Dr. Iffat Zareen Ahmad, M.Sc., D. Phil.
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Hyperlinks of (Google Scholar Citation, Scholar |Orcid Id, orcid Scopus, Scopus Web of Science, AAQ-2868-2021|Research gate, Researchgate linkedin https://www.linkedin.com/feed

PROFILE

Profile Summary (in bullets)

- Dr. Iffat Zareen Ahmad is working as a Professor in the Department of Bioengineering, Integral University, Lucknow.
- She has done B.Sc. and M.Sc. form the University of Allahabad and has received her doctorate degree from University of Allahabad in the area of Biotechnology.
- Her area of expertise involves Plant and algal Biotechnology, natural products, stress biology, nanoformulations and pharmacology.
- She has more than hundred publications to her credit with publishers of International repute and high impact factor.
- She has authored seven books and thirty book chapters.
- Twenty two students have been awarded with the doctoral degree under her supervision.
- She is a member of many professional bodies. Her work has been recognized globally and she has many awards and recognitions from national and international agencies.
- She has been awarded with the prestigious research projects from the Ministry of AYUSH, Government of India and Life Sciences Research Board, Defence Research and Development Organization, Central Council for Research in Unani Medicine and Uttar Pradesh Council for Science & Technology.
- She is in the panel of examiners of many National and International educational organizations.

- She is a Chairperson of Internal Complaints Committee of Integral University and playing an instrumental role in organizing several programs under the aegis of Mission Shakti initiative by the government of U.P.

- She has been awarded with "Chirag-e-awadh" by the Daily Insiders publishing house. She has received award in Business pitching Competition in Startup Conclave 2022 organized by Centre for Incubation and Entrepreneurship development (CIED) in association with Uttar Pradesh Electronic Corporation Limited and also Outstanding Researcher of the Year Award-2021-2022" from Integral University.
- **Invited to attend a Conference and present paper in the** 7th International Conference on Hands-on Science, 2010 at Rethymno, Greece. (Given registration waiver).
- **Awarded Fellowship of 760 Australian Dollars** to attend and present a research paper in Ninth International Phycological Congress (IPC9) held in Tokyo, Japan from 2-8 August, 2009.
- **Awarded Fellowship** to attend the Conference on Plant Tissue Culture and Agribiotechnology held in Kuala Lumpur, Malaysia from 17th to 21st June, 2007.
- **Young Scientist Award** in Chemical Sciences in the 7th Conference of International Academy of Physical Sciences from Dec. 21-23, 2004 organized by University of Allahabad., Rajyashree Tandon Open University, Allahabad and International Academy of Physical Sciences. Gave oral presentation for young scientist award category on "Study on Chl a synthesis by laser induced fluorescence and UV-visible spectrophotometer in the presence of heavy metals".

RESEARCH INTEREST:

- Natural products
- Nanoformulations
- Cancer biology
- Plant Tissue Culture
- Cyanobacterial bBiotechnology

SUMMARY OF RESEARCH ACCOMPLISHMENT:

1. Research Grant of Rs. 69.93 lakhs under EMR scheme as a Principal Investigator from the Ministry of AYUSH, Government of India on a project titled "*In vitro* and *in vivo* study of hepatoprotective activity of *Nigella sativa* extracts in various germination stages". (Sanction No. Z. 28015/226/2015-HPC (EMR)-AYUSH-C).
2. Research Grant of Rs. 23.50 lakhs as a Principal Investigator from Life Science Research Board, Defiance Research and Development Organization, Government of India on a project titled "Characterization of UV protective compounds from cynabacteria and media optimization for their enhancement". (Sanction No. O/o CC R&D (TM)/81/48222/LSRB-293/SH&DD/2017).

3. Research Grant of Rs. 28.288 lakhs under EMR scheme as a Principal Investigator from CCRUM, Ministry of AYUSH, Government of India on a project titled "Study and validation of the anticancer potential of prominent Unani medicines and their nano formulations as an adjuvant against liver carcinoma". (Sanction No. F. No. 3 64/2022-CCRUM-Tech).

