## **CURRICULUM VITAE**

Name	:	Dr. RAJESH KUMAR MANHAS	
Designation	:	Associate Professor (since 23.11.2019)	
Father's name	:	Shri Ram Ditta	
Date of birth	:	18th of November, 1974	
Permanent & Mailing address	:	Indira Colony, Ward No. 3, College Road, Kathua (J&K).	
Phone number (Mob) :		9419158504	
Phone number (Mob)	):	9419158504	
Phone number (Mob) WhatsApp	):	9419158504 7889629456	
	): :		
WhatsApp		7889629456	
WhatsApp E–mail address	:	7889629456 manhasrk@rediffmail.com & manhasrk@gmail.com	
WhatsApp E-mail address Language proficiency	:	7889629456 <u>manhasrk@rediffmail.com</u> & <u>manhasrk@gmail.com</u> Dogri, Hindi, and English	

# ACADEMIC QUALIFICATIONS:

Degree	Year	Board/University	Subject/s	% age	Division
D. Phil.	2003	HNB Garhwal University, Srinagar, Uttarakhand.	Botany (Ecology)	_	_
Masters (M. Sc.)	1997	HNB Garhwal University, Srinagar, Uttarakhand.	Botany	67.2	First
<b>Graduation</b> (B.Sc.)	1995	University of Jammu, Jammu, J&K, India	Botany, Zoology, Chemistry, English	67.4	First

## **RESEARCH EXPERIENCE: 7.2 years**

		Period of	
Employer	Post held	Service	Nature of Duty/ies
Principal, DAV (PG) College, Dehra Dun	SRF/JRF	Sept. 1997 to Oct. 1999 (2 yrs and 15 days)	• Effect of fire on biomass and Vegetation Structure.
Principal, DAV (PG) College, Dehra Dun	SRF/JRF	Nov. 1999 to Oct. 2001 (2 yrs)	<ul> <li>Collection of plants from alpine pastures.</li> <li>Effects of Herbivory.</li> <li>Medicinal plants of the pastures.</li> </ul>
Director, FRI, Dehra Dun	Technical Associate in GEF	Nov 2001– Jan 2002 (2 months)	<ul> <li>Socio-Economic Survey of eleven villages of Kumaun (Uttaranchal).</li> <li>Phytosociological studies of the forests of Central Himalaya.</li> </ul>
Director, FRI, Dehradun	Technical Associate in NATCOM	Feb. to July 2002 (6 months)	<ul><li>Carbon estimation of Indian forests.</li><li>Estimation of carbon of 54 plant species.</li><li>Preparation of Report.</li></ul>
Director, FRI, Dehradun	Technical Associate in Sal ANR	27 <sup>th</sup> of January to 24 <sup>th</sup> July, 03 (6 months)	<ul> <li>Forest Survey of Sal ANR areas.</li> <li>Socio-economical survey of these areas.</li> <li>Preparation of Report.</li> </ul>
Director, FRI, Dehradun	Research Associate	25 <sup>th</sup> of July, 2003 to 31 <sup>st</sup> of March, 05 (1.8 yrs)	<ul> <li>To study the impact of disturbances on biodiversity status and resource availability.</li> <li>To find out the carrying capacity of the forests of Kandi Regions of Punjab</li> </ul>
President, SEES	Environment Consultant	9 <sup>th</sup> of April to 31 <sup>st</sup> July, 05 (3 months and 22 days)	<ul> <li>Worked as Environmental Consultant for UEPPCB.</li> <li>Preparation of Appraisals of the entrepreneurs.</li> </ul>

Details of Employment

## **TEACHING EXPERIENCE:** 19 years and 04 months

 Working as Associate Professor in Department of Botany, Govt. Degree College, Kathua, J&K, since 21<sup>st</sup> of October, 2023 = 1 year

Total = 1+2+3+4+5+6+7 = 18 years, 3 months, and 28 days

- Worked as Assistant/Associate Professor in Department of Botany, Govt. Degree College, Basohli, J&K, from 17<sup>th</sup> of May, 2019 to 20<sup>th</sup> of October, 2023 = 4 years, 5 months, and 03 days.
- 6. Worked as Assistant Professor in Department of Botany, Govt. Degree College, Kathua, J&K, from 30<sup>th</sup> of August, 2011 to 13<sup>th</sup> of May, 2019 (7yrs, 8 months & 13 days).
- 5. Worked as Assistant Professor in Department of Botany, G.G.M. Science College, Jammu, J&K, from 13th July, 2011 to 29th August, 2011. (1 month and 16 days).
- 4. Worked as Assistant Professor in Department of Botany, S.P. College, Srinagar, J&K, from 28th Nov, 2007 to 12th July, 2011. (3 years and 7 months and 14 days).
- 3. Worked as Lecturer of Botany (contractual basis) in Govt. Degree College, Kathua from 6th September 2006 to 31st May 2007 (8 months).
- 2. Worked as Lecturer of Botany in Cosmic Heart Senior Secondary School, Kathua, from 1st of June 2006 to 5th September 2006 (3 months).
- 1. Worked as Lecturer of Botany (contractual basis) in Govt. Higher Secondary School, Magloor, Kathua from 30th August 2005 to 29th April 2006 (8 months).

## **MEMBERSHIPS:**

- 1. National Social Service Volunteer.
- 2. Life member of Society for Environmental Protection of India (SEPI), Dehradun.
- 3. Life member of ISCA
- 4. Life member of The Indian Botanical Society
- 5. Member of International Society for Tropical Ecology (Jan, 2012 to Jan, 2019)
- 6. Natural Member of East Himalayan Society for Spermatophyte Taxonomy

## **COMPUTER KNOWLEDGE:**

- 1. Six Month Computer Course in DBASE, Microsoft Windows, MS office, Internet Explorer etc.
- 2. Knowledge of Software:

Ecological packages viz., TWINSPAN, DECORANA, CANOCO etc.

