

CURRICULUM VITAE

Name: SATISH CHANDRA GARKOTI

Date of Birth: 10-09-1966

Father's Name: Shri J.N. Garkoti

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Educational Qualifications:

M.Sc. (Botany), 1988, Kumaun University, Nainital
Ph.D. (Botany), 1992, Kumaun University, Nainital

Ph.D. Thesis Title: “High Altitude Forests of Central Himalaya: Productivity and Nutrient Cycling”

Area of Specialization: Forest Ecology

Professional Experience:

Research:	26 years
Teaching:	15 years
Student Supervision:	
Ph.D.:	Degree awarded: 5 students Currently registered: 4 students
M.Phil.	Degree awarded: 5 students Currently registered: 4 students

Employment:

2014- Present	Professor, School of Environmental Sciences, Jawaharlal Nehru University, New Delhi
2008-2014	Associate Professor, School of Environmental Sciences, Jawaharlal Nehru University, New Delhi
2004-2008	Senior Lecturer, Department of Ecology & Environmental Science, Assam University, Silchar
2000-2004	Lecturer, Department of Ecology & Environmental Science, Assam University, Silchar

Membership of Professional Societies:

- International Society for Tropical Ecology, India (Fellow)
- Ecological Society of America, USA (Member)
- National Institute of Ecology, India (Fellow)
- International Association for Ecology (INTECOL) (Member)

Research and Development Projects:

(a) Ongoing Projects:

1. “An ecological study of paradoxical establishment of white oak in the pine invaded habitats and change in ecosystem processes and services in oak-pine ecotone areas in central Himalaya” funded by University Grants Commission, 2013-16.
2. “Scope of enhancing carbon sequestration by oak forests in central Himalaya” funded by Department of Science and Technology, Government of India, 2014-17.
3. “Network programme on convergence of traditional knowledge systems for integration to sustainable development in the Indian Himalayan region” funded by Department of Science and Technology, Government of India, 2015-2020.

(b) Completed Projects:

1. “Water relation and drought adaptation in *Shorea robusta*” funded by Department of Science & Technology, New Delhi, 1995-1998
2. “Mapping and quantitative assessment of geographic distribution and population status of plant resources of Eastern Himalayan region” funded by Department of Biotechnology, Government of India, 2007-08
3. “Assessment of National Carbon Pool in India” sub project of the ISRO-Geosphere Biosphere Program (IGBP), National Carbon Project (NCP), Department of Space, Government of India, 2009-11
4. “Measurement of vegetation and biomass parameters under vegetation carbon pool assessment (VCP)” sub project of the ISRO-Geosphere Biosphere Program (IGBP) National Carbon Project (NCP), 2012-15).

Publications:

(a) Publications in Journals:

- Athokpam, F.A., S.C. Garkoti & N. Borah (2014). Periodicity of leaf growth and leaf dry mass changes in the evergreen and deciduous species of Southern Assam, India. *Ecological Research*. DOI 10.1007/s11284-013-1105-2.
- Borah, N., F.A. Athokpam, S.C. Garkoti, A.K. Das & D.K. Hore (2014). Structural and compositional variations in undisturbed and disturbed tropical forests of Bhuban hills in south Assam, India. *Journal of Biodiversity Science, Ecosystem Services & Management*. DOI: 10.1080/21513732.2013.873823.

