-6915
 5. Singh, B. K., **Chaudhari, A. K.**, Das, S., Tiwari, S., & Dubey, N. K. (2022). Preparation and characterization of a novel nanoemulsion consisting of chitosan and *Cinnamomum tamala* essential oil and its effect on shelf-life lengthening of stored millets. **Pesticide Biochemistry and Physiology**, 184, 105214. (IF: 4.966). ISSN: 0048-3575
 6. Singh, B. K., Tiwari, S., **Chaudhari, A. K.**, Maurya, A., Das, S., Singh, V. K., & Dubey, N. K. (2022). Chitosan encompassed *Aniba rosaeodora* essential oil as innovative green candidate for antifungal and antiaflatoxigenic activity in millets with emphasis on cellular and its mode of action. **Frontiers in Microbiology, section Food Microbiology**. **Accepted**. (IF: 6.064). ISSN: 1664-302X
 7. Das, S., Singh, V. K., **Chaudhari, A. K.**, Deepika., Dwivedy, A. K., & Dubey, N. K. (2022). Co-encapsulation of *Pimpinella anisum* and *Coriandrum sativum* essential oils based synergistic formulation through binary mixture: Physico-chemical characterization, appraisal of antifungal mechanism of action, and application as natural food preservative. **Pesticide Biochemistry and Physiology**, 105066. (IF: 4.966). ISSN: 0048-3575
 8. Das, S., Singh, V. K., **Chaudhari, A. K.**, Dwivedy, A. K., & Dubey, N. K. (2022). Efficacy of *Cinnamomum camphora* essential oil loaded chitosan nanoemulsion coating against fungal association, aflatoxin B₁ contamination, and storage quality deterioration of *Citrus aurantifolia* fruits. **International Journal of Food Science and Technology**. **In Press**. (IF: 3.612). ISSN: 1365-2621
 9. **Chaudhari, A. K.**, Singh, V. K., Kedia, A., Das, S., & Dubey, N. K. (2021). Essential oils and their bioactive compounds as eco-friendly novel green pesticides for management of storage insect pests: prospects and retrospects. **Environmental Science and Pollution Research**, 28, 18918-18940. (IF: 5.190). ISSN: 1614-7499
 10. **Chaudhari, A. K.**, Singh, V. K., Das, S., & Dubey, N. K. (2021). Nanoencapsulation of essential oils and their bioactive constituents: A novel strategy to control mycotoxin