Statistical Packages viz., S – Plus, XL<sup>STAT</sup>, SPSS and Microsoft Excel

## **PUBLICATIONS:** Total 96

#### Papers published in national and international journals (90)

- 90. Yash Paul, Bilques Farooq, and Manhas, R.K. 2024. Population threat assessment of Incarvillea emodi (Bignoniaceae) from the Shiwalik Hills of Jammu Region, India. Journal of Economic & Taxonomic Botany, 48(3): 156.
- 89. Yash Paul, Bilques Farooq, and **Manhas, R.K.** 2024. Evaluation of the threat status of *Aconitum heterophyllum* and *Aconitum ferox* in the high-altitude regions of Kathua district of Jammu & Kashmir, India. Medicinal Plants, 16(4): 585-592.
- 88. Yash Paul, Bilques Farooq, and **Manhas, R.K.** 2024. Traditional phyto-remedies used by the Midwives for the Treatment of Uterine Prolapse in Billawar and Basohli tehsils of district Kathua, Union Territory of Jammu and Kashmir, India. *Indian Forester*, 150(7): 663-669.
- Parasher, M, Pandey, D.K., and Manhas, R.K. 2024. Traditionally used anti-diabetic plants in Kathua district of Union Territory of Jammu and Kashmir, India. *Journal* of Ethnopharmacology, 319, 117087. Impact Factor, 5.4
- 86. Singh, B.P., Devashree, Y., Sharma, V. and Manhas, R.K. 2023. Diversity of wild edible plants and fungi consumed by seminomadic Gaddi and Sippi tribes in Doda district of Union Territory of Jammu and Kashmir. *Ethnobotany Research and Applications* 25:61.
- Kumar, K., Manhas, R.K., Singh, S.P., and Bhatia, H. 2023. Traditional phytoremedies for the treatment of vitiligo in Udhampur, J&K, India. Indian Journal of Traditional Knowledge, 22(1): 167-181
   Impact Factor, 0.8
- 84. Bhagat, N., Upadhyay, H., Manhas, R.K. and Gupta, S.K. 2022. Wild Edible Plants of Purmandal block of District Samba, J&K (UT), India. *Ethnobotany Research and Applications*, 24:12
- Wani, M.A., Manhas, R.K. and Singh, Y.P. 2022. Incident precipitation, throughfall and stemflow chemistry in *Pinus wallichiana* A.B. Jack. stand in Dal Lake catchment, Srinagar, J & K, India. *Indian Forester*, 148(8): 663-671.

- Sharma, R., Sharma, N., Manhas, R.K. and Nanda, R. 2022. Spatial Distribution and Floristic Composition of Overstorey Vegetation in *Zanthoxylum armatum* DC. inhabited sites of Union Territory of Jammu & Kashmir, India. *Indian Forester*, 148(7): 746-753.
- Sharma, Y.P., Hashmi, S.A.J., Sharma, R., Kumar, S. and Manhas, R.K. 2022. Macrofungal diversity and distribution in Kishtwar High Altitude National Park, Jammu and Kashmir, India. *Current Science* 122(12): 1415-1425. doi: 10.18520/cs/v122/i12/1415-1425
- 80. Sharma, R., Sharma, Y.P., Hashmi, S.A.J., Kumar, S. and Manhas, R.K. 2022. Ethnomycological study of wild edible and medicinal mushrooms in district Jammu, J&K (UT), India. Journal of Ethnobiology and Ethnomedicine 18:23. <u>https://doi.org/10.1186/s13002-022-00521-z</u> Impact Factor, 3.4
- 79. Singh, B.P., Devashree, Y. and Manhas, R.K. 2021. Ethnomedicinal plants belonging to Asteraceae used by Tribal communities of Union Territory of Jammu & Kashmir, India – a review. *Pleione* 15(3): 317-331.
- 78. Khajuria, A.K., Manhas, R.K., Kumar, H. and Bisht, N.S. 2021. Ethnobotanical study of traditionally used medicinal plants of Pauri district of Uttarakhand, India. *Journal of Ethnopharmacology*, 276: https://doi.org/10.1016/j.jep.2021.114204 Impact Factor, 5.4
- 77. Gupta, S.K. and Manhas, R.K. 2021. *Sinopodophyllum hexandrum* (Royle) T.S Ying: An Endangered Medicinal Plant Species in Indian Himalayan Region A Review. *Bulletin of Environment, Pharmacology, and Life Sciences*, 10(8): 55-64.
- 76. Sharma, Roshi, Sharma, Y.P., Kumar, S., Hashmi, S.A.J. and Manhas, R.K. 2020. Diversity and distribution of wild fleshy fungi in district Jammu, J&K, India. Indian Forester, 146 (6): 524-531.
- 75. Singh, B.P., Devashree, Y. and **Manhas, R.K.** 2020. Ethnobotanical documentation of wild edible fruits (WEFs) used by *Gaddi* tribe of district Doda, J&K (North West Himalayas). *Journal of Biosphere*, 9: 1-6.
- 74. Khajuria, A.K., Chandra, S., Manhas, R.K., and Bisht, N.S. 2019. Effect of different PGRs on in vitro organogenesis in *Viola canescens* Wall. ex. Roxb. from petiole callus culture. *Vegetos* 1-10.
- 73. Khajuria, A.K., Bisht, N.S., Manhas, R.K. and Kumar, G. 2019. Callus mediated biosynthesis and antibacterial activities of zinc oxide nanoparticles from *Viola* canescens: an important Himalayan medicinal herb. SN Applied Sciences, https://doi.org/10.1007/s42452-019-0426-3. Impact Factor, 2.6
- 72. Bhatia, H., Sharma, Y.P., Manhas, R.K., Kumar, K. 2018. Traditionally used wild edible plants of district Udhampur, J&K, India. Journal of Ethnobiology & Ethnomedicine, https://doi.org/10.1186/s13002-018-0272-1. Impact Factor, 3.4
- 71. **Manhas, R.K.** and Chauhan, P.S. 2017. Classificatory analysis and diversity relations in shrub layer of *Shorea robusta* Gaertn. f. forests of Doon Valley. *Journal of Biosphere*, 6: 6-17.
- Kumar, Kewal, Sharma, Y.P., Manhas, R.K. 2016. Traditional Usages of Grasses by the Locals Living Around Shankaracharya Hill, Srinagar, J&K, India. American Journal of Ethnomedicine 3 (3), 2348-9502.
- 69. Kumar, Kewal, Sharma, Y.P., **Manhas, R.K.** 2016. Parasitism of Orobanche alba on *Thymus serphyllum*: A new report from India. *Indian Forester*, 142 (7): 704-705.
- Gautam, M.K., Manhas, R.K. and Tripathi, A.K. 2016. Overstory structure and soil nutrients effect on plant diversity in unmanaged moist tropical forest. Acta Oecologica, 75: 43–53.
   Impact Factor, 1.8
- Mehta, L.C., Jitendra, S., Chauhan, P.S., Bhim, S. and Manhas, R.K. 2016. Biomass accumulation and carbon storage in six-year-old *Citrus reticulate* Blanco. Plantation. *Indian Forester*, 142 (6): 563-568.
- 66. Gautam, M.K., **Manhas, R.K.** and Tripathi, A.K. 2016. Patterns of diversity and regeneration in unmanaged moist deciduous forests in response to disturbance in

