

KRISHNA KUMAR CHANDRA: PROFILE

Position:- Associate Professor and Nodal Officer, Unnat Bharat Abhiyan

Date of Birth:- 11 Nov, 1969

Contact Information:

Address: Department of Forestry, Wildlife & Environmental Sciences

Guru Ghasidas (Central) Vishwavidyalaya, Bilaspur, Chhattisgarh- 495009 (India)

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S.No.	Degree	Institution	Year
1	Ph.D.	Forest Research Institute, Dehradun, UK, India	1998
2	M.Sc.	Guru Ghasidas Vishwavidyalaya, Bilaspur, C.G., India	1993

Research project completed in GGV As Principal Investigator

1. Vesicular Arbuscular Mycorrhizal fungi in important forest species planted in Entisol soil of eastern Chhattisgarh and its exploitation for the production of quality nursery stock. Amount sanctioned 13.82 lakh, UGC Major research Project, Delhi.
2. Study of Structure and function of different Agroforestry Practices existing in Chhattisgarh Plain zone. CG Council of Science and Technology, Chhattisgarh. Amount Sanctioned 4.90 lakh.

Awards And Recognitions:-

1. Gold medal for the first position in the university
2. Qualified National Eligibility Test, Agricultural Scientist Recruitment Board, New Delhi twice in year 1995, 1996
3. Awarded Junior Research Fellowship, Senior Research Fellowship and Research Associate from Council of Forestry Research & Education, Dehradun, UttaraKhand
4. Commendation certificate (1997) for poster presentation in annual meeting of Indian Phytopathological Society, Jabalpur, Madhya Pradesh
5. Awarded with **Young Scientist Associate Award** in the occasion of 18 th Indian Agricultural Scientists & Farmer's Congress on "Prospects of Skill Development in Agriculture and Rural Development - A Step Towards Make in India" during 20-21 February, 2016 at Bioved Krishi Prodyogiki Gram, Moharab, Allahabad, UP.

6. **Distinguished Faculty Award, 2016** in Venus International Faculty meet 2016 held at Green Park Chennai on dated 9 July, 2016. In which awarded with Distinguished Faculty Award in Tree Microbe interaction subject.

Past Work Experiences:

1. Junior Scientist/Tech Assistant at State Forest Research Institute, Jabalpur since July 1996 to Sept 2001.
2. Subject Matter Specialist (SMS) Agroforestry, Narendra Deva University of Agriculture and Technology, Faizabad, Uttar Pradesh during September 2001 to April 2012.

List of Publications:

1. Jamaluddin and Chandra, K.K. **1995**: Development of VA-Mycorrhizae in tree species planted in coal mine dumps of Maharashtra. **Mycorrhiza News** 7(2), 8-9.
2. Williams A.J., Chandra, K.K., Dugaya D., Mishra A.K. and Banerjee S.K. **1995**: Population status of VAM fungi in rehabilitated ash disposal area. **Environment and Ecology**. 13(2), 384-387.
3. Dugaya D, William A.J., Chandra K.K., Gupta B.N. and Banerjee S.K. **1996**: Mycorrhizal development and plant growth in amended coal mine spoil. **Indian Journal of Forestry**. 19(3), 222-226.
4. Jamaluddin and Chandra, K.K. and Chaturvedi P. **1997**: Development of VAMF in different bamboo species in bambusetum. **Indian Phytopathologist**. 50(4), 552-556.
5. Jamaluddin and Chandra, K.K. **1997**: Distribution of VAM fungi in bauxite mine overburden plantation of Amarkantaka. **Indian Forester**. 123(5), 412-418.
6. Chandra K.K. Jamaluddin and Chaturvedi P. **1997**: Comparative study of VA-Mycorrhizal root infection and spore relative density in *Grevilliapteridifolia*. **Mycorrhiza New**. 9,2.
7. Chandra K.K., Jamaluddin and Singh, A.K. **1997**: VAM infection in tree species planted in coal mine overburden at Kusmunda (MP) India. **Proceeding National Academy of Science India**. 67(B) 11, 149-156.
8. Chandra K.K. and Jamaluddin **1997**: Re-vegetation of mined overburden through vesicular arbuscular mycorrhiza. **VanikiSandesh**. 21(3), 13-15.
9. Sharma, M.C., Bhandari, P.S., Mohammad, G., Paroha, S. and Chandra, K.K. **1997**: Effect of different soil mixtures on the production of quality seedlings of *Tectona grandis* in nursery. **VanikiSandesh**. XXI, 3-7.
10. Chandra K.K. and Jamaluddin **1998**: Seasonal variation of VAM fungi in tree species planted in coal mine overburden of Kusmunda. **Journal of Tropical Forestry**. 14(1), 118-123.
11. Sharma M.C., Chandra K.K. and Mohammad G. **1998**: Growth potentiality of different soil and its mixtures for some forestry species. **Journal of Tropical Forestry**. 14(1), 56-64.

