

Curriculum Vitae

Full Name	Dr. Babita Patni			
Designation	Assistant Professor			
Department	HAPPRC			
Campus	Birla campus			
Telephone	7895630389			
Mobile	+917895630389			
Email	babita28paatni@gmail.com			
Education Qualification		Ph.D (2011), G. B. Pant University of Agriculture and Technology, Pantnagar		
Teaching Experience		15 Years	Research Experience	15 Years
Areas of Interest/ Specialization 1. Plant Tissue Culture 2. Plant Nutrition 3. Allelopathy 4. Biochemical Methods 5. Conservation and promotion of medicinal plants				
Honours & Awards 1. Teaching Assistantship in M.Sc for three semesters. 2. Topper in B.Sc (Kumaon University)in batch 2006 (80%) 3. First rank holder in M.Sc Plant Physiology and Biotechnology from GBPUAg.andTech. (81%) 4. First rank holder in Ph.D Plant Physiology and Biotechnology from GBPUAg.andTech. (88%) 5. Qualified GATE-2008 with percentile of 86.67 6. Qualified ICAR-SRF-2008 with fellowship (All India Rank-4) 7. Qualified ARS-NET 2009, in Plant physiology and plant biochemistry 8. Qualified ARS-NET 2010 in Basic plant sciences 9. Qualified CSIR-NET-JRF 2010 in Life sciences (All India Rank-64) 10. Best oral and poster presentation awards in conferences.				
Member of Academic Institutions 1. NIL				
Membership of Scientific Organization NIL.				
Research Supervision (No. of Ph.D. Degree Awarded/ Registered) 02 (Awarded) 03 (Registered)				

Research Projects/ MoU undertaken			
Sl. No.	Title of the Project	Funding Agency	Total outlay of the Project (Rs.)
1.	Biofortification of Rice grains with ZINC by the application of plant growth promoting rhizobacteria as Zinc solubilising agents- PI	UGC, University Grant Commission, New Delhi – Sanctioned Year- 2015 (Completed)	6.0 Lakh
1.	Evaluation and standardization of applicable fast propagation techniques (biotechnological and conventional) of highly valued and high risk plant species <i>Inula racemosa</i> (Pushkarmool) and <i>Paris polyphylla</i> (Satuwa) for promotion of cultivation and conservation of the species in Higher Himalayan region of Uttarakhand - Co-PI	Uttarakhand Council for Biotechnology, Department of Agriculture, Govt. of Uttarakhand, Biotech Bhavan, Haldi, U.S. Sanctioned Year – 2022	9.45 Lakh
2.	Production of Quality planting material, cultivation and market linkages of four commercially important plants of Himalayan region (<i>Aconitum heterophyllum</i> , <i>Gaultheria fragrantissima</i> , <i>Nardostachys jatamansi</i> & <i>Swertia chirayita</i>) – PI	Himalayan Bioresources Mission, Department of Biotechnology, Ministry of Science and Technology, Govt. of India, New Delhi. Sanctioned year-March 2022	55.02 Lakh
3.	Development of large scale seedlings and their establishment for the promotion of cultivation, regeneration and conservation of highly valued and high risk plant species <i>Paris polyphylla</i> (Satuwa) - PI	G.B. Pant National Institute of Himalayan Environment, Kosi-Katarmal, Almora under its Integrated Ecodevelopment Research Programme (IERP) Sanctioned Year – November-2022	9.75 Lakh
4.	Field genebank: A sustainable tool for preservation/conservation of threatened high altitude medicinal plant species – Co-PI	National Medicinal plants Board (NMPB), Ministry of AYUSH, Govt. of India, New Delhi under the MAP scheme "Conservation, Development and Sustainable Management of Medicinal Plants (F.No.Z.18017/187/CSS/R&D/UK-02/2023-24-NMPB-IV A, 19/3/2024). Sanctioned year -March 2024	Rs.45.97 Lakh
5.	Establishment of Seed Production/Germplasm Centre (SPC) for augment supply of Quality Planting Material/Seeds for the producers for	National Medicinal plants Board (NMPB), Ministry of AYUSH, Govt. of India, New Delhi under the MAP scheme "Conservation, Development and	Rs. 120.00 Lakh)