- contamination in food system. **Food and Chemical Toxicology**, 149, 112019. (IF: 5.572). ISSN: 0278-6915
11. Das, S., Singh, V. K., Chaudhari, A. K., Dwivedy, A. K., & Dubey, N. K. (2021). Fabrication, physico-chemical characterization, and bioactivity evaluation of chitosan-linalool composite nano-matrix as innovative controlled release delivery system for food preservation. **International Journal of Biological Macromolecules**, 188, 751-763. (IF: 8.025). ISSN: 0141-8130
 12. Das, S., Singh, V. K., Dwivedy, A. K., Chaudhari, A. K., & Dubey, N. K. (2021). Eugenol loaded chitosan nanoemulsion for food protection and inhibition of Aflatoxin B₁ synthesizing genes based on molecular docking. **Carbohydrate Polymers**, 255, 117339. (IF: 10.723). ISSN: 0144-8617
 13. Das, S., Singh, V. K., Dwivedy, A. K., Chaudhari, A. K., & Dubey, N. K. (2021). Nanostructured *Pimpinella anisum* essential oil as novel green food preservative against fungal infestation, aflatoxin B₁ contamination and deterioration of nutritional qualities. **Food Chemistry**, 344, 128574. (IF: 9.231). ISSN: 0308-8146
 14. Upadhyay, N., Singh, V. K., Dwivedy, A. K., Chaudhari, A. K., & Dubey, N. K. (2021). Assessment of nanoencapsulated *Cananga odorata* essential oil in chitosan nanopolymer as a green approach to boost the antifungal, antioxidant and *in situ* efficacy. **International Journal of Biological Macromolecules**, 171, 480-490. (IF: 8.025). ISSN: 0141-8130
 15. Deepika., Chaudhari, A. K., Singh, A., Das, S., & Dubey, N. K. (2021). Nanoencapsulated *Petroselinum crispum* essential oil: Characterization and practical efficacy against fungal and aflatoxin contamination of stored chia seeds. **Food Bioscience**, 42, 101117. (IF: 5.318). ISSN: 2212-4292
 16. Deepika., Chaudhari, A. K., Das, S., Singh, V. K., Prasad, J., & Dubey, N. K. (2021). Assessing the *Levisticum officinale* Koch. essential oil as a novel preservative for stored chia seeds (*Salvia hispanica* L.) with emphasis on probable mechanism of action. **Environmental Science and Pollution Research**, 28, 68690-68705 (IF: 5.190). ISSN: 1614-7499
 17. Das, S., Singh, V. K., Dwivedy, A. K., Chaudhari, A. K., & Dubey, N. K. (2021). *Anethum graveolens* Essential Oil Encapsulation in Chitosan Nanomatrix: Investigations on *In Vitro* Release Behavior, Organoleptic Attributes, and Efficacy as Potential Delivery Vehicles Against Biodeterioration of Rice (*Oryza sativa* L.). **Food and Bioprocess Technology**, 14, 831-853 (IF: 5.581). ISSN: 1935-5149
 18. Das, S., Singh, V. K., Dwivedy, A. K., Chaudhari, A. K., & Dubey, N. K. (2021). Exploration of some potential bioactive essential oil components as green food preservative. **LWT-Food Science and Technology**, 137, 110498. (IF: 6.056). ISSN: 0023-6438
 19. Deepika., Singh, A., Chaudhari, A. K., Das, S., & Dubey, N. K. (2021). *Zingiber zerumbet* L. essential oil-based chitosan nanoemulsion as an efficient green preservative against fungi and aflatoxin B₁ contamination. **Journal of Food Science**, 86(1), 149-160. (IF: 3.693). ISSN: 1750-3841

20. Maurya A., Kumar S., Singh, B. K., Chaudhari, A.K., Dwivedy, A.K., Prakash, B., & Dubey, N.K., (2021). Mechanistic investigations on antifungal and antiaflatoxigenic activities of chemically characterised *Carum carvi* L. essential oil against fungal infestation and aflatoxin contamination of herbal raw materials. **Natural Product Research**. 36, 4569-4574. (IF: 2.488). ISSN: 1478-6427
21. Das, S., Singh, V. K., Dwivedy, A. K., Chaudhari, A. K., & Dubey, N. K. (2021). Insecticidal and fungicidal efficacy of essential oils and nanoencapsulation approaches for the development of next generation ecofriendly green preservatives for management of stored food commodities: an overview. **International Journal of Pest Management**. In Press (IF: 1.766). ISSN: 1366-5863
22. Ramsdam, M. Grace., Chaudhari, A. K., Singh, V. K., Kayang, H., Dubey, N. K., and Prakash, B., (2021). Antifungal and antioxidant activity of plant based essential oils on *Aspergillus flavus* Link (Trichocomaceae) isolated from stored maize grains of Meghalaya. **Archives of Phytopathology and Plant Protection**. ISSN: 1477-2906
23. Chaudhari, A. K., Singh, A., Singh, V. K., Dwivedy, A. K., Das, S., Ramsdam, M. G., & Dubey, N. K. (2020). Assessment of chitosan biopolymer encapsulated α -Terpineol against fungal, aflatoxin B₁ (AFB₁) and free radicals mediated deterioration of stored maize and possible mode of action. **Food Chemistry**, 311, 126010. (IF: 9.231). ISSN: 0308-8146
24. Chaudhari, A. K., Singh, V. K., Das, S., Prasad, J., Dwivedy, A. K., & Dubey, N. K. (2020). Improvement of *in vitro* and *in situ* antifungal, AFB₁ inhibitory and antioxidant activity of *Origanum majorana* L. essential oil through nanoemulsion and recommending as novel food preservative. **Food and Chemical Toxicology**, 143, 111536. (IF: 5.572). ISSN: 0278-6915
25. Chaudhari, A. K., Singh, V. K., Das, S., Singh, B. K., & Dubey, N. K. (2020). Antimicrobial, Aflatoxin B₁ Inhibitory and Lipid Oxidation Suppressing Potential of Anethole-Based Chitosan Nanoemulsion as Novel Preservative for Protection of Stored Maize. **Food and Bioprocess Technology**, 13, 1462-1477. (IF: 5.581). ISSN: 1935-5149
26. Chaudhari, A. K., Singh, V. K., Dwivedy, A. K., Das, S., Upadhyay, N., Singh, A., & Dubey, N. K. (2020). Chemically characterised *Pimenta dioica* (L.) Merr. essential oil as a novel plant based antimicrobial against fungal and aflatoxin B₁ contamination of stored maize and its possible mode of action. **Natural Product Research**, 34, 745-749. (IF: 2.488). ISSN: 1478-6427
27. Das, S., Singh, V. K., Dwivedy, A. K., Chaudhari, A. K., & Dubey, N. K. (2020). *Myristica fragrans* essential oil nanoemulsion as novel green preservative against fungal and aflatoxin contamination of food commodities with emphasis on biochemical mode of action and molecular docking of major components. **LWT-Food Science and Technology**, 130, 109495. (IF: 6.056). ISSN: 0023-6438
28. Singh, A., Chaudhari, A. K., Das, S., Singh, V. K., Dwivedy, A. K., Shivalingam, R. K., & Dubey, N. K. (2020). Assessment of preservative potential of *Bunium persicum* (Boiss) essential oil against fungal and aflatoxin contamination of stored masticatories and improvement in efficacy through encapsulation into chitosan nanomatrix. **Environmental Science and Pollution Research**, 27, 27635-27650. (IF: 5.190). ISSN: 1614-7499