PROFESSIONAL MEMBERSHIP:

- Senior Member, Advisory Board, International Association of Scientist.
- Member, American Chemical Society, Membership ID: 32647319
- The Biochemical Society Wales, London, Member Number 20028382
- Member, International Academy of Physical Sciences.
- Member, BIOVED Research Society.
- Member: Live DNA (Live DNA is 91.1183).

COURSE TAUGHT:

- **Undergraduate level -**
  - Introduction to Biology (B. Tech I Semester)
  - Genetics and Molecular Biology (B. Tech IV Semester)
  - Plant Biotechnology (B. Tech VI Semester)
  - Microbiology Lab (B. Tech III Semester)
  - Genetics and Molecular Biology Lab (B. Tech IV Semester)
  - Fermentation and Plant Tissue Culture Lab (B. Tech VI semester)
  - Enzymology (B. Tech IV Semester)
  - Plant Physiology(B. Tech III Semester)
  - Plant Biochemistry (B. Tech IV Semester)

- **Post graduate level-**
  - Plant Cell Technology (M.Tech II Semester and B.Tech-M.Tech Dual Degree VIII Sem)
  - Biochemical and Biophysical Methods (M. Sc I Semester)
  - Metabolism (M. Sc. II Semester)
  - Industrial and Environmental Biotechnology (M. Sc. III Semester)
  - Plant Biotechnology (M. Sc. IV semester)
  - Biochemistry Lab (M. Sc. I Semester)
  - Microbiology and Enzymology Lab (M. Sc. II Semester)
  - Plant Tissue Culture Lab (M. Sc. III Semester)
  - Biochemistry and Biophysical Techniques (M.Tech I Semester)
  - Enzyme Engineering (M. Tech II Semester)
  - Downstream Processing (M. Tech II Semester)
  - Tools and Techniques in Microbiology (M.Sc. Microbiology III Semester).
  - Physiological Biochemistry (M.Sc. Biochemistry III Semester).

- Biochemistry Lab
- Microbiological Engineering Lab

➢ **Doctoral level-**
- Advances in Plant Tissue Culture (PhD course work)
- Methods in Biophysics (PhD course work)

ADMINISTRATIVE/DEPARTMENTAL RESPONSIBILTY

- Chairperson, Internal Complaint Committee, Integral University, Lucknow-2011-till date.
- Chairperson, Sub-committee for Curriculum Development and academic Reforms, Integral University, Lucknow.
- Coordinator, CARE, Consortium Academic and Research Ethics (task groups of faculty members for quality mandate), Integral University, Lucknow.
- Subject Expert, Local Selection Committee of the Department of Bioengineering or the appointment of Assistant Professor & Lab Instructor.
- Member, Subcommittee for Research & Development, Integral University, Lucknow.
- Sub-criteria incharge, NAAC Core Committee, Criteria III.
- Coordinator, Catering and Refreshment Committee, Integral University, Lucknow.
- Discipline, law and order committee, End-semester examination, Integral University, Lucknow.
- Member, Faculty Academic Council, Faculty of Engineering, Integral University, Lucknow.
- Member of Board of Studies, Department of Biotechnology, Integral University, Lucknow.
- Member, Faculty Board, Faculty of Engineering, Integral University, Lucknow.
- Member, Academic Council, Integral University, Lucknow.
- Head examiner, M.Tech Biotechnology II year examination.
- Coordinator, PhD in the Department of Bioengineering, Integral University, Lucknow.
- Member, Criteria III, DQAC, Department of Bioengineering, Integral University, Lucknow.
- Incharge, ATC and PTC laboratories, Department of Bioengineering, Integral University, Lucknow.
- Incharge, Research lab, IIRC II, 4th floor, Library Building, Integral University, Lucknow.