- Garkoti, S. C. (2014). Litter production and nutrient return in two regenerating white oak (*Quercus leucotrichophora* A. Camas) forests in central Himalaya. *International Journal of Ecology and Environmental Sciences* 40: 139-148.
- Devi, T.I., P.S. Yadava & S.C. Garkoti (2014). Cattle grazing influences soil microbial biomass in sub-tropical grassland ecosystem at Nambol, Manipur, North-east India. *Tropical Ecology* 55: 195-206.
- Athokpam, F.D. & S. C. Garkoti, (2013). Variation in evergreen and deciduous species leaf phenology in Assam, India. *Trees*. DOI 10.1007/s00468-013-0850-8.
- Arunachalam, K., P. Bordoloi, A. Arunachalam & S.C. Garkoti (2013). Bamboo based low cost vermicomposting technology for the farmers of north-east India. *Indian Farming* 63: 21-23.
- Garkoti, S.C. (2012). Dynamics of fine root N, P, K in high elevation forests of central Himalayas. *Forestry Studies in China* 14: 1, DOI 10.1007/s11632-012-0203-5.
- Borah, N., A. K. Das & S.C. Garkoti (2012). Community structure and diversity of tropical forests along disturbance gradients in Barak Valley of Assam, India. *Assam University Journal of Science and Technology* 9:38-45.
- Athokpam, F.D., S. C. Garkoti & A.K. Das (2012). Shoot growth phenology of *Gmelina arborea* Roxb. in a moist tropical evergreen forest of Southern Assam, India. *Assam University Journal of Science and Technology* 9: 29-37.
- Garkoti, S.C. (2011). Fine root productivity and turnover in high altitude forests of central Himalaya. *Journal of Forest Research* 16:136–143.
- Borah, N. & S.C. Garkoti (2011). Tree species composition, diversity, and regeneration patterns in undisturbed and disturbed forests of Barak Valley, South Assam, India. *International Journal of Ecology and Environmental Sciences* 37:131-141.
- Garkoti, S.C. (2007). Estimates of biomass and primary productivity in a high altitude maple forest of central Himalaya. *Ecological Research* 23:41- 49.
- Singh, S.P., D.B. Zobel, S.C. Garkoti, A. Tewari & C.M.S. Negi (2006). Patterns in water relations of central Himalayan trees. *Tropical Ecology* 47:159-182.
- Garkoti, S.C., D.B. Zobel & S.P. Singh (2003). Variation in drought response of Sal (*Shorea robusta*) seedlings. *Tree Physiology*. 23: 1021 - 1030.
- Garkoti, S.C., S.B. Akoijam & S.P. Singh (2002). Ecology of water relations between mistletoe (*Taxilus vestitus*) and its host oak (*Quercus floribunda*). *Tropical Ecology* 43: 243-249.
- Garkoti, S.C., D.B. Zobel & S.P. Singh (2001). Leaf conductance of primary and mature leaves of *Pinus roxburghii*: A comparison. *Journal of Forest Research* 6: 1-5.
- Zobel, D.B., S.C. Garkoti, S.P. Singh, A. Tewari & C.M.S. Negi (2000). Patterns of water potentials among forest types of the central Himalaya. *Current Science* 80: 774-779.
- Garkoti, S.C., D.B. Zobel & S.P. Singh (2000). Comparison of water relations of seedlings and trees of two Himalayan oaks. *International Journal of Ecology and Environmental Sciences* 26:213-222.

- Garkoti, S.C. & S.P. Singh (1999). Litter decomposition and nutrient release in Central Himalayan high altitude forests. *Tropical Ecology* 40: 19-26.
- Garkoti, S.C. (1999). Changes in weight loss and nutrient composition of woody litter in three forests in high altitudinal zones of Central Himalaya. *Tropical Ecology* 40: 129-136.
- Malhotra, P., S.C. Garkoti, Y.S. Rawat & S. P. Singh (1999). Morphological differences and habitat relationship of four common herb species of oak and pine forests of Central Himalaya. *Oecologia Montana* 7: 15-20.
- Usman, S., Y.S. Rawat, S.P. Singh & S.C. Garkoti (1998). Fine root biomass, productivity and root turnover in evergreen forests of Central Himalaya. *Oecologia Montana* 6: 4-8.
- Negi, G.C.S., H.C. Rikhari & S.C. Garkoti (1998). Hydrological studies in three high altitude forests in Nanda Devi Biosphere Reserve, Kumaun Himalaya. *Hydrological Processes* 12: 343-350.
- Singh, S.P., Y.S. Rawat & S.C. Garkoti (1997). Failure of brown oak (*Quercus leucotrichophora*) to regenerate in Central Himalaya- A case of environmental semisurprise. *Current Science*. 73: 371-374.
- Garkoti, S.C. & S.P. Singh (1997). Structure and functioning of herbaceous vegetation in high mountains of Central Himalaya. *Tropical Ecology* 38: 153 - 156.
- Garkoti, S.C. & S.P. Singh (1996). Patterns of epiphytic biomass and diversity on *Quercus floribunda*. *Advances in Forestry Research in India XV*: 145-154.
- Garkoti, S.C. (1996). Nutrient dynamics in high altitude shrubs of Central Himalaya. *Proceedings of Indian National Science Academy B* 62: 281-286.
- Garkoti, S.C. & S.P. Singh (1995). Forest floor biomass, litter fall and nutrient return in Central Himalayan high altitude forests. *Vegetatio* 120: 33-48.
- Garkoti, S.C. (1995). Shrub layer productivity in Central Himalayan high elevation forests. *Proceedings of Indian National Science Academy B* 61 : 45-50.
- Garkoti, S.C. & S.P. Singh (1995). Variation in forest biomass and net primary productivity in the high mountains of Central Himalaya. *Journal of Vegetation Science* 6: 23-28.
- Garkoti, S.C. & S.P. Singh (1994). Nutrient cycling in three Central Himalayan forests ranging from close-canopied to open-canopied tree-line forests. *Arctic and Alpine Research* 26: 339 - 348.
- Joshi, B. & S.C. Garkoti (1994). Seasonal changes in fine root biomass in *Quercus floribunda* forest of Central Himalaya. *Bio-Science Research Bulletin* 10: 63-66.
- Adhikari, B.S., S.C. Garkoti & Y.S. Rawat (1993). Productivity of shrub layer in high altitude forest of Central Himalaya. *Advances in Forestry Research in India IX*: 134 - 143.
- Garkoti, S.C., B.S. Adhikari, Y.S. Rawat & N. Pande (1993). An ecological study of epiphytic vegetation on *Quercus leucotrichophora* trees. *Advances in Forestry Research in India. IX*: 122-127.