29. Deepika., Singh, A., **Chaudhari, A. K.**, Das, S., & Dubey, N. K. (2020). Nanoencapsulated *Monarda citriodora* Cerv. ex Lag. essential oil as potential antifungal and antiaflatoxic agent against deterioration of stored functional foods. **Journal of Food Science and Technology**, 57, 2863-2876. (IF: 3.117). ISSN: 0975-8402
30. Das, S., Singh, V. K., Dwivedy, A. K., **Chaudhari, A. K.**, Upadhyay, N., Singh, A., & Dubey, N. K. (2020). Fabrication, characterization and practical efficacy of *Myristica fragrans* essential oil nanoemulsion delivery system against postharvest biodeterioration. **Ecotoxicology and Environmental Safety**, 189, 110000. (IF: 7.129). ISSN: 0147-6513
31. Das, S., Kumar Singh, V., Kumar Dwivedy, A., **Kumar Chaudhari, A.**, Upadhyay, N., Singh, A., & Dubey, N. K. (2020). Assessment of chemically characterised *Myristica fragrans* essential oil against fungi contaminating stored scented rice and its mode of action as novel aflatoxin inhibitor. **Natural Product Research**, 34, 1611-1615. (IF: 2.488). ISSN: 1478-6427
32. Singh, A., Deepika, **Chaudhari, A. K.**, Das, S., Prasad, J., Dwivedy, A. K., & Dubey, N. K. (2020). Efficacy of *Cinnamomum cassia* essential oil against food-borne molds and aflatoxin B1 contamination. **Plant Biosystems-An International Journal Dealing with all Aspects of Plant Biology**, 899-907. (IF: 1.781). ISSN: 1724-5575
33. **Chaudhari, A. K.**, Dwivedy, A. K., Singh, V. K., Das, S., Singh, A., & Dubey, N. K. (2019). Essential oils and their bioactive compounds as green preservatives against fungal and mycotoxin contamination of food commodities with special reference to their nanoencapsulation. **Environmental Science and Pollution Research**, 26(25), 25414-25431. (IF: 5.190). ISSN: 1614-7499
34. Das, S., Singh, V. K., Dwivedy, A. K., **Chaudhari, A. K.**, Upadhyay, N., Singh, A., & Dubey, N. K. (2019). Antimicrobial activity, antiaflatoxic potential and *in situ* efficacy of novel formulation comprising of *Apium graveolens* essential oil and its major component. **Pesticide Biochemistry and Physiology**, 160, 102-111. (IF: 4.966). ISSN: 0048-3575
35. Das, S., Singh, V. K., Dwivedy, A. K., **Chaudhari, A. K.**, Upadhyay, N., Singh, P., & Dubey, N. K. (2019). Encapsulation in chitosan-based nanomatrix as an efficient green technology to boost the antimicrobial, antioxidant and *in situ* efficacy of *Coriandrum sativum* essential oil. **International Journal of Biological Macromolecules**, 133, 294-305. (IF: 8.025). ISSN: 0141-8130.
36. Upadhyay, N., Singh, V. K., Dwivedy, A. K., Das, S., Chaudhari, A. K., & Dubey, N. K. (2019). Assessment of *Melissa officinalis* L. essential oil as an eco-friendly approach against biodeterioration of wheat flour caused by *Tribolium castaneum* Herbst. **Environmental Science and Pollution Research**, 26(14), 14036-14049. (IF: 5.190). ISSN: 1614-7499
37. Kumar Singh, V., Das, S., Kumar Dwivedy, A., **Kumar Chaudhari, A.**, Upadhyay, N., & Dubey, N. K. (2019). Assessment of chemically characterized *Salvia sclarea* L. essential oil and its combination with linalyl acetate as novel plant based antifungal,