STUDENTS SUPERVISION

- Deeba Zaidi: Assessment of cent chroman-mediated apoptosis: An in vitro study. (2012)
- Aisha Kamal: Biochemical and Physiological response of medicinally important Nigella sativa seed in its germination stages. (2012)
- Roohi: Purification and characterization of cold-active extracellular amylase from psychrophiles microorganisms and its industrial applications (as co- supervisor). (2012)
- Amreen Iqbal: Evaluation of biologically active compounds from Indian spices for Bioprospection. (2014)
- Khan Uzma Aftab: Role of blue green algae to be used as a biofertilizer in different regions of Uttar Pradesh. (2014)

- Deepmala Singh: Morphological and Biochemical characterization of Collectotrichum falcatum causing red rot disease of sugarcane in Uttar Pradesh region. (2014)
- Hayatul Islam: Study of the Pharmacological activities of Nigella sativa seed extracts in different germination stages. (2014)
- Saima: Purification and characterization of extra-cellular chitinase from microorganisms and its biological applications (as co-supervisor). (2016)
- Jitendra Pratap Singh: Studies on genetic variability in Jamun (Syzygium cumin Skeels) related with morphological, biochemical and medicinal attributes. (2016)
- Syed Saima: Functional characterization of sterol glycosyltransferase (sgt) gene family of Withania some fear by overexpression and RNAi-mediated knockdown expression". (2016)
- Nida Fatima: Study of cyanobacterial phytochemicals as a potent source of UV protectant. (2016)
- Hera Chaudhry: Study of bioactive metabolites in Nigella sativa Linn. by plant cell culture techniques (2018).
- Abdul Mabood: Effect of heavy metals (lead, iron and zinc) alteration on biochemical parameters (Nigella sativa, Trigonella foenum) in Indian spices (2019).
- Maria Kidwai: Expression and functional characterization of arsenic responses genes from rice (Oryza sativa) (2019).
- Heena Tabassum: Hepatoprotective activity of Nigella sativa sprout on liver carcinoma cell line (2020).
- Supriya Vaish: Morphological, biochemical and molecular characterization of microbial isolates from biodynamic preparations and study of their PGPR and biocontrol efficacy (2021).
- Asad Ahmad: Characterization and Evaluation of Lepidium sativum L. seed extract loaded nanoformulation against hepatocarcinoma (as co-supervisor, submitted).
- Elhan Khan: Study of anticancer potential of *Cydonia oblonga* Mill. seed extract loaded nanoformulation against hepatocellular carcinoma.
- Sonam Dwivedi: Isolation, characterization and enhancement of UV protectant compounds in cyanobacteria.
- Sadiyah Samreen: Development and characterization of *Cichorium intybus* L. based nanoformulation against hepatocarcinoma

- Nafeesh Ahmad: Application of Abiotic stress to assess Artemisinin production in *Artemisia annua* L. plants (as co-supervisor).
- Haram Sarfraz: Study of anticancer potential of *Linum usitatissimum* L. seed extract-loaded nanoformulation against hepatocellular carcinoma.
- Pooja Maurya: Exploring the bioherbicidal potential of selected MAPs against major weeds in wheat (*Triticum aestivum*) and its synergistic effect on soil microbial diversity.
- Adfar Bashir: Genetic Dissection and Mapping of Anthracnose Resistance Gene(s) in Broad Spectrum *Phaseolus vulgaris* Landrace WB967.
- Bikash Sarmah: Evaluation of phytoestrogenic activity of some Indian medicinal plants and its co-relation with anti-cancerous activity for adjuvant therapy.
- Nafeesa Shaheen: Isolation of genetically improved somaclonal variant of *Artemisia annua* L.

PUBLISHED/GRANT PATENTS

- **Iffat Zareen Ahmad**, Sonam Dwivedi, Heena Tabassum. Nanoemulsion-based cosmeceutical products having UV-protective and anti-skin cancer properties. Application No.: 202211035969.
- **Iffat Zareen Ahmad**, Elhan Khan. *Cydonia oblonga* Mill. seed extract and its nanoemulsion as anti-hepatocellular carcinoma agents.
  Application No.: 202211044085

