

Name: Dr. Jyoti Amol Deshpande

Designation: Assistant Professor
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Contact No : +91 20 67919444 (ext. 9459)
Qualification: M. Sc., Ph. D. Biotechnology
Area of Specialization: Plant Biotechnology



Academic Qualifications:

- 1) Ph. D. in Biotechnology, Dr. D. Y. Patil Vidyapeeth (DPU), Pimpri, Pune, 2017.
Title of Thesis: Standardization of *in-vitro* culture of *Plumbago sp.* for optimization of plumbagin production and therapeutic studies of plumbagin along with *in-silico* designing and docking of plumbagin analogs
- 2) Masters Degree in Biotechnology (2004) – 68.30%, Amravati University, Amravati.
(**University 3rd Rank**)
- 3) Bachelor of Sciences (Microbiology, Biochemistry, Chemistry) -78.28 %, R.L.T. College of Science, Akola,
- 4) H.S.C.- 75.50%, Arts, Commerce and Science Junior college, Akola.
- 5) S.S.C.- 86.40%, S.S.H.S. Dongaon. **Amravati Board 27th merit.**

Teaching Experience: 11Years

Working as an Assistant Professor in Biotechnology at Dr. D. Y. Patil Biotechnology and Bioinformatics Institute, Tathawade, Pune.

Teaching to Under Graduate and Post Graduate students of Biotechnology (Nov 2006 to till date)

Publications:

Papers Published in Indexed Journals:

1. Padhye S, Chavan D, Pandey S, **Deshpande J**, Swamy K V, Srkar F H, Perspectives on chemopreventive and therapeutic potential of cucumin analogs in Medicinal chemistry, *Mini reviews in medicinal chemistry*, (Impact factor 2.9), 10 (2010) 1-16.
2. Padhye S, Ahmad A, Oswal N, Dandawate P, Rub R A, **Deshpande J**, Swamy K V, Sarkar F H, Fluorinated 2'-Hydroxychalcones as Garcinol Analogs with Enhanced Antioxidant and Anticancer Activities, *Bioorganic & Medicinal Chemistry Letters*, (Impact Factor 2.4), 20 (19) (2010) 5818-21.
3. Swamy K V, **Deshpande J**, Pthegiri J S, Kothekar V, Padhye S, Molecular docking studies on estrogen receptor- α , and chalcone derivatives, *International Journal of Advances in Pharmacy and Biological Sciences*, 1(3) (2011) 87-93.
4. Dandawate P R, Vyas A, Ahmad A, Banerjee S, **Deshpande J**, Swamy K V, Jamadar A, Dumhe-Klaire A C, Padhye S, Sarkar F H, Inclusion Complex of Novel Curcumin Analogue CDF and β -

Cyclodextrin (1:2) and Its Enhanced *In Vivo* Anticancer Activity Against Pancreatic Cancer, *Pharmaceutical Research*, (Impact factor 4.5), 29 (2012) 1775–1786.

5. Prasad Dandawate, Ejazuddin Khan, Subhash Padhye, Himanshi Gaba, Swati Sinha, **Jyoti Deshpande**, K. Venkateswara Swamy, Madhukar Khetmalas, Aamir Ahmad and Fazlul Sarkar, Synthesis, characterization, molecular docking and cytotoxic activity of novel plumbagin hydrazones against breast cancer cells, *Bioorganic & Medicinal Chemistry Letters*, (Impact Factor 2.4), 22 (2012) 3104 - 3108.
6. Wani M, Saha, **Bidwai J** and Khetmalas M, Changes in Carbohydrate Levels and Associated Enzyme Activities During Post Harvest Vase Life Of *Gerbera Jamesonii* Cv. Danalin Flowers As Influenced By Mineral Salts, *Journal of Horticulture Letters*, (Index Copernicus Value (ICV) 2012- 6.8), 2(1), (2012) 08-11.
7. Wani M, Sarvar F A, Agrawal J, **Deshpande J**, Mathew S, Khetmalas M, **Qualitative phytochemical analysis and antimicrobial activity studies of *Gymnema sylvestre***, **R. Br., Acta Biologica Indica**, 1(1) (2012) 121-124.
8. Wani M, Sharma A, **Deshpande J**, Mathew S, and Khetmalas M B, Qualitative Phytochemical screening of Three Indigenous Medicinal plants, *Research Journal of Pharmaceutical, Biological and Chemical Sciences*, 4(1) (2013) 287-291.
9. **Deshpande J**, Labade D, Kalaiselvi S, Kata N, Chaudhari M, Wani M, Khetmalas M, “*In- vitro* callus induction studies and estimation of plumbagin content from *Plumbago auriculata L*” *Indian Journal of Experimental Biology*, (Impact factor 1.1), 52 (2014) 1122-1127.
10. **Deshpande J**, Goel A, Labade D, Khetmalas M, Wani M, *In vitro* induction and proliferation of adventitious roots and estimation of plumbagin content from *Plumbago auriculata L.*, *Advances in Bioresearch*, (Impact Factor 0.9), 6 (6) (2015) 141-147.
11. **Deshpande J**, Bodas M, Wani M., Khetmalas M, Plumbagin: a potential drug candidate for treatment of oral cancer, *Trends in Life Sciences*, (Global impact factor 0.65), 4(4) (2015) 773-777.
12. Dandawate P, Ahamad A, **Deshpande J**, Swamy K V, Khan E M, Khetmalas M, Padhye S, and Sarkar F, Anticancer phytochemical analogs 37: Synthesis, characterization, molecular docking and cytotoxicity of novel plumbagin hydrazones against breast cancer cells, *Bioorganic & Medicinal Chemistry letters*, (Impact Factor 2.4), 24(13) (2014) 2009-2904.