antiaflatoxic and antioxidant agent against herbal drugs contamination and probable mode of action. **Natural Product Research**, 782-787. (IF: 2.488). ISSN: 1478-6427

38. Singh, A., Dwivedy, A. K., Singh, V. K., Upadhyay, N., Chaudhari, A. K., Das, S., & Dubey, N. K. (2019). Essential oils based formulations as safe preservatives for stored plant masticatories against fungal and mycotoxin contamination: A review. **Biocatalysis and Agricultural Biotechnology**, 17, 313-317. ISSN: 1878-8181
39. Upadhyay, N., Singh, V. K., Dwivedy, A. K., Das, S., Chaudhari, A. K., & Dubey, N. K. (2018). *Cistus ladanifer* L. essential oil as a plant based preservative against molds infesting oil seeds, aflatoxin B₁ secretion, oxidative deterioration and methylglyoxal biosynthesis. **LWT-Food Science and Technology**, 92, 395-403. (IF: 6.056). ISSN: 0023-6438
40. Dubey, N. K., Kumar, A., & Kumar, A. (2017). Efficacy of *Luvunga scandens* Roxb. essential oil as antifungal, aflatoxin suppressor and antioxidant. **Journal of Food Technology and Preservation**, 1, 37-41., (IF: 1.88). ISSN: 2591-796X

➤ **BOOK CHAPTERS:**

1. Chaudhari, A. K., Das, S., Singh, B. K., Prasad, J., Dubey, N. K., & Dwivedy, A. K. (2020). Herbal Medicines as a Rational Alternative for Treatment of Human Diseases. In *Botanical Leads for Drug Discovery* (pp. 29-49). Springer, Singapore.
2. Singh, V. K., Chaudhari, A. K., Notarte, K. I. R., Kumar, A., Singh, R., & Bhadouria, R. (2021). Metal-oxidizing microbes and potential application in bioremediation. In *Microbe Mediated Remediation of Environmental Contaminants* (pp. 107-114). Woodhead Publishing.
3. Das, S., Chaudhari, A. K., Dwivedy, A. K., Upadhyay, N., Singh, V. K., Singh, A., & Dubey, N. K. (2020). Nanoencapsulation Technology: Boon to Food Packaging Industries. In *Nanomaterials and Environmental Biotechnology* (pp. 17-40). Springer, Cham.
4. Das, S., Chaudhari, A. K., Singh, A., Singh, V. K., Dwivedy, A. K., & Dubey, N. K. (2020). Foodborne microbial toxins and their inhibition by plant-based chemicals. In *Functional and Preservative Properties of Phytochemicals* (pp. 165-207). Academic Press.
5. Prakash, B., Singh, P. P., Kumar, A., Das, S., & Chaudhari, A. K. (2019). Microbes as a novel source of secondary metabolite products of industrial significance. In *Role of Plant Growth Promoting Microorganisms in Sustainable Agriculture and Nanotechnology* (pp. 21-37). Woodhead Publishing.
6. Dubey, N. K., Dwivedy, A. K., Chaudhari, A. K., & Das, S. (2018). Common toxic plants and their forensic significance. In *Natural Products and Drug Discovery* (pp. 349-374). Elsevier.