PUBLISHED/ACCEPTED SCI/SCOPUS RESEARCH PAPERS

1. Haram Sarfraz, Elhan Khan, Iffat Zareen Ahmad, Unveiling the Potential of Bioactive Compounds from *Linum usitatissimum* L. to Target Hepatocellular Carcinoma: An In silico based Approach, Journal of Biomolecular Structure and Dynamics (IF: 4.4 accepted).
2. Supriya Vaish, Sumit K Soni, Balvindra Singh, Neelima Garg, Iffat Zareen Ahmad, Muthukumar Manoharan, Ajaya Kumar Trivedi, 2024. Meta-analysis of biodynamic (BD) preparations reveal the bacterial population involved in improving soil health, crop yield and quality, Journal of Genetic Engineering and Biotechnology; 22(1); 100345.
3. Nizar A. Khamjan, Elhan Khan, Heena Tabassum, Sadiyah Samreen, Abdullah Algaissi, Mohtashim Lohani, Saif Khan, Nader Kameli, Faisal Madkhali, Iffat Zareen Ahmad, 2024. Campesterol and Dithymoquinone as a potent inhibitors of SARS Cov-2 main proteases -

promising drug candidates for targeting its novel variants, Journal of Biomolecular Structure and Dynamics, 1-15. (IF: 4.4)

4. Nizar A. Khamjan, Elhan Khan, Heena Tabassum, Sadiyah Samreen, Abdullah Algaissi, Mohtashim Lohani, Saif Khan, Nader Kameli, Faisal Madkhali, Iffat Zareen Ahmad, 2023. HDAC inhibition by *Nigella sativa* L. sprouts extract in hepatocellular carcinoma: an approach to study anti-cancer potential, Journal of Biomolecular Structure and Dynamics 1-19. (IF: 4.4).
5. Haram Sarfraz, Iffat Zareen Ahmad, 2023. A Systematic Review on the pharmacological potential of Linum usitatissimum L.: A significant nutraceutical plant. Journal of Herbal Medicine, pp. 100755 (IF: 2.3).
6. Sadiyah Samreen, Elhan Khan, Iffat Zareen Ahmad, 2023. Molecular docking and molecular dynamics simulation analysis of bioactive compounds of Cichorium intybus L. seed against hepatocellular carcinoma. Journal of Biomolecular Structure and Dynamics 1-12. Taylor & Francis (IF: 5.235).
7. Sakshi Mathur, Chaitali Gawas, Iffat Zareen Ahmad, Minal Wani, Heena Tabassum, 2023. Neurodegenerative disorders: Assessing the impact of natural vs drug-induced treatment options, Aging Medicine, 6)1), 82-97.
8. Kuldeep Singh Suvaiv, Syed Misbahul Hasan, Shom Prakash Kushwaha, Arun Kumar, Iffat Zareen Ahmad, Piyush Kumar, 2023. Design, Molecular docking, synthesis, and antibacterial activity of 1h-benzimidazole-2-carboxylic acid (2-oxo-1, 2-dihydro-indol-3-ylidene)-hydrazide derivatives, Indian Journal of Heterocyclic Chemistry, 33: 249-256.
9. Elhan Khan, Mahvish Khan, Saif Khan, Mohtashim Lohani, Nashwa Zaki Ali Bushara, Hussein Abdul Aziz Marouf, Kurian Punnoose, Iffat Zareen Ahmad, 2023. Computational modeling of cyanobacterial phytoconstituents against toll-like receptors of skin cancer, Journal of Biomolecular Structure and Dynamics, Feb 6;1-13 (IF: 5.235).
10. Sonam Dwivedi, **Iffat Zareen Ahmad**, 2023. Evaluation of the effect of UV-B radiation on growth, photosynthetic pigment, and antioxidant enzymes of some cyanobacteria, Environmental Research, Volume 218, 1 February 2023, 114943 (IF: 8.431).
11. Elhan Khan, Mahvish Khan, Saif Khan, Mohtashim Lohani, Nashwa Zaki Ali Bushara, Hussein Abdul Aziz Marouf, Kurian Punnoose, **Iffat Zareen Ahmad**, 2023. Computational modeling of cyanobacterial phytoconstituents against toll-like receptors of skin cancer, Journal of Biomolecular Structure and Dynamics, Feb 6;1-13 (IF: 5.235).