	cultivation/plantation of medicinal plants in Himalayan Region – Co-PI	Sustainable Management of Medicinal Plants (F.No.Z.18017/187/CSS/Integ.Comp./UK-01/2023-24-NMPB-X (E-175570), 10/4/2024. Sanctioned year - April 2024		
6.	Herbal – Kingdom - Programmes to protect endangered species of herbs & plants, enhancing livelihood – Co-PI	Jivanti Welfare and Charitable Trust (JWCT), 8/3 Asaf Ali Road, New Delhi M/S Dabur India Limited, Sahibabad, U.P., Sanctioned Year – 25 October - 2024.	Rs. 15.70 Lakh	On
7.	Assessment of socio-ecological vulnerabilities and community responses in climate-sensitive higher Himalayan rural ecosystems of the Uttarakhand Himalaya- Co-PI	National Mission for Sustaining Himalayan Ecosystem (NMSHE) Department of Science and Technology (DST), Govt. of India, Sanctioned Year - 22.6.2024	Rs. 99.99 Lakh	San d (I yet rece

Academic /Administrative Experience

- **(02)years in Admission and Counselling committee** in Lovely professional university Punjab
- **(1) years in Placement cell** in in Lovely professional university Punjab
- **(1) years in Coordinator in Revising Course Programme** in Lovely professional university Punjab.
- **(02)years in Teachers association committee** in Srinagar ,Garhwal
- **(04) years in Election committee Board in Srinagar, Garhwal**
- **(12)years in Admission and Counselling committee** in HAPPRC HNB garhwal university ,Srinagar ,Garhwal.
- **(12)Member/ Convenor** Department Purchase Committee in HAPPRC HNB garhwal university ,Srinagar ,Garhwal.
- **Member/Convenor** Board of Studies in HAPPRC HNB garhwal university ,Srinagar ,Garhwal.
- **Convenor/Coordinator** Board of Studies in HAPPRC HNB garhwal university ,Srinagar ,Garhwal.
- **Coordinator NEP Course Programme running in HAPPRC**
- **Coordinator and Nodal officer to IQAC HAPPRC (HNBGU)**
- **Coordinator and Nodal Officer to ICAR Team Visit (2024)**
- **Coordinator and Nodal Officer to NAAC –PEER Review Team (2025)**
- **Coordinator Academic Activity since 2023** in HAPPRC HNB garhwal university ,Srinagar ,Garhwal
- **(12) years as Warden** in Alaknanda Girls hostel, Srinagar ,Garhwal.
Hostel received Appreciation during the NAAC team visit among all the hostels in HNB garhwal university ,Srinagar Garhwal.(2025)

Scientific Visits Abroad/International Collaboration

NII

Conference/Symposium/Workshop Attended during last five years

National

- Participated in Advance Training Program on SPSS organized by Department of Statistic, H.N.B.Garhwal University, Srinagar, Garhwal (30th -31st Jan 2014)

- Participated and presented paper in **National Conference on Recent Advances in Biosciences and Drug discovery** organized by Department of Pharmaceutical Sciences held Gurukul Kangri University, Haridwar (3-4 March 2014) .
- Participated in **National Conference on Contemporary Issues In Biotechnology Programs And Future Applications** at Amity university Haryana(2/4/2014).
- Participated in **UGC sponsored 28 days Orientation Training Program** in Laxmi Bai National institute of physical education college at Gwalior from(2/09/14 - 29/09/2014)
- Attended **15 days Hands on training** in Bose Institute ,kolkotta in “Diagonistic of Medicinal potential and DNA Fingerprinting In plants” from 1-15 November 2016
- Participated in **UGC sponsored 21 days Refresher course Program** in University of Calcutta at Kolkotta from (23/12/2016 – 13/01/ 2017)
- Participated in National Conference in Uttaranchal university at Dehradun in 27/02/17-28/02/017)
- Participated in **Rajasthan Science Congress** on Science & Technology for Sustainable Development of State of Rajasthan at Rajasthan in 13/10/17 -15/10/17.
- Participated in **Short Term course** on Open Educational Resources in higher Education. in H.N.B Garhwal University. (04/09/2017 – 09/09/ 2017).
- Participated in **Short Term course** on Moocs and E-content Development in University of Jammu held on (22/10/2018 – 27/10/ 2018).
- Participated in **Short Term course** on Research methodology in H.N.B Garhwal University held on (10/12/2018 – 16/12/ 2018).
- Participated in National conference on **Innovative approaches in microbial Technology(IAMT-2019)** in Gurukul kangri Haridwar held on (08/03/2019 – 09/03/2019).
- Participated in National conference on **Challenges and opportunities in research and development in pharmaceutical and Biological sciences** in IDPL Rishikesh. held on 07/11/19.
- Participated in **Refresher course Program** on Multidisciplinary Approaches to address environmental issues: Emerging Trends in physical ,Biological and social sciences in H.N.B Garhwal University held on (12/09/2019 – 25/09/ 2019).
- Participated in **One week Short Term course organized by UGC sponsored MMTTC** on Water management and traditional Knowledge in Allahabad University held on (16/10/2024 – 22/10/24)
- Participated in **One week Short Term course course organized by UGC sponsored MMTTC** on e content development using ICT in Ranchi University held on (18/09/2024 – 24/09/24).

