Curriculum Vitae

Full Name:	**DR. T. S. BISHT**		
Designation:	Assistant Professor		
Department:	Horticulture		
Campus:	Chauras Campus		
Telephone:	01370267603	**Fax:**	
Mobile:	+91 9412938995		
Email	tejpalbisht23@gmail.com		
Education Qualification:	B.Sc. M.Sc., Ph.D. in Horticulture with specialization in Fruit Science		
Teaching Experience:	10 Years	**Research Experience:**	10 Years

Research Interest and Fields of Specialization

1. Horticulture
2. Fruit Science
3. Post-Harvest Management
4. *In-Vitro* Propagation
5. Under Utilized Horticultural Crops

Honours & Awards

1. Young Scientist Award (2016)
2. Scientist of the Year Award (2017)
3. Himadri Young Scientist Award (2019)
4. Young Horticulturist Award (2021)
5. Outstanding Achievement Award (2021)
6. Excellence in Research Award (2022)

Membership of professional societies:

1. Life Member: Indian Society for Horticultural Research and Development
2. Life Member: Society for Horticultural Research and Development
3. Life Member: Indian Society of Hill Agriculture
4. Life Member: Society for Scientific Development in Agricultural& Technology

Research Supervision (M.Sc. Research Supervision): 16

Research Projects

A) Project handled as principal investigator

1. National Initiative on Climate Resilient Agriculture (NICRA) from 27/09/2014 to 19/07/2015 funded by ICAR
2. All India Coordinated Research Project on Vegetable Crops (AICRP on Vegetable Crops) from 16/09/2016 to 05/03/2020 funded by ICAR
3. All India Coordinated Research Project on Potato (AICRP on Potato) from 16/09/2016 to 05/03/2020 funded by ICAR
4. All India Network Project on Outreach of Technologies on Temperate Fruits (AINP on Temperate Fruits) from 16/09/2016 to 05/03/2020 funded by ICAR
5. Centre of Excellence for temperate fruits funded by HMNEHS

B) Project completed as co-principal investigator

1. Livelihood development programme of farmers in dam affected areas of district Tehri Garhwal through integrated farming systems approach from Jan 2016 to Jan 2019 funded by SEWA-THDC

C) Ongoing project as principal investigator

1. Demonstration of Modern Fruit Production Technologies for Productivity Enhancement, Promoting Awareness and their Commercial Adaptation in Mid Hills of Uttarakhand funded by HMNEHS

Training programmes/workshops attended

1. Attended **six (06)** days training on "Soil and Water Conservation & Water Harvesting Techniques for Officers/Scientists of KVKs organized at Central Soil and Water Conservation Research & Training Institute from **May 27 to 31, 2014.**

2. Attended **four (04)** days Training Programme on Farmers to Farmer Extension. Organized by National Institute of Agricultural Extension Management, Hyderabad at SAMETI- UK, Pantnagar from **25.11 2013 to 28.11 2013.**

3. Attended **one (01)** day workshop on Kitchen Gardening: Aesthetic to Health, jointly organized by Departments of Horticulture and Vegetable Science on October 17, 2015, G.B.P.U.A &T, Pantnagar.

4. Attended **Twenty-One (21)** days CAFT Training Programme on "Quality seed production of vegetable crops". Organized by YS Parmar University of Horticulture and Forestry, Nauni, Solan, Himanchal Pradesh from **06.09. 2017 to 26.109.2017.**

5. Attended **Twenty-One (21)** days CAFT Training Programme on "Techniques in Bio-fertilizers and Bio-pesticides production for Organic Agriculture". Organized by Centre of Advanced Faculty training in Organic farming, department of Soil Science, Faculty of Agriculture, Assam Agriculture University, Jorhat from **14.11. 2018 to 04.12.2018.**

6. Attended 14 days Faculty Development Programme on "Managing Online Classes and Co-creating MOOCS 3.0" organized by Teaching Learning Centre, Ramanujan College, University of Delhi under the aegis of MHRD *and obtained grade A+ from* **25.07.2020 to 10.08.2020**

7. 31 days Induction/Orientation Programme for "Faculty in Universities/Colleges/Institutes of Higher Education" Teaching Learning Centre, Ramanujan College, University of Delhi under the aegis of MHRD *and obtained grade A+ from* **10.11.2020 to 09.12.2020**

8. 31 days Induction/Orientation Programme for "Faculty in Universities/Colleges/Institutes of Higher Education" Teaching Learning Centre, Ramanujan College, University of Delhi under the aegis of MHRD *and obtained grade A+ from* **20.12.2021 to 09.12.2020**

Publications during last five years (2018-2023)

1. Research papers in referred journals : **Thirty Eight (38)**
2. Review articles in referred journals (NAAS rating) : **Two (02)**
3. Books : **One (01)**
4. Book Chapters : **Four (04)**
5. Laboratory Manuals (Published by Publishers/Institute) : **Two (02)**
6. Popular articles in magazine & others : **Thirty Three (33)**