12. Sadiyah Samreen, **Iffat Zareen Ahmad**, 2022. A review on phytochemistry, pharmacology and ethnobotanical uses of *Cichorium intybus* L., Annals of Phytomedicine, Volume 11, No. 1.
13. Heena Tabassum, **Iffat Zareen Ahmad**, 2022. Applications of metallic nanomaterials for the treatment of water. Letters in Applied Microbiology, 2022 Oct;75(4):731-743. (IF: 2.858).
14. **Iffat Zareen Ahmad**, 2022. The usage of cyanobacteria in wastewater treatment: prospects and limitations. Letters in Applied Microbiology, 2022 Oct; 75(4):718-730. (IF: 2.858).
15. Elhan Khan, **Iffat Zareen Ahmad,** 2021. Screening of phytochemicals from Golden apple of discord, *Cydonia oblonga* against the pTen and HBx using in silico-based tools, Journal of Molecular Modeling, 28:191 (IF: 2. 172).
16. Asad Ahmad, Heena Tabassum, Rabia Nabi, Anuradha Mishra, **Iffat Zareen Ahmad, 2022**. Solid Lipid Nanoparticles of *Lepidium sativum* L. Seed Extract: Formulation, Optimization and In vitro Cytotoxicity Studies, Drug Research, 72(5):284-293.
17. Sonam Dwivedi**, Iffat Zareen Ahmad,** 2022**.** A review of the emerging role of cyanobacteria based nanoformulations for skin care: Opportunities and challenges. Journal of Applied Biology and Biotechnology, 10(3):210-218.
18. Pooja Maurya, Abdul Mazeed, Dipender Kumar, Suryavanshi, **Iffat Zareen Ahmad.** 2022. Medicinal and aromatic plants as emerging source of bio-herbicides, Current Science, 122 (3), 258-266 (IF: 1.169, Q3).
19. Supriya Vaish, Neelima Garg, **Iffat Zareen Ahmad**, 2022. Muthukumar Manoharan. Metagenomic analysis decodes the fungal diversity of Bio-Dynamic (BD) preparations, Journal of Environmental Biology, 43 (1), 115-122. (IF=0.781).
20. Asfia Zaidi, **Iffat Zareen Ahmad**, Elhan Khan, Heena Tabassum, 2021. Post COVID-19 medical complications, Annals of Phytomedicine, 10(2), S63-S70.
21. Elhan Khan, **Iffat Zareen Ahmad**. An insight into the prophylactic and therapeutic activities of golden apple (*Cydonia oblonga* Mill.) for the future cancer care and prevention : A review, Annals of Phytomedicine : An International Journal ,10, No. 2, December issue, 2021.
22. Ateeque Ahmad, Sudeep Tandon, Heena Tabassum, Zulfa Nooreen, **Iffat Zareen Ahmad**, Ulrike Lindequist, Ramzi A Mothana, Perwez Alam, Nasir Ali Siddiqui. Multifactorial antioxidant potential of novel compounds isolated from *Zanthoxylum armatum* fruits along

with cytotoxicity studies on HepG2 cell lines. Journal of King Saud University, 34 (2), 2022 (IF: 4.011).