7. Das, S., **Chaudhari, A. K.**, Kumar, A., & Singh, V. K. Endosulfan Contamination In Soil: Sources, Impact And Bioremediation. In: Endosulfan, Editors: I. C. Yadav and N. L. Devi © 2019 Nova Science Publishers, Inc. ISBN: 978-1-53615-910-3.
8. Dwivedy, A. K., Singh, V. K., Das, S., **Chaudhari, A. K.**, Upadhyay, N., Singh, A., & Dubey, N. K. Biodiversity Bioprospection With Respect To Medicinal Plants.
9. Dwivedy, A. K., Singh, V. K., Kumar, M., Upadhyay, N., Das, S., **Chaudhari, A. K.**, & Dubey, N. K. Bioprospection of Traditionally used Medicinal Plants: An Overview. Edited by: Priyanka Agnihotri & J.S. Khuraijam Published by: M/s Bishen Singh Mahendra Pal Singh, Dehra Dun, India. ISBN: 978-81-211-0981-9.

➤ **RESEARCH PAPER REVIED IN SCIENTIFIC JOURNALS**

1. Reviewed article entitled “Mining RNA-seq data to depict how *Penicillium digitatum* shapes its transcriptome in response to nanoemulsion” in journal **Frontiers in Nutrition (2021)**.
2. Reviewed article entitled “Farmers’ Perceptions, Existing Knowledge and Control methods of Major Stored Maize Grain Insect Pests in West Showa, Ethiopia” in journal **Archives of Phytopathology and Plant Protection (2021)**.
3. Reviewed article entitled “Molecular identification of some fusarium isolates and their chemotypes involved in *Fusarium* head blight on Durum wheat in Algeria” in journal **Archives of Phytopathology and Plant Protection (2021)**.
4. Reviewed article entitled “Down-regulatory effect of essential oils on fungal growth and Tri4 gene expression for some *Fusarium oxysporum* strains: GC-MS analysis of essential oils” in journal **Archives of Phytopathology and Plant Protection (2021)**.
5. Reviewed article entitled “Elucidation of antifungal toxicity of *Callistemon lanceolatus* essential oil encapsulated in chitosan nanogel against *Aspergillus flavus* using biochemical and in-silico approaches” in journal **Food Additives and Contaminants (2020)**.
6. Reviewed article entitled “Genetic diversity and population structure of *Hemileia vastatrix* from Ethiopian Arabica coffee” in journal **Archives of Phytopathology and Plant Protection (2021)**.
7. Reviewed article entitled “Chemical profile, allelopathic, antibacterial and antioxidant potential of the essential oil from Aleppo pine (*Pinus halipensis* Miller) needles” in journal **Archives of Phytopathology and Plant Protection (2021)**.
8. Reviewed article entitled “Joint Action between Essential Oils Mixture against the adults of *Tribolium castaneum* (Herbst), *Oryzaephilus surinamensis* (L.) and *Callosobruchus maculatus* (Fab.) in journal **Archives of Phytopathology and Plant Protection (2021)**.
9. Reviewed article entitled “Antifungal potential of Guava (*Psidium guajava*) leaves essential oil, major compounds: beta-caryophyllene and caryophyllene oxide” in journal **Archives of Phytopathology and Plant Protection (2021)**.

10. Reviewed article entitled “Insecticidal and morpho-physiological disorders caused by *Thymus vulgaris* L. essential oil on the elm leaf beetle, *Xanthogaleruca luteola* Müller (Coleoptera: Chrysomelidae)” in journal **Archives of Phytopathology and Plant Protection** (2020).
11. Reviewed article entitled “Antimicrobial Performance of Essential Oil obtained from *Limnophila aromatica* (Lam.) Merr. against Phytopathogenic Fungi and Bacteria” in journal **Archives of Phytopathology and Plant Protection** (2021).
12. Reviewed article entitled “Chemical characterization of essential oil constituents of three selected botanicals and their antimicrobial activity against postharvest rot pathogens of tomato (*Solanum lycopersicum* L.)” in journal **Archives of Phytopathology and Plant Protection** (2021).