12. Chandra K.K., Sharma M.C. and Tiwari K.P. **1998**: Regeneration status in different ANR areas situated in various forest ecosystems. **Journal of Tropical Forestry**. 14(4), 262-264.
13. Jamaluddin and Chandra, K.K. and Rajesh Kumar **1998**: Effect of fungicides on root colonization and development of VAM in *Dalbergiasissoo*. **Indian Forester**. 124(8), 658-662.
14. Paroha, S., Chandra, K.K. and Bhandari, P.S. **1999**: growth performance of *Bambusa arundinacea* in relation to VA-Mycorrhizal inoculation. **VanikiSandesh**. XXIII, 21-23.
15. Chandra K.K., Bhandari P.S. and Sharma M.C. **1999**: Suitability of different soil types for biomass production of some forestry species. **Annals of Forestry**. 7(1), 151-152.
16. Jamaluddin and Chandra, K.K. **1999**: Application of VAM technology in bamboo cultivation in mine soils. In Modern approaches and innovations in soil management (*Eds.* Bagyaraj D.J., VarmaAjit, Khanna K.K. and Kehri H.K.) Rastogi Publication, Meerut 324-332.
17. Chandra K.K. and Jamaluddin**1999**: Distribution of Vesicular ArbuscularMycorrhizal fungi in coal mine overburden dumps. **Indian Phytopathology**. 52(3), 254-258.
18. Chandra K.K. and Jamaluddin**1999**: Dynamics of VAM infectivity and their population under different seasons in Teak and bamboo plantations of Chandrapur (MS). **VanikiSandesh**, XXIII(I), 16-20.
19. Chandra K.K., Paroha S.,M.C. Sharma and Tiwari K.P. **1999**: Dynamics of PSB on growth enhancement of some forestry species. **My Forest**. 35(1), 67-71.
20. Paroha S., Chandra K.K. and Tiwari K.P. **2000**: Synergistic role of VAM and Azotobactor inoculation on growth and biomass production of forestry species. **Journal of Tropical Forestry**. 16, 13-21.
21. Chandra K.K., Bhandari P.S., Khosla H. and Tiwari K.P. **2001**: Comparative study on regeneration status, pH and organic matter content in protected mixed forest and unprotected forest. **Indian Journal of Forestry**. 24(4), 414-418.
22. Chandra K.K. and Jamaluddin**1999**: Distribution of Vesicular ArbuscularMycorrhizal fungi in coal mine overburden dumps. **Indian Phytopathology**. 52(3), 254-258.
23. Chandra K.K., Wadhera S.L. and Pandey A. **2001**: An evaluation of the effect of ANR programmes on regeneration and soil nutrient status of Teak, Sal and mixed forest area of Madhya Pradesh. **My Forest**. 37(1), 399-416.
24. Jamaluddin, Chandra KK and Goswami MG. 2001. Effectiveness of various types of VAM inocula on growth and biomass of *Bambusa nutans*. **Mycorrhiza News** 12 (3), 15-17.
25. Chandra K.K. and Ujjaini M **2002**: Interaction of AMF with three levels of soil organic matter and their influence on seedling biomass and root infection of six forest specie. **My Forest**. 38(2), 155-161.
26. Ram Singh and Chandra K.K. **2005**: Varietal replacement of lentil in Ballia district. **KVK Science Journal**.1(1), 63-64.
27. Singh V.B. and Chandra K.K. **2005**: Influence of biofertilizers on productivity of *Pigeonpea*. **Environmental Biology and Conservation**. 10,65-66.