- Participated in **One week Short Term course organized by UGC sponsored MMTTP** on Nurturing future leadership Programme in IIM BodhGaya held on (11/11/2024 – 15/11/24).
- Participated as a invited speaker cum expert paper entitled **“Alpine Meadows”** under the theme Advances, Opportunities and Challenges in Plant and Agricultural Science in **National Conference on Trending Biotechnological Interventions to Address and Combat Himalayan biodiversity challenges** jointly organised by Uttarakhand Council for Biotechnology; Society for Plant Research Graphic Era Hill University, Dehradun & Directorate of Cold Water Fisheries Research, Bhimtal during 6-8 March, 2024 at Reginal Centre, Patwadangar, Nainital.
- Presented a Paper entitled **“Livelihood Generation by Medicinal Plant”** in the **One Day National Workshop on Livelihood Generation, Entrepreneurship Development & Women Empowerment Through Production & Processing of Millets in Uttarakhand: Opportunities & Challenges** Organised by Department of Economics, H.N.B.G.U. at Academic Activity Centre, Chauras Campus, H.N.B Garhwal University on 27 Feb, 2024.
- Participated as a Speaker in the **International Conference on Medicinal Plants** held on 14-15 December, 2024 at Dehradun, Uttarakhand sponsored by National Medicinal Plants Board, Ministry of AYUSH, Govt. of India.
- Participated and Presented an Oral Paper on topic Titled **“Comparative study on the biochemical...obtain from Uttarakhand”** during two-day **National Conference on Academia-Industry Interface for Promoting Entrepreneurship in medicinal and aromatic plants (PEMAP-2023)** Sponsored by National Medicinal Plants Board (Ministry of AYUSH, Govt. of India) organized by Department of Botany, Central University of Jammu on 24-25 August,2023.
- Has Awarded the Appreciation award in **UCOST** sponsored **National Seminar on Cultivation, Conservation and Sustainable Utilization of Medicinal Plant and Uttarakhand** organized by Department of Botany, DBS (P.G.) Collage, Dehradun, During 17 Feb, 2025.
- Participated and Presented an Oral Paper on topic Titled **“Medicinal Plant Conservation”** in **National Conference on Traditional and Modern Research in Science and Technology (TAMRST – 2022)** organized by ITS, Haridwar & IPGA, State Branch Uttarakhand on 08 Oct, 2022.
- Participation as a Resource Person in **“Two Day Regional Workshop Cum Training Programme”** on **Cultivation, Value Addition and Market Integration of Medicinal and Aromatic Plants** the Event Jointly organised by High Altitude Plant Physiology Research Centre and Regional Cum Facilitation Centre, Northern Region- I, Joginder Nagar, Distt- Mandi (H.P.) on 20-21 Feb, 2025.