Research Publications in referred journals

1. Management of Important Endemic Diseases of Barnyard Millet (*Echinochloa frumentacea* L.) by the Use of Bio-Control Agents in Mid Hills of Uttarakhand, India **(2018).** *International Journal of Current Microbiology and Applied Sciences.* **7(2):**64-70. **(NAAS Rating=5.38, ISSN=2319-7706).**

2. Effect of bio-priming and colonized FYM with bio-control agents on quantitative and qualitative traits and disease management in barnyard millet (*Echinochloa crusgalli* L.) **(2018).** *International Journal of Agricultural Sciences*. **14(2):**335-343**. (NAAS Rating=4.82, Citations=1, ISSN= 0975-3710).**

3. Assessment of Genetic Variability and Divergence in Finger Millet Accessions at Mid Hills of Uttarakhand **(2019).** *International Journal of Current Microbiology and Applied Sciences.* **7(11):**2912-2922 (**NAAS Rating=5.38, ISSN=2319-7692).**

4. Screening of Barnyard Millet Germplasm against Shoot Fly and Stem Borer Damage under Field Conditions **(2019).** *International Journal of Current Microbiology and Applied Sciences.* **8(2):**1221-1226 (**NAAS Rating=5.38, ISSN=2319-7692).**

5. An impact assessment of Front-Line Demonstrations on Yield and Economics of Finger Millet and Barnyard Millet under Rainfed Conditions of Uttarakhand **(2019).** *International Journal of Pure & Applied Biosciences.* **7(2):**408-414 **(NAAS Rating=4.74, ISSN=2320-7051).**

6. Enhancement of growth, yield and yield contributing traits with particular reference by using *Trichoderma* and *Pseudomonas* through seed bio-priming technique and value added FYM in finger millet (*Eleusine coracana* L.) under field conditions **(2019).** *Journal of Pharmacognosy and Phytochemistry*. **8(4):**3333-3337 **(NAAS Rating=5.21, ISSN=2349-8234).**

7. Evaluation of promalin doses for improving fruit size, shape and yield of apple **(2019)** *Progressive Research.* **14(4):** *258-261* **NAAS Rating=3.84, ISSN=0973-6417)**

8. Bio-efficacy evaluation of Chlorothalonil 40% w/w + Difenoconazole 4% w/w SC against apple diseases **(2020).** *International Journal of Chemical Studies.* **8(1):** 398-405 **(NAAS Rating=5.31, ISSN=2349–8528).**

9. Efficacy of Pydiflumentofen 7.5% + Difenoconazole 12.5% w/v (200 SC) in combating apple diseases complex in Uttarakhand (2020). International Journal of Chemical Studies. **8(5):**1350-1356 **(NAAS Rating=5.31, ISSN=2349–8528).**

10. Evaluation of Barnyard Millet Advance Lines for Yield, Yield Contributing Traits and Grain Smut Disease at High Hills of Uttarakhand, India **(2020).** *International Journal of Current Microbiology and Applied Sciences.* **9(4):** 387-394 **(NAAS Rating=5.38, ISSN=2319-7692).**

11. Bio-efficacy Evaluation of Tebuconazole 430 SC against Marssonina blotch of apple in Uttarakhand **(2020).** *The Pharma Innovation Journal*. **9(3):** 440-443 **(NAAS Rating=5.23, ISSN=2349-8242).**

12. Management of shoot fly damage in barnyard millet by seed treatment for higher monetary return in hills of Uttarakhand **(2020).** *Journal of Entomology and Zoological Studies.* **8(3):** 1762-1767 **(NAAS Rating=5.53, ISSN=2320-7078).**

13. Scanning electron microscopy indicates *Pseudomonad strains* facilitate AMF mycorrhization in litchi (*Litchi chinensis* Sonn.) air-layers and improving survivability, growth and leaf nutrient status **(2021).** *Current Research in Microbial Sciences*. doi.org/10.1016/j.crmicr.2021.100063, **(Impact factor: 1.609, ISSN: 2666-5174).**

14. Potential of seed biopriming with Trichoderma in ameliorating salinity stress and providing resistance against leaf blast disease in finger millet (Eleusine coracana L.) **(2021).** *Indian Phytopathology*. **8(3):** 1762-1767, doi.org/10.1007/s42360-021-00441-0 **(NAAS Rating=5.95, ISSN=0367-973X).**

15. Improving Germination efficiency in Seabuckthorn (*Hippophae salicifolia* D. Don) seeds through stratification and priming **(2021).** *Frontiers in Crop Improvement.* **9:** 2718-2723 **(NAAS Rating=4.67, ISSN: 2393-8234)**.