Shiwalik Himalayas, India. Journal of Asia-Pacific Biodiversity, 9(2); 144–151.

#### **Impact Factor**, 0.8

- Rao P.K, Hasan, S.S., Bhellum, B.L and Manhas, R.K. 2015. Ethnomedicinal plants of Kathua district, J&K, India. *Journal of Ethnopharmacology*, 171: 12–27. Impact Factor, 5.4
- 64. **Manhas, R.K.**, Singh, S.P., Rao, P.K. and Singh, H. 2015. Some Ethnomedicinal Plants of Nagrota Village of Basohli, Kathua, J&K, India. *Journal of Biosphere*, 4: 17-20.
- 63. Chauhan, P.S., Porwal, M.C., Negi, J.D.S. and **Manhas, R.K**. 2015. Change detection during 1959 to 1999 (40 yrs.) for Barkot forest range and its peripheral area, Dehradun, India. *Journal of Biosphere*, 4: 11-16.
- 62. Singh, H., **Manhas, R.K.**, Chandan, V. and Singh, S.P. 2015. Ethnomedicinal plants of Tehsil Nowshera, District Rajouri, J&K, India. *Journal of Biosphere*, 4: 5-10.
- 61. Devi, Ashni, Rao, P.K. and **Manhas, R.K.** 2015. Liverworts and Hornwort Flora of District Kathua. *Journal of Biosphere*, 4: 1-4.
- Kumar, Kewal, Sharma, Y.P., Manhas, R.K. and Bhatia, H. 2015. Ethnomedicinal plants of Shankaracharya Hill, Srinagar, J&K, India. *Journal of Ethnopharmacology*, 170: 255–274.
   Impact Factor, 5.4
- 59. Sharma, R. and Manhas, R.K. 2015. Ethnoveterinary plants for the treatment of camels in Shiwalik regions of Kathua district of Jammu & Kashmir, India. Journal of Ethnopharmacology, 169: 170–175. Impact Factor, 5.4
- 58. Bhatia, H., Sharma, Y.P., Manhas, R.K., Kumar, K. 2015. Traditional phytoremedies for the treatment of menstrual disorders in district Udhampur, J&K, India. Journal of Ethnopharmacology, 160: 202-210. Impact Factor, 5.4
- 57. Kait, R., **Manhas, R.K.**, Aggarwal, S. and Sahi, D.N. 2014. Birds of Srinagar City, Jammu and Kashmir, India. *International Journal of Biodiversity and Conservation*, 6(3): 217-221.
- 56. Tomar, Anita, Manhas, R.K., Srivastava, R.K. and Vasistha, H.B. 2014. Fruit and seed characters of some valuable lesser known plants of Uttarakhand Himalayas. Annals of Forestry, 22(2): 189-194.
- 55. **Manhas, R.K.**, Kumar, K. and Chiwan, A.A. 2014. Species diversity and biological spectrum of the flora of Sri Pratap College, Srinagar, J&K, India. *Journal of Biosphere*, 3 (1): 1-10.
- Bhatia, H., Manhas R.K., Kumar, K. and Magotra, R. 2014. Traditional knowledge on poisonous plants of Udhampur district of Jammu and Kashmir, India. Journal of Ethnopharmacology, 151 (4): 207–216. Impact Factor, 5.4
- 53. Bhatia, H., Sharma, Y.P., Manhas, R.K. and Kumar, K. 2014. Ethnomedicinal plants used by the villagers of district Udhampur, J&K, India. Journal of Ethnopharmacology, 151 (2): 1005–1018. Impact Factor, 5.4
- Gautam, M.K., Manhas, R.K. and Tripathi, A.K. 2014. Plant species diversity in unmanaged moist deciduous forest of Northern India. Current Science, 106(2): 277-287.
   Impact Factor, 1.0
- 51. Bhatia, H., **Manhas, R.K.,** Kumar, K. and Magotra, R. 2013 Some new additions to the poisonous plant flora of the World. *Journal of Biosphere*, 2: 74-77.
- Singh, Hardial and Manhas, R.K. 2013. Guava: Nature's Gift to Mankind. Journal of Biosphere, 2: 72-73.
- Rawat, L., Manhas, R.K., Kholiya, D. and Kamboj, S.K. 2013. Floristic Diversity of Kandi region of Hoshiarpur, Punjab, India. Applied Ecology and Environmental Sciences, Vol. 1, No. 4, 49-54.
- Rawat, Megha, Vasistha, H.B., Manhas, R.K. and Negi, M. 2013. Floristic diversity of Kunjapuri sacred grove, Western Himalaya, India. *Journal of the Bombay Natural History Society*, 110(1): 57-64.

47. Manhas, R.K. 2013. The dwindling glory of Chinar. *Current Science*, 104(11): 1466. Impact Factor, 1.0

- 46. Tomar, Anita, **Manhas, R.K.** and Srivastava R.K. 2012. Seed germination studies in *Gentiana kurroo* Royle-An endangered medicinal herb. *Journal of Medicinal and* Aromatic Plant Sciences, 34 (3&4): 168-171.
- 45. Tomar, Anita, **Manhas, R.K.**, Srivastava, R.K. and Vasistha, H.B. 2012. Growth Performance of Macroproliferated Plants of *Gentiana kurroo* and *Cyrtomium caryotideum* at Two Different Sites. *Indian Forester*, 138 (11): 1063-65.
- 44. Wani, M.A. and **Manhas, R.K.** 2012. Rainfall interception in relation to the tree architecture of *Pinus wallichiana* A.B. Jackson. *Current Science*, 103(7): 821-827.