Total Number of Research Publications

- Chandra,H, **Patni,B** ,Srivastava,J Nautiyal,A.R and Nautiyal M.C. **2014** . 16s RNA gene sequencing *Bacillus cereus* HAPPRC B4 was done and gene sequencing was submitted to Gene bank, NCBI, USA (Submission ID 1734312) (Accession number KM036215)
- Chandra,H.,**Patni,B.**, Srivastava,J., Nautiyal,A.R and Nautiyal M.C. **2014**. 16s RNA gene sequencing of *Achromobacter xylosoxidans* HAPPRC K4 was done and sequence is submitted to Gene bank, NCBI, USA (Submission ID 1734319) (**Accession number** KM036216)
- Sharma,A.,**Patni, B.**, Shankhdhar,D and Shankhdhar,SC. **2015**. Evaluation of different PGPR strains for yield enhancement and higher Zn content in different genotypes of rice (*Oryza sativa*.L).*Journal of plant nutrition*. 38(3):456-472 (**Impact factor 0.59**)
- **Patni,B** and Chandra,H. **2016**. Identification of phytochemical contents and antimicrobial activity in saraca asoka leaf extract leaves *Environment conservation journal*.17(3):17-24.
- Chandra,H., Dobhal,P., **Patni,B** and AR nautiyal **2016**.Antagonistic effect of *Pseudomonas spp.* isolated from rhizospheric soil of *Picrorhiza kurrooa* (kutki) against phytopathogenic fungi ,Medicinal Plants - *International Journal of Phytomedicines and Related Industries*. : 8(4)
- Chandra,H.,Bishnoi,P.,Yadav,A.,**Patni,B.**,Mishra,A.P.andNautiyal,A.R.**2017**.Antimicrobial Resistance and the Alternative Resources with special Emphasis on Plant-Based Antimicrobials—A Review. *Plants* 10(2):1-11.(**Impact factor 2.6**)
- Agarwal,C, Guru,S.K and **Patni,B.** **2017**. Bioefficacy of herbicides and eucalyptus oil for weed Management and their effect on crop growth in rice (*oryza sativa* L.) *J of plant development sciences* .9(11):991-997.
- Chandra,H, Negi,L **Patni,B.**, Maurya,V.K and Pandey,I.P. **2017**. Phytochemical Evaluation and Antimicrobial Activity of *Zanthoxylum armatum* DC, *Solanum nigrum* and *Coriandum Sativum* *UJPAH*. 2(23):24-28.
- Chandra,H .,Yadav,A., Prasad,R and **Patni,B.** **2017**. Assessment of microbiological quality of raw medicinal plants used for the preparation of Ayurvedic drugs *Medicinal Plants* .9 (4) :296-300.
- Thakur,A., Agarwal,C., Rana,K .,Singh,M and **Patni,B.****2017**. In vitro antimicrobial activity and phytochemical analysis of two species of *Saraca asoca*. *J. Mountain Res*. 12(1) :119-127.
- **Patni,B** Panwar,A,S., Negi,P. and Joshi G.K. **2018**. Plant growth promoting traits of psychrotolerant bacteria: A boon for agriculture in hilly terrains. *.Plant Science Today* 5(1): 24-28.
- **Patni,B** Chandra,H .,Mishra,A,P., Guru,S.K., Vitalini,S., and Iriti,M. **2018**. Rice allelopathy in weed management-An integrated approach. *Cellular and molecular biology*.64(8) :84-93.(**Impact factor 1.3**)
- **Patni ,B.**, Guru,S.K., Iriti,M and Vitalini,S. **2019**. Elicitation of the Allelopathic Potential of Rice by Methyl Salicylate Treatment.. *Applied science*. 9, 4881;doi:10.3390/app9224881.(**Impact factor 2.2**)