Abstracts Published:

1. **Jyoti Deshpande**, Dinesh Labade, Kalaiselvi Shankar, Navin Kata, Manoj Chaudhari, Minal Wani, Madhukar Khetmalas, “*In- vitro* callus induction studies and estimation of plumbagin content from *Plumbago auriculata*.”, International Conference on Advances in Biotechnology and Bioinformatics (ICABB Nov. 2013) Nov 25-27 2013, organized by Dr. D.Y. Patil Vidyapeeth, Pune and The Biotech Research Society, India (BRSI).
2. **Jyoti Deshpande**, Dinesh Labade, Kalaiselvi Shankar, Ashish Goel, Minal Wani, Madhukar Khetmalas, “*In vitro* Induction and proliferation of adventitious roots and estimation of plumbagin content from *Plumbago auriculata*.” International Conference on Advances in Biotechnology and Bioinformatics (ICABB 2013) Nov 25-27 2013, organized by Dr. D.Y. Patil Vidyapeeth, Pune, India and The Biotech Research Society, India (BRSI).

3. **Jyoti Deshpande**, Geeta Bora, Anjul Lunkad, Anjali Gawande, Manoj Choudhari, Minal Wani and Madhukar Khetmalas, “Physicochemical, phytochemical and antimicrobial studies of *Plumbago auriculata* L. leaves”, 35th Annual meeting of PTCA & National Symposium on Advances in Plant Molecular Biology and Biotechnology, March 10-12, 2014, at Indian Institute of Science Education and research (IISER) Pune.
4. **Jyoti Deshpande**, Payal Amale, Minal Wani, Madhukar Khetmalas, “Qualitative phytochemical investigation studies and isolation of active compounds by thin layer chromatography of *Plumbago*” for oral presentation in the International Seminar on Emerging threats and challenges to Biodiversity-Policy framework and Sustainable management ETCOB2012 at S. V. University, Tirupati, A.P., India, 2-4 March 2012.
5. Faizan Ali Sarvar, Arif Kamal Khan, **Jyoti Deshpande**, Minal Wani, K. V. Swamy. “*In vitro* Callus Induction Studies of *Gymnema sylvestre* R.Br. & Molecular Docking Of Gymnemic Acid” ICABS – International Conference on Advances in Biological Sciences organized by the Department of Biotechnology and Microbiology and Inter University Centre for Biosciences, Kannur University, Kannur, Kerala, India, March 15-17, 2012.
6. K V Swamy, **Jyoti Deshpande**, Soumya Pathgeri, Vidya Kothekar, Subhash Padye, “Molecular docking studies on estrogen receptor alpha and chalcone derivatives”, 1st IFIP International conference on Bioinformatics, Surat, 25-28 Mar, 2010.
7. **Jyoti Deshpande**, Minal Wani, Snehal Pande, Rashi Gupta and Pallavi Thakral, “Studies on callus induction and inhibitory effect of *Azadirachta indica* on *S.aureus*, *B. subtilis* and *E. coli*.” International Conference on conservation, Marketing and patenting of medicinal Plants, (ICMP), Raipur, 13-14 Mar, 2010.
8. Aparna Sharma, Tarushikha Khetan, **Jyoti Deshpande**, Siji Mathew, Minal Wani “Qualitative Phytochemical Investigation Studies and Isolation of Active Compounds by Thin Layer Chromatography of Three Anti diabetic plants” Second National Conference on Biotechnology, Bioinformatics and Bioengineering at Kolhapur, Maharashtra, 24-25 February 2012.
9. Faizan Ali Sarvar, Juhi Agrawal, **Jyoti Deshpande**, MinalWani. ‘Second National Conference on Biotechnology, Bioinformatics and Bioengineering’ at Kolhapur, Maharashtra, 24-25 February 2012
10. Minal Wani, Snehal Pande, Nitin More, Shikha Sharma and Dhvani Kothari and **Jyoti Deshpande**, “Phytochemical Analysis and Antimicrobial Activity of Crude Extract of *Tridax procumbens* Leaves” International Conference on conservation, Marketing and patenting of medicinal Plants, (ICMP), Raipur, 13-14 Mar, 2010.