#### **Impact Factor**, 1.0

- 43. **Manhas, R.K.** and Rao, P.K. 2012. *Butea monosperma* (Lamk.) Taub.: A medicoreligious tree of Kandi region of Jammu and Kashmir. *Journal of Biosphere*, 1: 51.
- Sharma, R., Manhas, R.K. and Magotra, R. 2012. Ethnoveterinary Remedies of Diseases among Milk Yielding Animals in Kathua, Jammu and Kashmir, India. Journal of Ethnopharmacology, 141 (1): 265–272. Impact Factor, 5.4
- Chauhan, L.S., Sharma, N. and Manhas, R.K. 2011. Phytosociological study of bamboo plantation and natural forest of Kalsi Forest Division of Doon Valley. *Indian Journal* of Forestry, 34(2): 143-150.
- 40. Tomar A, **Manhas R.K.**, Srivastava R.K. 2011. Macroproliferation of *Gentiana kurroo* Royle. *Int. J Green Pharm*, 5(2): 138-140.
- Kumar, Kewal, Manhas, R.K. and Magotra, R. 2011. The Shankaracharya sacred grove of Srinagar, Kashmir, India. *Current Science*, 101 (3): 262-263. Impact Factor, 1.0
- 38. Gautam, M.K., Raina, A.K., Manhas, R.K., Tripathi, A.K. and Gupta, M.K. 2011. Sand and Clay Mineralogy of Sal Forest Soils of the Doon Siwalik Himalayas. Journal of Earth System Science, 120 (1): 123-144. Impact Factor, 1.9
- Manhas, R.K., Chauhan, P.S., Mukesh, Singh, Lokender and Negi, J.D.S. 2011. Structure and Diversity of 80-yr-Old Plantations after successional colonization of the natives. *Current Science*, 100(5): 714-725. Impact Factor, 1.0
- Rawat, Megha, Vasistha, H.B., Manhas, R.K. and Negi, M. 2011. Sacred Forest of Kunjapuri Siddhapeeth, Uttarakhand, India. *Tropical Ecology*, 52(2): 219-221.

#### **Impact Factor**, 1.6

35. Gautam, M.K., Tripathi, A.K. and Manhas, R.K. 2011. Assessment of Critical Loads in Tropical Sal (Shorea robusta Gaertn. F.) Forests of Doon Valley Himalaya, India. Water Air and Soil Pollution, 218 (1-4): 235-264. DOI 10.1007/s11270-010-0638-z.

## **Impact Factor**, 2.9

- 34. Singh, L., **Manhas, R.K.**, Vasistha, H.B. and Negi, M. 2010. New Records of Angiosperms for Punjab State, India. *Annals of Forestry*, 18(2): 335-336.
- Chauhan, P.S., Manhas, R.K., Negi, J.D.S. and Singh, L. 2010. Dominance, Diversity and Regeneration status of a moist sub-tropical *Shorea robusta* Gaertn. f. (sal) forest of Doon valley, India. *Indian Forester*, 136 (4): 544-552.
- Manhas, R.K., Lokender Singh, H.B. Vasistha and Mridula Negi. 2010. Floristic Diversity of Protected Ecosystems of Kandi Region of Punjab, India. New York Science Journal, 3 (4): 96-103.
- Chauhan, P.S., Negi, J.D.S., Singh, Lokender and Manhas, R.K. 2009. Demographic Dispersal and Diversity in a Dry Shorea robusta Gaertn. f. (Sal) Forest of Rajaji National Park, India. Indian Journal of Forestry, 31 (4): 529-32.

- Manhas, R.K., Singh, Lokender, Chauhan, P.S. and Negi, J.D.S. 2009. Natural Recuperation in Sal (Shorea robusta) Mortality Affected Ecosystem through Miliusa velutina. Indian Journal of Forestry, 31 (3): 357-62.
- 29. **Manhas, R.K.,** Mukesh Kumar Gautam and Deepa Kumari. 2009. Two Way Indicator Species Analysis (TWINSPAN) of the Herbaceous Vegetation in an Inland Wetland Ecosystem of Doon Valley Himalaya, India. *Journal of Wetlands Ecology*, 3: 23-31.
- Rawat, Laxmi, Manhas, R.K., Kholiya, Deepak and Kamboj, S.K. 2009. Structure of Understorey Vegetation in Native and Exotic Plantations of Semi-Arid Regions of Punjab, India. *Nature and Science*, 7(12): 79-85.
- Luna, R.K., Manhas, R.K., Banyal, S. and Kamboj, S.K. 2009. Effect of Lantana Camara Linn. on Biomass and Carrying Capacity of Forest Areas of Shiwalik Hills of Punjab. Indian Forester, 135(7): 869-879.
- 26. **Manhas, R.K.,** Mukesh Kumar Gautam and Deepa Kumari. 2009. Plant Diversity of a Fresh Water Swamp of Doon Valley, India. *Journal of American Science*, 5(1): 1-7.
- 25. Chauhan, P.S., Negi, J.D.S., Singh, Lokender and **Manhas, R.K.** 2008. Regeneration Status of Sal forests of Doon Valley. *Annals of Forestry*, 16 (2): 178-182.
- Gautam, Mukesh Kumar, Tripathi, A.K., Kamboj, S.K., and Manhas, R.K. 2008. TWINSPAN classification of moist *Shorea robusta* Gaertn. f. (Sal) forests with respect to regeneration. *Annals of Forestry*, 16 (2): 173-177.
- 23. Gupta, Arun, Joshi, S.P. and Manhas, R.K. 2008. Multivariate analysis of diversity and composition of weed communities of wheat fields in Doon Valley, India. *Tropical Ecology*, 49 (2): 103-112. Impact Factor, 1.6
- 22. Singh, Lokender, Sharma, Neelam, Joshi, S.P., Manhas, R.K. and Joshi, Venita. 2008. Ethno-Medicinal Uses of Weedy Herbs of Some Agro-Ecosystems of Doon Valley. Journal of Economic and Taxonomic Botany, 32: 97-103.
- 21. Manhas, R.K. and Sharma, S.C. 2008. Vanishing Butea. Science Reporter, 45(5): 18.
- 20. Sharma, Renu and **Manhas, R.K.** 2008. Medico-Religious plants used in Diwali in Jammu and Kashmir, India. *Annals of Forestry*, 16 (1): 170-171.
- Gautam, Mukesh Kumar, Tripathi, A.K. and Manhas, R.K. 2008. Plant diversity and structure of sub-tropical Shorea robusta Gaertn. F. (Sal) forests of Doon valley, India. Indian Journal of Forestry, 31 (1): 131-140.
- 18. **Manhas, R.K.** and Gupta, Arun. 2007. Gradient analysis of the vegetation of an Inland wetland ecosystem. *Indian Journal of Forestry*, 30 (4): 499-504.
- Gautam, Mukesh Kumar, Tripathi, A.K. and Manhas, R.K. 2007. Indicator species for the natural regeneration of sal (*Shorea robusta* Gaertn. f.). *Current Science*, 93 (10): 1359-1361. Impact Factor, 1.0
- Sharma, Neelam, Singh, Lokender, Joshi, S.P. and Manhas, R.K. 2007. Dominance, diversity and species compositions of the woods of rice crop in Doon valley. *Journal of Non-Timber Forest Products*, 14 (1): 63-69.
- 15. Kandwal, Manish K., Manhas, R.K., Joshi, S.P. and Singh, Lokender. 2007. Seasonal variation in community structure and invasion of aliens in a fresh water swamp at Golatappar, Dehradun, India. Annals of Forestry, 15 (1): 47-61.
- Manhas, R.K., Kandwal, Manish K., Dhyani, Sandeep, Singh, Lokender and Joshi, S.P. 2007. Effect of Soil Moisture on Demographic Dispersion, Species Association and Diversity of Primary Producers in a Sub–Tropical Swamp Forest. *Indian Forester*, 133 (4): 547-560.
- Luna, R.K., Manhas, R.K., and Kamboj, S.K. 2007. Effect of Lantana camara Linn. on Herbaceous Diversity. Indian Forester, 133 (2): 109-122.