23. Heena Tabassum, **Iffat Zareen Ahmad**, 2021. Molecular Docking and Dynamics Simulation Analysis of Thymoquinone and thymol compounds from Nigella sativa L. that Inhibits Cag A and Vac A oncoprotein of *Helicobacter pylori*: Probable treatment of *Helicobacter pylori* infections, Medicinal Chemistry, 17(2), 146-157 (IF=2.745).
24. Supriya Vaish, Neelima Garg, Iffat Zareen Ahmad, 2021. Bio-prospecting of microbial isolates from biodynamic preparations for PGPR and Bio control properties, 2021, Vol 42, Journal of Environmental Biology, 42 (3), 644-651 (IF=0.781).
25. Asad Ahmad, Rabia Nabi, Anuradha Mishra, **Iffat Zareen Ahmad**, 2021. A Panoramic Review on *Lepidium sativum* L. Bioactives as Prospective Therapeutics, Drug Research, 71(05): 233-242 (0.701).
26. Supriya Vaish, Neelima Garg, **Iffat Zareen Ahmad**, 2020. Microbial basis of organic farming system with special reference to biodynamic preparations - A review. Indian Journal of Agricultural Sciences, 90 (7), 1219-1225 (IF=0.39).
27. Maria Kidwai, **Iffat Ahmad**, and Debasis Chakrabarty, 2020. Class III peroxidase: An indispensable enzyme for biotic/abiotic stress tolerance and a potent candidate for crop improvement, Plant Cell reports, 39, 1381-1393 https://doi.org/10.1007/s00299-020-02588-y (IF: 4. 964).
28. Heena Tabassum, **Iffat Zareen Ahmad,** Molecular Docking and Dynamics Simulation Analysis of Thymoquinone and Thymol compounds from *Nigella sativa* L. that Inhibits P38 Protein: Probable Remedies for Hepatocellular Carcinoma, Medicinal Chemistry, 2020; 16(3):350-357. (IF=2.631)
29. Maria Kidwai, Yogeshwar Vikram Dhar, Neelam Gautam, Madhu Tiwari, **Iffat Zareen Ahmad**, Mehar Hasan Asif, Debasis Chakrabarty, 2019**.** *Oryza sativa* class III peroxidase (*OsPRX38*) overexpression in *Arabidopsis thaliana* reduces arsenic accumulation due to apoplastic lignification, Journal of Hazardous Materials, Volume 362 (15), 383-393 (IF: 14.224).
30. Heena Tabassum, **Iffat Zareen Ahmad,** 2018, Evaluation of the anticancer activity of sprout extract-loaded nanoemulsion of *Nigella sativa* against hepatocellular carcinoma, Journal of Microencapsulation, 35:7-8, 643-656 (IF: 4.034).

31. Heena Tabassum, Asad Ahmad, **Iffat Zareen Ahmad,** 2018. *Nigella sativa* L. and its bioactive constituents as hepatoprotectant: a review, Current Pharmaceutical Biotechnology, 19(1), 43-67 (IF: 2.837)
32. Abdul Mabood and **Iffat Zareen Ahmad**. Effects of iron, lead and zinc on growth and metal accumulation in *Trigonella foenum-graecum* L. seedlings. Plant Cell Biotechnology and Molecular Biology 18(7&8):500-508; 2017.
33. **Iffat Zareen Ahmad**, Mohammad Kuddus, Asad Ahmad, Heena Tabassum and Abdul Mabood, 2017. Applications of surface modified nanoparticles in cancer theranostics, Current Drug metabolism, 18(11), 983-999 (IF- 3.408).
34. **Iffat Zareen Ahmad**, Ulfat Fatima, Heena Tabassum, Abdul Mabood, Asad Ahmad, Gaurav Srivastava and Mainak Das. Evaluation of the nutrient profile of *Trachyspermum ammi* L. seed under the influence of nanoparticles during germination, Cellular and Molecular Biology (Noisy le Grand), 2017, Vol. 63 (6), 7-11 (IF- 1.372).
35. Afroz Jahan, **Iffat Zareen Ahmad**, Nida Fatima, Vaseem A. Ansari, Juber Akhtar. Algal bioactive compounds in the cosmeceutical industry: a review, Phycologia, July 2017, Vol. 56, No. 4, pp. 410-422. (IF: 3.088).
36. Nida Fatima, **Iffat Zareen Ahmad** and Hera Chaudhry. Alterations in the antibacterial potential of *Synechococcus* spp. PCC 7942 under the influence of UV-B radiations on skin pathogens. Saudi Journal of Biological Sciences, 24 (7), November 2017, Pages 1657-1662 (IF=4.219).
37. Areeba Farooqui, Heena Tabassum, Asad Ahmad, Abdul Mabood, Adnan Ahmad, **Iffat Zareeen Ahmad**. Role of nanoparticles in growth and development of plants: a review. Int J Pharm Bio Sci 2016 Oct; 7(4): (P) 22 - 37.
38. Dilkash Bano, Heena Tabassum, Asad Ahmad, Abdul Mabood, **Iffat Zareen Ahmad**. The medicinal significance of the bioactive compounds of *Trigonella foenum-graecum*: a review, International Journal of Research in Ayurveda and Pharmacy, 7(4), July-Aug., 2016.
39. Syed Saema, **Iffat Zareen Ahmad**, Pratibha Misra. Ectopic overexpression of WsSGTL1, a sterol glucosyl transferase gene in *Withania somnifera*, promotes growth, enhances glycowithanolide and provides tolerance to abiotic and biotic stresses, Plant Cell Reports, 2016 Jan;35(1):195-211 (IF: 4.964).