16. Pre-Sowing treatments influence germination of two Important edible wild fruit plants (*Myrica esculenta* and *Rubus ellipticus*) of Garhwal Himalayas **(2021).** *Frontiers in Crop Improvement.* **9:** 2087-2094 **(NAAS Rating=4.67, ISSN: 2393-8234).**

17. Effective management strategies against ginger rhizome rot caused by *Fusarium solani* by the application of chemicals, bioagents and Herbal Kunapajala in mid hills of Uttarakhand (2021). *Pantnagar Journal of Research.* **19(3):** 417-428 **(NAAS Rating=5.53, ISSN: 0367-973X).**

18. Management of leaf spot disease in turmeric by using bioinoculants, liquid organic manure and chemicals (2021). *Frontiers in Crop Improvement.* **9:** 2087-2094 **(NAAS Rating=4.67, ISSN: 2393-8234)**.

19. Smart packaging: Modern way for reducing post-harvest losses of horticultural produce **(2021).** *International Journal of Agricultural Sciences*. **17:** 297-305 **(NAAS Rating=4.73, ISSN: 0973-130X)**.

20. Management of Leaf Spot Disease in Turmeric by Using Bioinoculants, Liquid Organic Manure and Chemicals **(2021).** *Frontiers in Crop Improvement*. **9:** 2016-2022 **(NAAS Rating=4.67, ISSN: 2393-8234)**.

Review articles in referred journals

1. A Recent Advances in Use of Plant Growth Regulators (PGRs) in Fruit Crops - A Review **(2018).** *International Journal of Current Microbiology and Applied Sciences. 7***(5):** 1307-1336 **(NAAS Rating=5.38, Citations=9, ISSN=2319-7706).**

2. A novel approach towards the fruit specific waste minimization and utilization - A review **(2018).** *Journal of Pharmacognosy and Phytochemistry.* **2019 9(1):**3333-3337 **NAAS Rating=5.21, ISSN=2349-8234)**

Books

2. **Tejpal Singh Bisht,** Satish Kumar Sharma **(2012). Apricot Oil:** Decortication, Enzymatic Extraction and Storage Technology. **Lambert Academic Publishing. ISSN: 978-3-659-27740-5, Pages: 1-106.**

Book Chapters

1. Plant Disease Management in Organic Farming System: Strategies and Challenges. *In:* **Emerging trends in plant pathology** (Eds. K P Singh et al). Springer Nature. Chapter 27 (2020). Page No. 611-641, ISBN: 978-981-15-6275-4(eBook).

2. Minor Millets: Profile and Ethnobotanical Scenario. *In*: **Millets and Millet Technology** (Eds. Kumar et al). Springer Nature. Chapter 3 **(2021).** Page No. 51-80, ISBN 978-981-16-0676-2 (eBook).

3. Varietal evaluation in okra for yield and yield attributing traits under mid-hill conditions of Garhwal Himalayas *In*: **Advances in Environment Engineering and Management** (Eds. Siddiqui et al). Springer, Cham Chapter 3 **(2021),** Page No. 413-427. ISBN 978-3-030-79065-3, DOI: 10.1007/978-3-030-79065-3_32 (eBook).

4. Strategies for doubling farmer's income in hilly terrains by adapting horticulture based integrated farming agri-entrepreneurship model *In*: **Hi-tech Crop Production and Pest Management** BIOTECH BOOKS **(2021),** Page No. 413-427 ISBN 978-81-7622 (eBook).

Laboratory/Technical Manuals

1. Laxmi Rawat, **Tejpal Singh Bisht,** B. P. Nautiyal and Matthew Prasad **(2017).** Technical Fact Sheets of Important Vegetable Diseases. **VCSG UUHF/DR/2016-17/Technical Mannual-01:1-31.**

2. Laxmi Rawat, Ajeet Kumar Karnatak, **Tejpal Singh Bisht,** B. P. Nautiyal and Matthew Prasad **(2020).** Technical Manual on Establishment of Ultra-high-density Apple Orchard. **UUHF/DR/COE/Technical Mannual-01/2020:1-56.**

Additional academically relevant achievements/information's

- ✓ Team member to developed new Triple cross hybrid of Apple from Ranichauri centre.
- ✓ Team member to developed variety of **Mustard Green/Vegetable Rai (*Brassica juncea* L.) var. UHF VR 12-1 (IC-0598459) and Radish (*Raphanus sativus* L.) var. UHF R 12-1 (IC-0598463)** from Ranichauri centre using as a national check under AICRP.
- ✓ Evaluated elite lines of important underutilized vegetables including Vegetable Rai (*Brassica juncea*), Local Radish, Pahari Palak (Spinacea oleracea), Pahari Kheera (Cucumber) and Meetha Karela (*Cyclanthera pedata)*.
- ✓ Developed cultural practices in Vegetable crops for different situations of Uttarakhand hills.
- ✓ Performed numbers of responsibilities during service period like, OIC Transport, OIC Tissue Culture Lab. OIC Vegetable research block and OIC Fruit research block etc.
- ✓ Having expertise in development of varieties with respect to screening, evaluation, processes and field evaluation with applications for welfare of farmer community with output-based research and development.
- ✓ Well versed with plant bio regulators (PBRs) and its practical uses in different horticultural crops.
- ✓ Having expertise in development of tissue culture varieties, to promote high density apple plantation through production of quality tissue cultured dwarfing apple rootstocks.