- Gautam, Mukesh Kumar, Tripathi, A.K., Kamboj, S.K. and Manhas, R.K. 2006. Changes in the Scenario of Dominance and Diversity in *Shorea robusta* Gaertn. f. (Sal) Forests of Lacchiwala, Doon Valley, India. *Indian Forester*, 132 (12): 1645 – 1652.
- Manhas, R.K., Negi, J.DS. Kumar, Rajesh and Chauhan, P.S. 2006. Temporal Assessment of Growing Stock, Biomass and Carbon Stock of Indian Forests. *Climatic Change*, 74: 191-221. Impact Factor, 4.8
- Negi, J.D.S., Manhas, R.K. and Chauhan, P.S. 2005. Community structure of the Upland and Riparian forests near Golatappar wetland of Doon valley. *Bulletin of* the National Institute of Ecology 16: 149-154.
- 09. Srivastava, M.M., Joshi, S.P., Manhas, R.K. and Singh, Lokendra. 2005. Biodiversity Study in Natural Forests, Abandoned Mine & Eco-restored Mine Habitats of Mussoorie Hills. Bulletin of the National Institute of Ecology 16: 59-68.
- 08. Chauhan, P.S., Manhas, R.K., Bhandari, Diksha and Negi, J.D.S. 2004. Carbon Stock Assessment in Old Growth *Pinus roxburghii* Spreng. Plantation of Forest Research Institute, New Forest, Dehra Dun, India. *Indian Journal of Forestry*, 27(1): 45-49.
- 07. Gupta, Arun, Joshi, S.P., **Manhas, R.K.** and Singh, Lokender. 2003. Impact of soil variables on the weed diversity in major cereal crops of Doon Valley. *Journal of Hill Research*, 16 (2): 91-93.
- 06. Negi, J.D.S., Manhas, R.K. and Chauhan, P.S. 2003. Carbon Allocation in Different Components of Some Tree species of India: A new approach for carbon estimation. *Current Science*, 86 (11): 1528-1531. Impact Factor, 1.0
- Dhand, Vivek, Tripathi, A.K., Manhas, R.K., Negi, J.D.S. and Chauhan, P.S. 2003. Estimation of Carbon Content in Some Forest Tree species. *Indian Forester*, 129 (7): 918-922.
- Chauhan, P.S., Manhas, R.K. and Negi, J.D.S. 2001. Demographic and Diversity Analysis of Trees Species in Sal (Shorea robusta Gaertn. f.) Forests of Doon Valley. Annals of Forestry, 9 (2): 188–198.
- 03. Gupta, Arun, Joshi, S.P., Gupta, B.K. and **Manhas, R.K.** 2001. Demographic dispersion of weed flora of rice, maize and wheat in Doon valley of Uttaranchal. *Journal of Indian Agriculture & Weed Science*, 1 (1): 52-58.
- 02. Joshi, S.P., Joshi, V., Kumar, V., **Manhas, R.K.** and Verma, N.K. 1999. Demographic Analysis of a sub-tropical forest at Dehra Dun. *Annals of Forestry*, 7 (2): 235-242.
- 01. Singh, Lokender, Joshi, S.P., Gupta, Arun, **Manhas, R.K.** and Verma, N.K. 1999. Demographic, Diversity and distribution pattern of weeds in response to difference regimes of fertilizers in rice crop of Doon Valley. *World Weeds*, 6: 133-142.