➤ **SEMINARS/CONFERENCES ATTENDED:**

1. **Delivered ORAL presentation** in the scientific session “**Young Botanist Contest**” during the XLV All India Botanical Conference, held from October 14-16, 2022 at the University of Lucknow, Lucknow, India.
2. Presented paper entitled “**Testing efficacy of *Cananga odorata* essential oil in terms of its antifungal, antiaflatoxicogenic, antioxidant and Phytotoxicity assessment**” in XXXIX All India conference of the Indian Botanical Society & National symposium on “New approaches and Recent challenges in Botany (October 21-23, 2016)” organized by University Department of Botany, **Ranchi University, Ranchi**, India
3. Presented paper entitled “**Mycological and aflatoxin estimation of some stored corn samples from different regions of India and evaluation of *Pimenta dioica* (L.) Merr. essential oil as potential source of antifungal, antiaflatoxicogenic and antioxidant activity**” in XXXX All India Botanical conference of the Indian Botanical Society & National symposium on evaluation and conservation of plant germplasm (September 15-17, 2017) organized by Department of Botany, **Panjabi University, Patiala**, India
4. Presented paper entitled “**Efficacy of *Origanum majorana* L. essential oil as novel plant based food preservative against aflatoxin B₁ and lipid peroxidation**” in International conference on “Trends in Biochemical and Biomedical Research (TBBR) (February 13-15, 2018)” organized by Department of Biochemistry, Banaras Hindu University, Varanasi, India.
5. Presented paper entitled “**Mycological analysis of groundnut and assessment of antifungal, antiaflatoxicogenic and antioxidant potential of *Cananga odorata* essential oil**” in National symposium on Issue and challenges in ecological sciences (ICES) (February 23-25, 2017)” organized by Centre of Advanced Study in Botany, Banaras Hindu University, Varanasi, India.
6. Presented paper entitled “**Encapsulation of α -Terpineol into chitosan nanoemulsion-a novel agent against post-harvest deterioration of stored maize samples**” in XLII All India conference of the Indian Botanical Society & National symposium on “Innovations and inventions in Plant Science Research” (November 6-8, 2019) organized by University of Calicut, Calicut, India

7. Presented paper entitled “**Chemically characterized *Pimenta dioica* (L.) Merr. essential oil as potential plant based preservative against aflatoxin B₁, methylglyoxal biosynthesis and lipid peroxidation in stored food commodities**” in an International conference on Innovation and translational dimensions: Food, Health, and Environmental Biotechnology (Biosangam 2018) (March 9-11, 2018) organized by Department of Biotechnology, Motilal Nehru National Institute of Technology, Allahabad, India.
8. Two-days National workshop on “**Green Biotechnology and Therapeutic Potential of Medicinal Plants**” jointly organized by Department of Botany and Zoology, S.S. Khanna, Girl’s Degree College, Prayagraj, India – **January 27–28, 2020**.
9. Two-days National workshop on “**Cartography and Geospatial Technology**” organized by Department of Geology, Government Girl’s P.G. College, Ghazipur, Uttar Pradesh, India – **March 24–25, 2022**.
10. Two-days National Seminar on “**Biodiversity & Environmental Sustainability**” organized by Department of Botany, K. N. Government P. G. College, Gyanpur, Bhadohi, Uttar Pradesh, India – **March 25–26, 2022**.
11. Participated in IP Awareness/Training program under National Intellectual Property Awareness Mission (NIPAM) organized by Government of India, Ministry of Commerce and Industry, Department for promotion of Industry and Internal Trade, Office of the Controller General of Patents, Designs, and Trademarks: **February 24, 2022**.
12. Participated in one day Seminar on “**Environmental Concerns in Himalaya**” on the Occasion of Prof. Y. P. S. Pangtey Memorial Day lecture series organized by Prof. Y. P. S. Pangtey Research Foundation Society on 28 August, 2022

➤ **MEMBERSHIPS:**

1. Indian Botanical Society (IBS), India
2. International forum for Botanist (IFB)

Date: 22-10-2022

(Anand Kumar Chaudhari)