40. Syed Saema, **Iffat Zareen Ahmad**, Pratibha Misra. RNAi-mediated gene silencing of WsSGTL1 in *W. somnifera* affects growth and glycosylation pattern, Plant Signaling & Behavior, 2016 Dec; 10(12): e1078064 (IF: 2.734).
41. Hera Chaudhry, Nida Fatima and **Iffat Zareen Ahmad**. Evaluation of antioxidant and antibacterial potentials of *Nigella sativa* L. suspension cultures under elicitation. Biomed Research International, August 2015 (IF: 3.246).
42. Mohammad Hayatul Islam, **Iffat Zareen Ahmad** and Mohammad Tariq Salman, (2015). Enhancement in neuroprotective activities of *Nigella sativa* seed during germination. Pharmacognosy Magazine**,** May, 2015, 11 (42): 182-189 (IF: 1.525).
43. Jitendra Pratap Singh, Anju Bajpai, A.K.Singh, **Iffat Zareen Ahmad**. Characterization of different *Syzygium cumini* skeels accessions based on physic-chemical attributes and phytochemical investigations. International Journal of Pharmacy and Pharmaceutical Sciences, Vol 7, Issue 5, May, 2015.
44. Nida Fatima, Hera Chaudhry and **Iffat Zareen Ahmad** (2015). UV-B protecting activity of *Synechococcus spp. PCC7942* by antioxidative defense system. Int J Pharm Bio Sci 2015 Jan; 6(1): (B) 344 - 357.
45. Hera Chaudhry, Nida Fatima and **Iffat Zareen Ahmad,** (2014). Evaluation of *Nigella sativa L.* callus extracts under elicitation for phytochemicals and antibacterial activity. Int J Pharm Bio Sci 2014 Oct; 5(4): (B) 903 - 916.
46. Jitendra P Singh, AK Singh, Anju Bajpai & **Iffat Zareen Ahmad** (2014), Comparative analysis of DNA polymorphisms and phylogenetic relationships among *Syzygium cumini* Skeels based on phenotypic characters and RAPD technique, Bioinformation, Vol. 10(4), pp.201-208.
47. Aisha Kamal and **Iffat Zareen Ahmad** (2014). Phytochemical Studies of Different Phases of Germination of *Nigella sativa* Linn - A Medicinally Important Plant. International Journal of Pharmacy and Pharmaceutical Sciences. Vol 6 (4) pp.318-323.
48. Aisha Kamal and **Iffat Zareen Ahmad** (2014) "Alteration in Antibacterial Potential of *Nigella sativa* L. Seed during Different Phases of Germination." International Journal of Current Microbiology and Applied Sciences. Vol. 3(3): pp.268-282, NAAS rating 5.38.