- Singh, P., Bhattacharyya, M. and **Patni, B.** 2020. In-vitro exploration of significance of salinity stress in enhancing the antioxidant capacity of *Rauwolfia serpentina* (L.). *Plant cell biotechnology and molecular biology* 21(15-16), 89-97
- Thapliyal, J., **Patni, B.** 2020. Environmental change and health impact associated with COVID-19 in India. *Bioinfolet, A Quarterly Journal of Life Sciences*. 17(2), 240–245
- Singh, P. and **Patni, B.** 2020. Elucidating the effect of salinity stress in enhancing the phenolic acid content in *Rauwolfia Serpentina* in vitro. *Journal of stress physiology and Biochemistry*. 16(3), 103–110.
- Kumar, S., Singh, K., Joshi, A., Gautam, A. S., **Patni, B.** and Panwar, M. S. 2020. A review of studies on coronavirus (COVID – 19) and its transmission. *Journal of science and technological researches*. 2(1).
- **Patni, B.** 2020. Rice allelopathy: Potential power for weed suppression. *Bioinfolet-A Quarterly Journal of Life Sciences*. 17(2) 284-289.
- Bhattacharyya, M. and **Patni, B.** 2020. Plant lectins have antagonist effect against corona virus family : natural products can control coronaviral infections : A review. *International journal of agricultural technology*. 16(5):1077-1088.
- **Patni, B.** 2020. Elucidating the Significance of Nitrogen requirements in Rice Cultivation: Review. *Jour Pl Sci Res* 36 (1-2) 1-9 2020
- Bhattacharyya, M. and **Patni, B.** 2020. Effect of salinity stress on growth performances, cellular responses and antioxidant production capacity of medicinal plants. *Jour Pl Sci Res* 36 (1-2), 285-291.
- **Patni, B.**, Thapliyal, J. and Gautam, A. S. 2020. Elucidating The Effect Of Aerosol Particles On Plants. *International Journal of Disaster Recovery and Business Continuity* 11(1):3054–3074.
- Singh, D., Gautam, A. S., **Patni, B.** and Nautiyal, A. 2020. Impact Assessment of COVID-19 Outbreak on Higher Education in India. *International Journal of Management (IJM)* 11 (9). 429-434
- **Patni, B.** 2020. Effect of Foliar Application of Methyl Salicylate (MeSA) on Antioxidant Ability Depicting the Role in Allelopathic Potential of Rice Genotypes. *Journal of stress physiology and Biochemistry* 16 (4):49-53.
- Ansari, S., **Patni, B.** and Bains, G. 2020. Quantitative Evaluation of Rice (*Oryza sativa* L.) Under High Temperature Stress. *Journal of stress physiology and Biochemistry*. 16 (4):5-12
- Tamta, P. and **Patni, B.** 2020. Elucidating the Role of Secondary Metabolite and Reactive Oxygen Species in High-Temperature Stress on Medicinal Plants. *Journal of stress physiology and Biochemistry*. 16 (4):13-21
- Singh, P. and **Patni, B.** 2020. Comprehensive study on Role of Allelopathic potential in Medicinal plants. *Bioinfolet-A Quarterly Journal of Life Sciences*. 17(4):533-539.
- Rana, B., Bhattacharyya, M., **Patni, B.** and Joshi, G. K. 2021. The Realm of Microbial Pigments in the Food Color Market. *Frontiers in Sustainable Food Systems*. DOI: 10.3389/fsufs.2021.603892.
- **Patni, B.**, Saklani, K., and Chandola, P. 2021. Suitable traits responsible for competitive ability in rice: An overview. *Plant Cell Biotechnology and Molecular Biology* 22(39-40):1-8; 20.
- Ansari, S. and **Patni, B.** 2021. Effect of Salicylic Acid on *Valeriana wallichii* DC syn *Valeriana jatamansi* Jones under Drought Stress. *Research Journal of Agricultural Sciences An International Journal*. 12: 733–738.
- Jamloki, A., Bhattacharyya, M., Nautiyal, M. C., & **Patni, B.** (2021). Elucidating the relevance of high temperature and elevated CO₂ in plant secondary metabolites (PSMs) production. *Heliyon*, 7(8), e07709. <https://doi.org/10.1016/j.heliyon.2021.e07709>