## Papers/Chapters published in edited books/proceedings (06)

- 06. Nanda, R., Sharma, R. Bhagat, N., Manhas, R.K. and Shabani. 2022. Global Warming. *In:* Environmental Issues and Sustainable Future (eds. Kaur, K.; Singh, P.; Upadhyay, H.; Singh, S.K.), Weser Books Pub., Weser Books, No. 79737, Äussere Weberstr. 57, 02763 Zittau, Germany, p. 99-111.
- 05. Bhagat, N., Nanda, R., Sharma, R., Kumar, M. and Manhas, R.K. 2022. Loss of Biodiversity. *In:* Environmental Issues and Sustainable Future (eds. Kaur, K.; Singh, P.; Upadhyay, H.; Singh, S.K.), Weser Books Pub., Weser Books, No. 79737, Äussere Weberstr. 57, 02763 Zittau, Germany, p. 85-97.
- 04. Bhatia, H., Sharma, Y.P., Manhas, R.K. 2021. Ethnotoxic plants of district Udhampur, Jammu and Kashmir, India. In: Human-Plant Relations and Future Drug Discovery (eds. Y.P. Sharma and Bikarma Singh). New India Publishing Agency, New Delhi – 110 034, India. pp. 297-316.

- 03. Bhatia, H., Sharma, Y.P., Manhas, R.K. 2019. Traditional Medicinal Plants Used to Treat Dermatological Disorders in District Udhampur, Jammu and Kashmir, India. *In:* Plants for Human Survival and Medicine (ed. Bikarma Singh). New India Publishing Agency, New Delhi – 110 034, India. pp. 219-232.
- 02. Tomar, A., **Manhas, R.K.** and Srivastava, R.K. 2012. Simple Techniques for the Propagation of Rhizome-Cuttings in Medicinally Important Herb -*Gentiana Kurroo* and Fern- *Cyrtomium Caryotideum*. Proceedings of the "*Green Technology and Environmental Conservation*" (*GTEC-2011*). Tamil Nadu Pollution Control Board (TNPCB), Chennai, 15-17 December, 2011.
- 01. Srivastava, M.M., Joshi, S.P., Ghildiyal, J.C., Manhas, R.K. and Kumar, Vinod. 2000. Demography & successional trends in Fresh water swamps of Dehradun Valley (UP) India. In: Landmarks of Botany in India (eds.: P. Soni & N.R. Dasturiya). Surya Publications Dehradun: pp 113-123.

## Edited Book (01)

Singh, Nater, Slathia, S., Vashisth, A., Singh, Ram and Manhas, R.K. 2013. Higher Education in J&K: Challenges and Perspectives. Highbrow Publications; Bari Brahmana, Jammu- 181133, J&K, India. ISBN: 978-93-82670-11-7.

#### Textbooks (05)

- Singh, K., Thakur, A.K., Bassi, S.K., and Manhas, R.K. 2019. Plant Physiology and Metabolism. S. Vinesh Publishers, Jalandhar-144008, India. ISBN: 978-93-87959-82-8.
- Thakur, A.K., Bassi, S.K., Kongo, N. and Manhas, R.K. 2019. Economic Botany and Biotechnology. S. Vinesh Publishers, Jalandhar-144008, India. ISBN: 978-93-87959-90-3.
- Singh, Y.P., Sharma, K., and Manhas, R.K. 2018. Textbook of Nursery, Gardening and Floriculture. AADEE Publishing House, New Delhi-110024, India. ISBN: 978-93-87384-11-8.
- Sood, S.K., Thakur, A.K., Bassi, S.K., and Manhas, R.K. 2018. Diversity of Microbes & Cryptogams. S. Vinesh Publishers, Jalandhar-144008, India. ISBN: 978-93-87959-21-7.
- Thakur, A.K., Bassi, S.K. and **Manhas, R.K.** 2018. Plant Anatomy, Embryology and Ecology. S. Vinesh Publishers, Jalandhar-144008, India. **ISBN:** 978-93-87959-32-3.

#### Paper presented in State/National Conferences/Seminars (15)

- 16. Presented paper entitled "Carbon Sequestration Potential of Some Old Growth Planation Ecosystems of New Forest Dehradun" in one day National Seminar on Climate Change and Disaster Risk Reduction: Making Sustainability a way of life" organized by GDCW, Kathua on 19.05.2023.
- 15. Presented paper entitled "Ethnomedicinal plants of some villages of Surinsar Mansar Wildlife Sanctuary of District Samba, J&K(UT), India" in National Multi-Disciplinary Conference on Recent Trends in Agriculture, Bio Sciences, Computer Applications, Environment, and Humanities organized by GDC Billawar on 24<sup>th</sup> of March, 2022.
- Presented paper entitled Herbal remedies for dermal problems from Pancheri village of Udhampur district, J&K, India in two days National Seminar on Diversity and Reproduction in Plants and Microbes: Present Scenario organized by Department of Botany, University of Jammu, Jammu on February 07-08, 2020.
- 13. Presented paper entitled "Ethnomedicinal plants of Basohli town of district Kathua: A Preliminary Survey" in National Level Seminar on Science and Technology: Rural

Development organized by GDC, Samba, J&K under the aegis of Indian Science Congress Association on December 10-11, 2019.