- Singh, R.P., B.S. Rana & S.C. Garkoti (1993). Biomass and production patterns of three dominant tree species along a girth series in a natural tropical forest of Chakia, Varanasi (India). *Indian forester* 119: 472 - 480.
- Garkoti, S.C. & S.P. Singh (1992). Biomass, productivity and nutrient cycling in alpine *Rhododendron* community of Central Himalaya. *Oecologia Montana* 2: 21-32.

(b) *Publications in Books and Proceedings:*

- Garkoti S.C. (2014). Regeneration of white oak (*Quercus leucotrichophora*) in two pine invaded forests in Indian Central Himalaya. In: *Management of Natural Resources in a Changing Environment*, N. J. Raju, W. Gossel and M. Sudhakar, eds., Capital Publishing Company, New Delhi (ISBN 978-93-81891-25-4), 200-205.
- Athokpam, F.D. & S. C. Garkoti (2012). Leaf phenology of some important forest trees in Southern Assam, India. In: *Glimpses of Forestry Research in the Indian Himalayan Region*. G.C.S. Negi and P.P. Dhyani eds., Bishan Singh Mahindra Pal Singh Publishers, Dehradun (ISBN: 978-81-211-0860-7), 75-81.
- Bordloi, P., D. Balasubramnian, A. Arunachalam, K. Arunachalam & S.C. Garkoti (2010). Sustainable crop production through organic farming. In: *Natural Resource Management in North-East India: Linking Ecology, Economics and Ethics*, A. Arunachalam and K. Arunachalam, eds., DVS Publishers, Guwahati, 289- 294.
- Bordloi, P., D. Balasubramanian, A. Arunachalam, K. Arunachalam & S.C. Garkoti (2007). Agriculture waste management for sustainable crop production: A case study in Arunachal Pradesh. In: *Biodiversity Conservation*, B.K. Dutta, A.K. Das and P. Choudhury eds., Avishek Printers and Publishers, Guwahati, 214-218.
- Garkoti, S.C. (2002). Patterns of water potential and leaf conductance in *Shorea robusta* seedlings. In *Recent Advances in Life Sciences*, P.S. Yadava ed., 1-8.
- Singh, S.P., B.S. Adhikari, S.C. Garkoti & Y.S. Rawat (1996). Structural and functional characteristics of the forest ecosystems around Nanda Devi Biosphere Reserve. In: *Conservation and Management of Biological Resources in Himalaya*, Ramakrishnan et al. eds., Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi, 413-432.

Organization of Conferences:

Organized International Tropical Ecology Congress-2014, in Jawaharlal Nehru University, December 10-12, 2014.