- **(Impact factor-2.8)**
- **Patni B.,**Bhattacharyya M., kumari A. and Purohit V.K. **(2021)** .Alarming influence of climate change and compromising quality of medicinal plants. *Plant Physiology Reports*. (Accepted) **(Impact factor-1.0)**
- Bhattacharyya, & **Patni, B. (2021)**. Prediction of Future World on The Basis of High Heat conditions on Plant Metabolism. *Journal of Stress Physiology & Biochemistry*, 17(4).72-76.
- P Chandola, SK Guru, M Bhattacharyya, B Patni. **2022**. Effect of Pre-Emergence Herbicides on Rice (*Oryza sativa* L.) and Rice Field Microflora. *BIOINFOLET-A Quarterly Journal of Life Sciences* 20 (2a), 144-146
- S Prakash, D Shah, D Jangpangi, **B Patni. 2022**. Exploring Regenerative Mechanisms: Comparative Analysis of Callus Induction and Shoot Regeneration in *Valeriana jatamansi* Jones through In-vitro and In-vivo Cultivation *Int. J. Plant Soil Sci* 35 (19), 1495-1502
- Bhattacharyya, M., Jamloki, A., & **Patni, B. (2022)**. Exploring the effects of elevated Carbon dioxide mediated global warming phenomenon in photosynthesis: Challenges and future direction. *International Journal of Global Warming*. (Accepted) **(Impact factor-0.8)**
- Kumar,P., **Patni,B., and Singh,M. (2022)** Wheat Genome Sequence opens new opportunities to understand the genetic basis of frost tolerance (FT) and marker-assisted breeding in wheat (*Triticum aestivum* L.) *Journal of Stress Physiology & Biochemistry*.18(1)17-27.
- Thapliyal,J., Bhattacharyya,M., Prakash,S., **Patni,B** • Gautam,S • Gautam.A.S. **(2022)**.Addressing the relevance of COVID–19 pandemic in nature and human socio-economic fate. *Stochastic Environmental Research and Risk Assessment* <https://doi.org/10.1007/s00477-022-02191-5> . **Impact factor-3.8)**
- Kumari.A., Lakshmi.L.K., Krishna,G.K .,**Patni, B.** Prakash,S., Bhattacharyya,M.,Singh,S,K and Verma.K. **2022** .Climate Change and Its Impact on Crops: A Comprehensive Investigation for Sustainable Agriculture. *Agronomy* 12(12).**Impact factor-3.9)**
- Verma,R.K., Prakash,S and **Patni ,B.2023**. Role of liquid PGPR in *Rosmarinus officinalis* L. *Bioinfolet* .19(4) 367-370.
- **Patni,B.,**Bhattacharyya,M.,and Pokhriyal, A.,Prakash,S. **2023**. The role of signaling compounds in enhancing rice allelochemicals for sustainable agriculture: an overview. *Planta* .258 (5), 90. **(Impact factor-4.8)**
- Nawaz,S ., Kaur,P., Konjengbam,M., Kumar,V., Gupta,R.C., Dwivedi,P., Patni,B. **2023**. Corrigendum to “Screening of elite germplasms for industrially valuable medicinal crop *Stevia rebaudiana* for stevioside and rebaudioside A production: An HPTLC-linked .*South African Journal of Botany* 163, 809. **(Impact factor-3.1)**
- *Pokhriyal, A.,Prakash,S and Patni,B. 2023*. Comparative Study on the Biochemical Profile and Antioxidant Activity of *Picrorhiza kurroa* Rolye ex Benth. Obtained from Uttarakhand. *Evidence-Based Complementary and Alternative Medicine*.**(Impact factor-2.7)**

- S Prakash, D Shah, D Jangpangi, **B Patni. 2023.** Exploring Regenerative Mechanisms: Comparative Analysis of Callus Induction and Shoot Regeneration in *Valeriana jatamansi* Jones through In-vitro and In-vivo Cultivation. *International Journal of Plant & Soil Science* 35 (19), 1495-1502.
- P Tamta, **B Patni .2023.** Exploring the role of high-temperature stress on medicinal plants: A review. *Journal of Stress Physiology & Biochemistry* 19 (3), 16-23.
- A Pokhriyal, VK Purohit, **B Patni.2023.** *Paris polyphylla* (Satwa): Medicinal herb of Himalayas
- *BIOINFOLET-A Quarterly Journal of Life Sciences* 20 (4), 635-638
- S Prakash., A Singh, H Chandra., A Yadav., SJS Kalra., AR Nautiyal., B Patni. **2023.** Effect of plant growth promoting rhizobacteria, *Bacillus cereus* and *Pseudomonas aeruginosa* on early seedling growth and seed germination of *Cinnamomum tamala*. *Medicinal Plants-International Journal of Phytomedicines and Related industries.*
- **Patni,B.,*** Bhattacharyya,M., Pokhriyal,A and Pandey,D.**2025.** *Remedying SARS-CoV-2 through nature: a review highlighting the potentiality of herbs, trees, mushrooms, and endophytic microorganisms in controlling Coronavirus* *Planta* 261 (4), 1-20. **Impact factor-4.8).**
- Chauhan J., Kumar, R.R .,Purohit,V.K., **Patni,B. 2025***.Environmental Monitoring and Assessment.. *Conservation and Ethnomedicinal uses of Zanthoxylumarmatum* DC. Through Zero budget germination from organic method of an Endangered Medicinal and Aromatic Plant of Indian Himalayan Region. 0.1007/s10661-025-13848-3711a6ce2-cf78-4326-9f94-f5e8c44d342f. **Impact factor 2.9).**
- Tamta,P. and **Patni,B.* 2025** Green Synthesis of Nanoparticles using Plant Parts: A Bridging System in Innovative Medicine. *Research Journal of Agricultural Sciences* 16(02) 134–137.
- Tamta,P. and **Patni,B.* 2025** Unveiling the devastating repercussions of forest fires and their ecological impact in Uttarakhand. *International journal of novel research and Development.*9(8)64-69.
- **Jangpangi,D., and Patni,B.* 2025** Medicinal plants in a changing climate: understanding the links between environmental stress and secondary metabolite synthesis. *Front. Plant Sci, Sec. Plant Abiotic Stress.*13(<https://doi.org/10.3389/fpls.2025.1587337>). **Impact factor 5.0**