- 12. Presented paper entitled Wild Edible Plants of Kathua, J&K, India in National Level Seminar on Science and Technology for the Unreached: Notions, Values, and Applicability organized by GDC, Samba J&K under the aegis of Indian Science Congress Association on April 20-21, 2018.
- Wani M.A. and Manhas, R.K. 2017. Throughfall, stemflow and rainfall interception in *Pinus wallichiana* Jack. plantation of Srinagar, J&K, India in 12<sup>th</sup> Science Congress organized University of Jammu, Jammu on 2-4<sup>th</sup> March, 2017.
- Manhas, R.K. 2015. Morpho-taxonomic studies of Gymnosperms from Shankaracharya Hill, Srinagar(J&K) India in 10<sup>th</sup> Science Congress organized by University of Jammu, Jammu on 14-16<sup>th</sup> March, 2015.
- 09. Kumar Kumar, Kewal, Sharma, Y.P., **Manhas, R.K.** and Bhatia, H. 2015. Traditionally used Anti-diabetic plants from Udhampur district (J&K), India. Department of Botany, University of Jammu, Jammu.
- 08. Kumar, Kewal, Sharma, Y.P., Manhas, R.K. and Bhatia, H. 2015. A study on ethnomedicinal potential of family Fabaceae from Udhampur district (J&K), India. 2<sup>nd</sup> National Symposium on Interdisciplinary Sciences organized by G.G.M. Science College, Canal Road, Jammu, J&K, India on 27-28<sup>th</sup> February, 2015.
- 07. Manhas, R.K. and Singh, S.P. 2015. A Preliminary Study of the Floral and Avi-Faunal Diversity of Low-Lying Regions surrounding Kathua Town. 2<sup>nd</sup> National Symposium on Interdisciplinary Sciences, 27-28<sup>th</sup> February, 2015. G.G.M. Science College, Canal Road, Jammu, J&K, India.
- 06. Manhas, R.K. and Singh, H. 2014. Impact of Assisted Natural Regeneration on the Heath of Sal Forest of Doon Valley. National Seminar on Environmental Education: The New Frontier (14<sup>th</sup>-15<sup>th</sup> February, 2014), Govt. Degree College, Kathua- 184104, J&K, India.
- 05. Kumar, Kewal and Manhas, R.K. 2014. Medicinal Plants in Shankaracharya Forest, Srinagar, Kashmir. 101<sup>st</sup> Indian Science Congress From 3-7 Feb, 2014 held at University of Jammu, Jammu.
- 04. **Manhas, R.K.** 2012. Presented paper titled Impact of Anthropogenic Disturbances on the Structure of Sal forests of Doon Valley in National Conference organized by GDC Kathua in collaboration with PG Deptt. Of Geography, University of Jammu on 27-28 November, 2012.
- 03. **Manhas, R.K.** 2012. Impact of Invasion in a Freshwater Swamp at Golatappar, Dehradun in State Level Symposium on Biodiversity: Issues and its Conservation organised by GDCW, Kathua on March 19, 2012.
- 02. Srivastava, M.M., Joshi, S.P., **Manhas, R.K.** and Singh, Lokendra. 2002. Ecorestoration For Sustainable Development in Mussoorie Hills- A case study in National Level Seminar organized by D. A. V. (P. G.) College, Dehradun on 9-10 November 2002.
- 01. **Manhas**, **R.K.**, Joshi, Venita, Shrivastava, Shalini, Joshi, S.P. and Srivastava, M.M. 2000. Demographic dispersion of herbaceous producers in response to surface fire in a sub-tropical forest. National Seminar on Environmental Perspectives and in the new millennium organized by Forest Research Institute, Dehra Dun from 14-15 April, 2000.

#### Paper presented in International Conferences/Seminars/Workshops (17)

18. Presented paper entitled "Impact of Landuse Change on the Climate of Dehradun, Uttarakhand, India" in two-day International Conference on One Earth, One Family, One Future: India's Motto for G20 Presidency" organised by GDC, Bani and Attitude Change on the Climate of Dehradun, Uttarakhand, India w.e.f. 28-04-2023 to 29-04-2023.

- Manhas, R.K. 2022. Wild Edible Plants of Kathua, JKUT, India. Two Days International Conference on Science for Survival: To Explore the Unexplored Dimensions organized by GCW, Udhampur on 10-11 February, 2023.
- Manhas, R.K. 2022. Wild Edible Plants vis-à-vis Leave No One Behind. Two days International Conference on Ethnobiology: Present and Future Perspectives organized by GDC Billawar on 25-25<sup>th</sup> of November, 2022.
- 15. **Manhas, R.K.** 2022. Research Publications: Tips to avoid predatory journals. One day International Workshop on Research Methodology organized by The Agriculture Magazine on 08<sup>th</sup> of November, 2022.
- 14. Sanjeev Kumar Gupta and Manhas, R.K. 2022. Presented paper entitled "Ethnoveterinary medicinal plants used by tribal communities in Bhaddu region of Kathua J&K, India" in International Conference on Multidisciplinary Studies- III Ankara Turkey, conducted by Ataturk University Ankara on 23-25 Sept., 2022.
- Sanjeev Kumar Gupta and Manhas, R.K. 2022. Presented paper entitled "Invasive alien species in Tehsil Malhar of district Kathua (North- West Himalayas), Jammu and Kashmir, India." 3. International Dicle Scientific Studies and Innovation Congress, organized by ISARC on 26-27<sup>th</sup> of August, 2022.
- 12. Sanjeev Kumar Gupta and Manhas, R.K. 2022. Presented paper entitled "Ethnoveterinary medicinal plants used in Tehsil Mahanpur of district Kathua, J&K, India" in 2. International Dicle Scientific Studies and Innovation Congress, organized by ISARC on 15-16<sup>th</sup> of April, 2022.
- 11. Sanjeev Kumar Gupta and **Manhas, R.K.** 2021. Presented paper entitled "Invasive alien species in the Shiwalik hills of Sukrala Devi forest, Kathua, J&K, India" in 6<sup>th</sup> Asian Pacific International Modern Science, Congress organized by Mata Sundari College for Women, University of Delhi on 15-16<sup>th</sup> of December, 2021.
- 10. Sanjeev Kumar Gupta and Manhas, R.K. 2021. Presented paper entitled "Ethnoveterinary medicinal plants used in Tehsil Majalta of district Udhampur, J&K, India" in ISPEC 7<sup>th</sup> International Conference on Agriculture, Animal Science & Rural Development organized by Mus Alparslan University, Turkey on 18-19<sup>th</sup> September, 2021.
- 09. Sanjeev Kumar Gupta and **Manhas, R.K.** 2021. Presented paper entitled "Invasive alien species in Tehsil Billawar of district Kathua, J&K, India" in 2<sup>nd</sup> International Scientific Research and Innovation Congress organized by International Science and Arts Research Centre, Istanbul, Turkey on 11-12<sup>th</sup> September, 2021.
- 08. Sanjeev Kumar Gupta and **Manhas, R.K.** 2021. Presented paper entitled "Ethnomedicinal plants used by Bakerwal Tribe in the Shiwalik hills of Mansar, J&K, India" in International Asian Congress on Contemporary Sciences-V organized by Nakhehivan State University, Azerbaijan on 1-2 June, 2021.
- 07. Sanjeev Kumar Gupta and **Manhas, R.K.** 2021. Presented paper entitled "Ethnomedicinal plants used by Gujjar tribe in the hills of Manwal, district Udhampur, J&K, India" in International IGDIR Conference on Applied Sciences organized by Institute of Economic Development and Social Research, IGDIR University, Igdir Turkey on 14-15<sup>th</sup> April, 2021.
- 06. Kewal Kumar and **Manhas, R.K.** 2021. Presented paper entitled "Reducing the risk of disasters through trees, forest & ecosystem Management: A Review" in International Conference on New Challenges and Dimensions on Ecology and Environment organized

by International Academy of Science & Research, Kolkata & GDC Doda, J&K on 02-03<sup>rd</sup> April, 2021.