28. Niraj Kumar, Room Singh, Mishra B.N. and Chandra K.K. **2007**: Influence of organic manure, biofertilizer and nitrogen levels of nutrients uptake soil properties and yield of rice. **Indian Journal of Fertilizer**. 3(7), 45-50.
29. Paroha S., Chandra K.K. and Yadav Rakhi. **2009**: Integrated effect of biofertilizers AM, Azotobacter and PSB and chemical fertilizers on growth and nutrient acquisition by *Tectonagrandis*. **Journal of Tropical forestry**. 25(I&II),54-61.
30. Chandra K K, Niraj Kumar, Avinash Verma and Saxena A.K. **2010**: Influence of certain tree species plantations on Physiochemical properties and microflora of soil. **Indian Journal of Agroforestry**, 12 (I),84-90.
31. Neeraj K, Chandra KK and Room S. 2010. IPNS on growth, yield and economics of rice. **Indian Journal of Fertilisers** 6 (2), 25-28.
32. Chandra K.K., Niraj Kumar and Girish Chand **2011**: Studies on Mycorrhizal inoculation on dry matter yield and root colonization of some medicinal plants grown in different stress soils and forest soil. **Journal of Environmental Biology**. 3,(6),975-979.
33. Gireesh chand, Chandra, K.K. and Sanjeev Kumar **2011**: Efficacy of different insecticides against fruit borer (*Leucinodes orbonalis* Guenee) of brinjal in eastern parts of Uttar Pradesh, India. **Plant archives**. Vol. 11(1),101-103.
34. Chandra, K.K., Pandey, S.K. and Singh, A. K. **2012**: Influence of tree rejuvenation, IPNM and VA-Mycorrhizal fungi on shoot emergence, yield and fruit quality of *Psidium guajava* under farmers field condition. **International Journal of Biosciences**. 2(11), 9-17.
35. Pandey SK and Chandra K.K. **2013**. Impact of Integrated Nutrient Management on yield of tomato under farmer's field. **Journal of Environmental biology**, 34 (6): 1047-1051
36. Chandra, K.K. **2013**. Seedling quality, biomass promotion and nutrient uptake potential of AMF, Azotobacter and Pseudomonas in *Azadiractaindica* under nursery condition. **Journal of Biodiversity and Environmental Sciences**, Vol. 3, No. 4, p. 39-45,
37. Chand, G. and Chandra, K.K. **2014**. Symptomological, Cultural And Molecular Variability Of *Alternaria Brassicicola* Leaf Spot In Broccoli (*Brassica Oleracea* Var. *Italica* L.). **International Journal Pharm Bio Sci.**, 2014 April ; 5 (2) : (B) 680 – 688.
38. Chandra, K.K. **2014**. Evaluation of growth and economic parameters of *Cucuma longa* and *Amorphophallus paeonifolius* intercrops in medium aged *Pisidium guajava* orchard. **Caribbean Journal of Science and Technology**, Vol. 2, 392-398.
39. Chandra, K.K. **2014**. Floristic And Microbial Diversity In Different Coal Mine Overburdens And Adjacent Natural Forest Of Chhattisgarh, India. **International Journal Scientific Research in Environmental Sciences**, 2(8), pp. 289-300.
40. Chandra, K.K. **2014**. Recovery Pattern in Diversity and Species of Ground Vegetation and AMF in Reclaimed Coal Mine Dumps of Korba (India). **Expert Opinion Environ Biol** 3:1.
41. Chandra, K.K. and Bhardwaj, A.K. **2015**. Incidence of Forest Fire in India and Its Effect on Terrestrial Ecosystem Dynamics, Nutrient and Microbial. **International Journal of Agriculture and Forestry**, 5(2): 69-78.