BOOK chapter in proceedings/conference

Malini Bhattacharyya , Nirjhar Bhattacharyya, Krishnendu Debnath , Ambika Kandpal , Abhishek Jamloki , A.R. Nautiyal , **Babita Patni. 2021** .Role of Survey Research for The Assessment of Medicinal Usage of Four Economically Important Plants in The Garhwal Himalaya, Uttarakhand.

Santosh kumar singh, Aradhana Kumari and **Babita patni. 2020.**Seaweed as alternative organic fertilizer for crop nutrition: mode on agri entrepreneurship.Published in **Souvenir** on Motivation of youth towards Agri-entrepreneurship and innovative farming on July **2020 from** Jawaharlal Nehru krishi Vishwa Vidyalaya,Jabalpur **M.P.**

Book chapters in edited book

AUTHOR NAME	Title of the Book	Title of Book Chapter	Page Number	ISBN	Name of publisher	Year
Dr. S.K. Singh, Dr. Krishan Pal, Dr. Hari Om Sharma, Dr. Jai Pal and Babita Patni	Green initiative and sustainable development	CLIMATE CHANGE : IMPACT & SOLUTION	58-60	978-81-942503-2-6	Learning Media Publication Meerut	2020
Himanshu Kumar, Ashwani Jangra, Jai Prakash Kadian, and Babita Patni.	Green initiative and sustainable development	TOXICOLOGICAL EVALUATION S OF RARE EARTHS ELEMENTS AND THEIR HEALTH IMPACTS TO WORKERS	233-245	978-81-942503-2-6	Learning Media Publication Meerut	2020
Babita Patni , Machiavelli Singh, S.K. Singh, Ashwani Kumar and Vijay Kant Purohit	Recent Advancements in Sciences with Special Reference to Himalaya	Nitrogen: A Key Nutrient for Rice Production	155-163	978-93-84866	Ancient publishing house ,New delhi	2019
Megha mittal, Babita patni , manju Sharma, Machiavelli Singh	Trends in Technology, for or Agriculture ,Food ,environment and health. (Agrobios International)	Role of endophytes in development Nutrient acquisition ,and tolerance to Abiotic stress in host plant)	417-432	978-93-81191-22-4	Agrobios International	2020

Soban Prakash, Malini Bhattacharyya and Babita Patni	Immunity a weapon for Viral and microbial illness	Herbal preparations for boosting Immunity.		978-93-81191- 22-4		2021
<u>Aradhna Kumari, Santosh Kumar Singh, M.S. Mikhina, Babita Patni, G.K. Krishna</u>	Melatonin as a Key Regulator of Plant Growth and Development	Advancement of Melatonin Research in Plants	1-16	eBook ISBN9781003 343752	CRC press Taylor and Francis group	2023

Awards And Honours

- Awarded “Excellence in education and research” in National conference entitled **Challenges and opportunities in research and development in pharmaceutical and Biological sciences** in IDPL Rishikesh. held on 07/11/19.
- Awarded “Outstanding performance in education and research” in International conference entitled **Modern approaches in research in Applied sciences** in IGPA Haridwar held on 04/12/21.
- Has Awarded the Appreciation award in **UCOST** sponsored **National Seminar on Cultivation, Conservation and Sustainable Utilization of Medicinal Plant and Uttarakhand** organized by Department of Botany, DBS (P.G.) Collage, Dehradun, During 17 Feb, 2025.
- Appreciation certificate as a Speaker in the **International Conference on Medicinal Plants** held on 14-15 December, 2024 at Dehradun, Uttarakhand sponsored by National Medicinal Plants Board, Ministry of AYUSH, Govt. of India.