49. Mohammad Hayatul Islam, **Iffat Zareen Ahmad** and Mohammad Tariq Salman, (2014). Enhancement in anti-inflammatory and analgesic activities of *Nigella sativa* seed during germination. Pharmacognosy Journal**,** 5: pp 1-3.
50. Hera Chaudhry, Nida Fatima and **Iffat Zareen Ahmad** (2013). Establishment of callus and cell suspension cultures of *Nigella sativa* Linn. for Thymol production. International Journal of Pharmacy and Pharmaceutical Sciences, 6(1), pp 688.
51. Saima, M. Kuddus, Roohi, **I.Z. Ahmad**. Isolation of novel chitinolytic bacteria and production optimization of extracellular chitinase**.** Journal of Genetic Engineering and Biotechnology**.** Volume 11, Issue 1, June 2013, Pages 39–46.
52. Mohammad Hayatul Islam, **Iffat Zareen Ahmad** and Mohammad Tariq Salman (2013). Antibacterial activity of *Nigella sativa* seed in various germination phases on clinical bacterial strains isolated from human patients. E3 Journal of Biotechnology and Pharmaceutical Research Vol. 4(1), pp. 8-13.
53. Mohammad Hayatul Islam, **Iffat Zareen Ahmad** and Mohammad Tariq Salman (2013). *In vivo* evaluation of anti-inflammatory and analgesic activities of *Nigella sativa* seed during germination. International Journal of Pharmacy and Pharmaceutical Sciences, Vol 5, Issue 4, 2013, pp: 451-454.
54. M. Kuddus, Roohi, Saima, **I.Z. Ahmad**. Cold-active extracellular a-amylase production from novel bacteria *Microbacterium foliorum GA2* and *Bacillus cereus* GA6 isolated from Gangotri glacier, Western Himalaya, Journal of Genetic Engineering and Biotechnology (2012) 10, 151–159.
55. M. Sarfaraj Hussain, Sheeba Fareed, M. Akhlaquer Rahman, Saba Ansari**, Iffat Zareen Ahmad**, 2012. Current approaches towards production of secondary plant metabolites. Journal of Pharmacy and Bioallied Sciences; 4(1): 10–20.
56. Deepmala Singh, Smriti Mall, Brinda Shukla, **Iffat Z. Ahmad** and G.P. Rao **(2011).** Morphological Characterization and Virulence of Newly Collected Red Rot Isolates of Sugarcane in Uttar Pradesh, J Mycol Plant Pathol, Vol. 41, No.4, 605-612, NAAS rating 5.79.
57. S. Sundaram, **I.Z. Ahmad** and P. Dwivedi, 2011. Study of Different Stages of Somatic Embryogenesis in a Medicinal Plant, Madar (*Calotropis procera*). Research Journal of Botany, 6: 1-10.

58. Roohi, M. Kuddus, **I.Z. Ahmad** and J.M. Arif (2011). Production of Cold-active Extracellular α-Amylase by Newly Isolated *Microbacterium foliorum* GA2 from Gangotri glacier, Western Himalaya, India. *Asian J of Biotechnology*, Vol. 3(5), pp. 449-459.
59. Zaidi, Deeba; Singh, Neetu; **Ahmad, Iffat Zareen**; Sharma, Ramesh; Balapure, Anil K. April 2011. Antiproliferative effects of curcumin plus centchroman in MCF-7 and MDA MB-231 cells. International Journal of Pharmacy & Pharmaceutical Sciences; Apr 2011, Vol. 3 Issue 2, p212.
60. Iqbal Amreen, Ahmad Iffat Zareen, Aslam Mohammad, New oleanane triterpene from the seeds of *Nigella sativa* Linn. Medicinal Plants - International Journal of Phytomedicines and Related Industries, 2010, Vol. 2, Issue: 3, pp: 245-247.
61. Junaid Aslam, Sheba Haque Khan, Zahid Hameed Siddiqui, Zohra Fatima, Mehpara Maqsood, Mukthar Ahmad Bhat, Sekh Abdul Nasim, Abdul Ilah, **Iffat Zareen Ahmad,** Saeed Ahmad Khan, Abdul Mujib and Maheshwar Prasad Sharma. *Catharanthus roseus* (L.) G. Don. An Important Drug: It's Applications and Production, Pharmacie Globale *(IJCP) 2010, 4 (12),* 1-16.
62. Aisha Kamal, Jamal Mohammad Arif and **Iffat Zareen Ahmad (2010)**, Potential of *Nigella sativa* L. seed during different phases of germination on inhibition of bacterial growth. Journal of Biotechnology and Pharmaceutical Research, Vol. 1 (1), pp.009–013.

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