42. Chandra, K.K. 2014. Growth, Fruit Yield and Disease Index of *Carica papaya* L. Inoculated with *Pseudomonas straita* and Inorganic Fertilizers, **Journal of Biofertilizer and Biopesticides**, 5: 146.
43. Chandra, K.K. 2015. Interaction Effects of Different nutrient levels, Rhizobia and AMF on growth and biomass of *Dalbergia sissoo* Roxb. Seedling under nursery condition. *International Journal of Advanced Research*, 3(7): 1410-1417.
44. Chandra, K.K. 2015. Reclamation of mining waste through the use of mycorrhizal fungi selecting different tree species. A review. **International journal of Education and Science Research Review**. 2(3), 20-27.
45. Chandra K.K. 2016. Use of *Stevia rebaudiana* and its diseases with management. In. Crop disease and their management: integrated approaches, Eds. Gireesh chand and Santosh Kumar, Apple Academic Press Inc US, ISBN 13: 978-1-77188-270-5, 295-308.
46. Chandra K.K. 2016. Morphological and Biochemical Activities of Root Nodule Rhizobium Isolated From Five Multipurpose Forest Species of India. **International Journal of Plant and Soil Science**. 10(3) : 1-6.
47. Bhardwaj A.K. and Chandra, K.K. 2016. Biomass and Carbon Stocks of Different Tree Plantations in Entisol Soil of Eastern Chhattisgarh India. **Current World Environment**. 11(3).
48. Atul Kumar Bhardwaj and Chandra KK. 2017. AMF symbiosis in forest species plantations and its relationship with major soil nutrients in entisol soil of Bilaspur, (C.G.). **Life science bulletin** – June, vol 14(1), 27-32.
49. Tiwari RKS and Chandra KK. 2017. Flowering and fruiting dynamics of medicinal plants in relation to climatic conditions. **International Journal of Ecology and Environmental Sciences**, 43 (1), 25-34.
50. Tiwari RKS and Chandra, KK 2017. Intercropping of sweet flag (*Acorus calamus* L.) with early and late maturing cultivars of rice (*Oryza sativa* L.). **African Journal of Agricultural Research**, 12(20),1713-1726, 18 May, 2017.
51. Chandra K K and Atul Kumar Bhardwaj. 2018. Growth, Biomass and Carbon Sequestration by Trees in Nutrient-Deficient Bhata Land Soil of Bilaspur, Chhattisgarh, India. Springer Nature Singapore Pte Ltd. 2018 (eds.) V.P. Singh et al., Energy and Environment, Water Science and Technology Library 80, https://doi.org/10.1007/978-981-10-5798-4_4 p 39-45.
52. Tiwari, R.K.S., Chandra K. K and Dubey S. 2018. Techniques For Breaking Seed Dormancy And Its Efficacy On Seed Germination Of Six Important Medicinal Plant Species. **International Journal of Agriculture, Environment and Biotechnology**, April, 2018.
53. Chandra K K 2018. Status of Agroforestry outside in forest area of Bilaspur (Chhattisgarh) and constraints for non adoption. **Journal of Forest and Environmental Sciences** 34, No. 5,

pp. 412-417, October, 2018, pISSN: 2288-9744, eISSN: 2288-9752
doi.org/10.7747/JFES.2018.34.5.412

54. Bhardwarj AK and Chandra K K. 2018. Soil moisture fluctuation influences AMF root colonization and spore population in tree species planted in degraded entisol soil. *International Journal of Biosciences*, Vol. 13, No. 3, p. 229-243, 2018.
55. Atul Kumar Bhardwaj and Chandra K K 2018. Micronutrients Status Under Different Tree Species Plantations In Entisol Soil And Its Relationship With AMF Root Colonization. *International Journal of Agriculture, Environment and Biotechnology*, IJAEB: 11(5): 731-738, October 2018.

Books/ book chapters Published

- 1) Chandra KK and Singh Rana P.K. 2013: Pramukh Ausadhiya Fasale:krishi taknik ewam arthik wishleshan Vasundhara Prakashan Gorakhpur. ISBN 9789384029005, P. 131.
- 2) Chandra KK, Singh Rana P.K. and Gireesh chand. 2013: Krishi vaniki hetu Upayogi van Prajatiyo. Vasundhara Prakashan Gorakhpur. ISBN 9789384029012, P. 67.
- 3) R.K.S. Tiwari and Chandra, K K. 2016. Antimicrobial properties of Medicinal Plants. Jaya Publishing House, New Delhi, ISBN: 9789384337636, P 242.
- 4) Chandra KK 2016. Use Of Stevia Rebaudiana and Its Diseases With Management. CROP DISEASES AND THEIR MANAGEMENT Integrated Approaches, Apple Academic Press USA 13:978-1-77188-270-5, edited by Gireesh Chand, Santosh Kumar, Chapter 15, p 296-307.
- 5) Chandra K K and Chand Gireesh. 2017. Aloe vera: chemical constituents, usage and cultivation technology. In Conservation of medicinal plants conventional and modern approaches (Ed. H.K. Chourasia). Scientific Publisher, New Delhi.

Other Achievements

- Radio Talk : 14 nos Broadcasted from AIR- Gorakhpur and Varanasi
- Television Talk : 43 Nos, Recorded and Broadcasted By DD Mau, Varanasi, ETV Annadata, India TV etc
- Working as Nodal Officer, Community Development Cell, GGV, Bilaspur.

- Working as Nodal Officer, Unnat Bharat Abhiyan, GGV Bilaspur, since October, 2016
- Executive Council Member of GGV Bilaspur CG, India