Workshops/Conferences Attended:

1. State Level Seminar on - **Research Orientation and Methodology** (SLSROM 2012)
Sponsored by – BCUD, University of Pune.
Organized by- Padmashree Dr. D. Y. Patil Arts, Commerce & Science College, Pimpri, Pune on 9th&10th February, 2012
2. Event: **12th Indo - US Cytometry Workshop** (19th and 20th Oct. 2011)
Sponsored By: Dr. D. Y. Patil Vidyapeeth Pune, India University of Miami, Florida, USA
International Society for Advancement of Cytometry (ISAC) International Society for Clinical Cytometry (ICCS), Organized by: Dr. D. Y. Patil Veedyapeeth, Pune.
3. Event: **National Workshop on System Biology** (23.04.2011)

Sponsored by: Dr. D. Y. Patil Vidyapeeth Pune

Organized by: Dr. D. Y. Patil Institute of Biotechnology and Bioinformatics Institute, Pune

4. Workshop on **Drug Designing, discovery and development**

Sponsored by: Pune University and Dr. D. Y. Patil University

Organised at: Dr. D. Y. Patil Institute of Pharmacy, Pimpri, Pune

5. Workshop on **Essentials of Drug Designing**

Organised at: Dr. D. Y. Patil Biotechnology and Bioinformatics Institute, Akurdi, Pune

Sponsored by: Dr. D. Y. Patil University, Pune

6. **National Symposium on Current trends on Biotechnology**

Organised at: Dept of Biotechnology, Amravati University, Sponsored by: Amravati University

7. **International Conference on Advances in Biotechnology and Bioinformatics (ICABB 2013)**

Organized by: Dr. D. Y. Patil Biotechnology and Bioinformatics Institute, Akurdi, Pune

Sponsored by: Dr. D.Y. Patil Vidyapeeth, Pune and The Biotech Research Society (BRSI), India

Research Projects and Fellowship

1. **Ph. D. Project:** Standardization of *in-vitro* regeneration of *Plumbago species* for optimization of Plumbagin production and studies of therapeutic activities of plumbagin along with *in-silico* designing and docking of plumbagin and its analogs.

2. **DPU Funded Project: Steroidal Motiffs as an Anticancer Agent.**

Name of Funding Agency: **Dr. D. Y. Patil University, Pune.** Duration: 2 Years

Principle Investigator: Dr. Dr K. V. Swamy, Assistant Professor, Dr. D. Y. Patil Biotechnology and Bioinformatics Institute, Tathawade, Pune

Co-Investigator: **Jyoti Deshpande**, Lecturer, Dr. D. Y. Patil Biotechnology and Bioinformatics Institute, Tathawade, Pune

3. **DPU Funded project:** Evaluation of anti-cancer activity of plumbagin on Oral Cancer

Name of Funding Agency: Dr. D. Y. Patil University, Pune, Duration – 3 Years

Principle Investigator: Dr. Soumya Basu, Assistant Professor, Dr. D. Y. Patil Biotechnology and Bioinformatics Institute, Tathawade, Pune

Co-Investigator: Jyoti Deshpande, Lecturer, Dr. D. Y. Patil Biotechnology and Bioinformatics Institute, Tathawade, Pune

4. **Sumer Research Fellowship of IAS, Bangalore**

Funding agency: Indian Academy of Sciences, (IAS), Bangalore

Worked at: Central Food Technological Research Institute, (CFTRI), Mysore, India

Guide: Dr. V. Prakash, Director, CFTRI