- 05. Sanjeev Kumar Gupta and **Manhas, R.K.** 2021. Presented paper entitled "Ethnomedicinal plants used by locals in Shiwalik Hills of Bhaddu, district Kathua, J&K, India" in Aegean Summit 2<sup>nd</sup> International Applied Science Congress organized by International Science Academy, IZMIR, Turkey on 27-28<sup>th</sup> March, 2021.
- 04. Kewal Kumar and **Manhas, R.K.** 2020. Presented paper entitled "Why Forests and trees matter in sustaining water and rainfall: A review" in Three Day International Conference on Water Conservation organized by GDC Udhampur from February 29 to March 2, 2020.
- 03. **Manhas, R.K.** and Joshi, S.P. 2019. Presented paper entitled "Impact of Herbivory on the Diversity of Grassland: A case study of Govind Pashu Vihar Sanctuary, Uttarkashi, India" in International Conference on Recent Advances in Interdisciplinary Sciences organized by Department of Electronics, University of Jammu in collaboration with IEEE EDS Delhi Chapter and IETE Jammu Centre on January 11-12, 2019.
- 02. Manhas, R.K. and Kumar, K. 2012. Tree Plantations and Climatic Change: A Case Study from 80 yrs old Plantations of New Forest, Dehradun. International Conference on Global Warming- The Biggest Challenge for 21<sup>st</sup> Century organized by GDC Udhampur on February 24-26, 2012.
- 01. Kumar, Vinod, Joshi, S.P., **Manhas, R.K.**, Joshi, Venita and Kumar, Naresh. 2003. Floristic structure of a Himalayan Alpine Meadow in Govind Pashu Vihar Sanctuary, Uttaranchal, India. 14-19 October, ICFRE, Dehradun.

## Faculty Development Programs (FDPs) attended

- One-week FDP on NEP 2020 Orientation and Sensitization Programme on Academic Leadership under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission (UGC) Organized by Malviya Mission Teacher Training Centre, Central University of Jammu from 15.05.2024 to 23.05.2024.
- One-week FDP on NEP 2020 Orientation and Sensitization Programme (MMC-005-2024-APR-B-01486) on Indian Knowledge System under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission (UGC) Organized by Malviya Mission Teacher Training Centre, Assam University, Silchar, from April 18th to April 30th, 2024.
- 17. Two-week international faculty development program(online) on Research Methodology organized by Research & Development Cell, Govt. PG College Rajouri, Jammu & Kashmir, India in collaboration with Africana Post Graduate Academy, Tshwane University of Technology, Pretoria, South Africa & University of Johannesburg, South Africa held from Dec. 28, 2022 to Jan. 08, 2023.
- Two-days Student Volunteer Workshop on 19-20<sup>th</sup> of May, 2022 organised by GDC Basohli in collaboration with INTACH Jammu Chapter.
- 15. One-day IP Awareness/Training program under National Intellectual Property Awareness Mission organised by Ministry of Commerce and Industry, Govt. of India on 04.04.2022.
- Seven days International Short Term Training Programme-1 on Recent Advances in Environmental Toxicology and Wildlife Conservation organized by Raj Rishi Govt. Autonomous College from 22nd - 28th March 2022.
- 13. Six days online FDP on "Implementation of NEP-2020 in Higher Education" organized by RKDF University, Bhopal (MP) from 17-22<sup>nd</sup> February, 2022.

- 12. Two-day online workshop on DNA isolation, Diversity Assessment and Analysis using ISSR markers in plants organised by Department of Botany, University of Jammu on 11th and 12th February, 2022.
- Seven days online FDP on "Data Analytics and Modeling Tools for Research" organized by Teaching Learning Centre, Ramanujan College, University of Delhi from 16-22<sup>nd</sup> January, 2022.
- 10. One-week national level FDP on Research Methodology organized by Amar Sewa Mandal's Kamla Nehru Mahavidyalaya, Nagpur from 26.04.2021-01.05.2021.
- 09. One-day e-workshop on Modern Angiosperms Taxonomy: Concept, Tools, and Techniques organized by PG Department of Botany, Dev Samaj College for Women, Ferozepur-152002 on 4<sup>th</sup> May, 2021.
- Five-day FDP on ICT Based Teaching and Learning Process organized by RCP, Roorkee from 1-5<sup>th</sup> of July, 2020.
- 07. One-week national level FDP on ICT Tools for effective teaching learning organized by School of Mathematical Sciences, Swami Ramanand Teerth Marathwada Univ., Nanded from 11-16<sup>th</sup> of May, 2020.
- 06. Two-week FDP on Managing Online Classes and Co-creating MOOCs 1.0 organized by Teaching Learning Centre, Ramanujan College, University of Delhi from 20<sup>th</sup> April to 06<sup>th</sup> May, 2020.
- 05. Five-day FDP on Design, Development and Delivery of Massive Open Online Courses (MOOCs) from 15th to 19th of January, 2020 organised by J&K HED at GCW, Parade Ground, Jammu.
- 04. Attended Interdisciplinary Refresher Course in Environmental Sciences conducted by UGC Human Resource Development Centre, University of Jammu, Jammu, from 21.10.2019 to 04.11.2019.
- Attended 2nd Refresher Course in Life Sciences & Biotechnology conducted by UGC-Human Resource Development Centre, Jawahar Lal Nehru University, New Delhi from October 3rd – 28th of October, 2016.
- 02. Attended Refresher Course (ID) on Environment Sciences- RC 292 at UGC-Human Resource Development Centre, Himachal Pradesh University, Summer Hill, Shimla, Himachal Pradesh from September 14<sup>th</sup> of September, 2015 to 3rd of October, 2015.
- 01. Orientation Course attended at UGC-Academic Staff College, Panjab University, Chandigarh from 03.03.2009 to 30.03.2009

Date: 04.12.2024 Place: Kathua

(Dr. R. K. Manhas)