

## CURRICULUM VITAE



**Name** : **Satyandra Singh**  
**Designation** : **Principal Scientist**  
**Discipline** : **Nematology**  
**Date of birth** : **01-07-1963**  
**Present Pay** : **37400-67000 (RGP-10000)**  
**Academic qualification** : **Ph. D (Nematology)**  
**Date of joining ICAR** : **30-11-1985**  
**Research experience** : **More than 30 years**  
**Recognition and awards** :

1. Senior Research Fellow, PG School, IARI, New Delhi
2. Chairman, National Vegetable Show-casing and Competition
3. Dr Harbhajan Singh Gold Medal for Best Research Paper
4. Reviewer of various Peer Reviewed Journals
5. Nematode Resistant Variety identified
6. Research projects handled as:

PI – 7

CO-PI – 13

Associate – 3

7. Number of publications in peer reviewed journals : 44
- a) National news item : 1
  - b) Radio Talk : 2
  - c) New Reports : 2

8. Citation

h Index : 4

i10 index : 1

9. Monitoring of various vegetable trials under AICRP (VC)

10. Member of professional Societies

- i) Indian Society of Nematologist
- ii) Indian Society of vegetable Science
- iii) Society of Plant Protection Sciences

## LIST OF PUBLICATIONS

### RESEARCH ARTICLES

1. Sehgal, M., Chawla, M.L., **Singh Satyandra** and Balakrishnan. B. (1990). Studies in interactive effect of moisture and temperature on *Tylenchulus semipenetrans*. *Current Nematology*, **1**(1): 35-36.
2. Chawla, M.L., Prasad, D. and **Singh Satyandra** (1990). Performance of soybean cultivars under concomitant infestation of three nematodes and an insect species. *Current Nematology*, **1**(1): 43-46.
3. Sehgal, M., Chawla, M.L. and **Singh Satyandra** (1990). Effect of fluctuating temperature on the survival of *Tylenchulus semipenetrans*. *International Nematological Network Newsletter*, **7**(4): 15-16.
4. Goswami, B.K., Rao Uma and **Singh Satyandra** (1998). Association of some Deuteromycetous fungi with the egg masses of *Meloidogyne incognita* infecting vegetables. *Annals of Agriculture Research*, **19**(2): 149-153.
5. Goswami, B.K. and **Singh Satyandra** (1998). Efficacy of some soil mycoflora arising from oilseed cakes of cotton, karanj, mahua and mustard amended soil against *Meloidogyne incognita* infecting okra. *Annals of Agriculture Research*, **19**(2): 158-161.
6. **Singh Satyandra** and Goswami B.K (1999). Penetration and development of root-knot nematode, *Meloidogyne incognita* alone and in presence of wilt fungus, *Fusarium oxysporum* in susceptible and resistant cultivars of cowpea. *Indian Journal of Nematology*, **29**(2): 113-117.
7. **Singh Satyandra** and Goswami, B.K. (2000). Pathogenicity of *Meloidogyne incognita* on cowpea. *Indian Journal of Nematology*, **30**(2): 249. (New report)
8. Goswami, B.K., Mittal, A. and **Singh Satyandra** (2001). Conducive role of *Fusarium solani* and suppressive role of different fungi associated with root-knot nematode infecting brinjal around Yamuna River Belt in Delhi. *Indian Phytopathology*, **54**(3): 385-386.
9. **Singh Satyandra** and Goswami, B.K. (2001). Studies on the management of disease-complex caused by root-knot nematode, *Meloidogyne incognita* and wilt fungus, *Fusarium oxysporum* on cowpea by neem cake and carbofuran. *Indian Journal of Nematology*, **31**(2): 122-125.
10. **Singh Satyandra** and Goswami, B.K. (2001). Interrelationships between *Meloidogyne incognita* and *Fusarium oxysporum* on susceptible and resistant cultivars of cowpea. *Indian Journal of Nematology*, **31**(2): 139-142.
11. Goswami, B.K. and **Singh Satyandra** (2002). Effect of *Aspergillus niger* and *Chladosporium oxysporum* on root-knot nematode, *Meloidogyne incognita* multiplication on eggplant. *Indian Journal of Nematology*, **32**(1): 94-95
12. Chatali, Singh Lokendra, **Singh Satyandra** and Goswami, B.K. (2003). Effect of cakes with *Trichoderma viride* for the management of Disease-complex caused by *Rhizoctonia bataticola* and *Meloidogyne incognita* on Okra. *Annals of Plant Protection Sciences*. **11**(1): 178-180.

13. Goswami, B.K. and **Singh Satyandra** (2004). Fungal bioagents for the management of root-knot nematode in tomato. *Pesticide Research Journal*. **16**(1): 9-12.
14. Pandey R.K., Goswami, B.K. and **Singh Satyandra** (2004). Influence of soil pH on population dynamics of *Tylenchulus semipenetrans* infecting citrus and its bio-management using VAM fungus. *International Journal of Nematology*, **14**(2): 174-176.
15. Goswami, B.K., Mittal, A. and **Singh Satyandra** (2005). Management of disease-complex caused by root-knot nematode, *Meloidogyne incognita* and root rot fungus, *Rhizoctonia solani* on balsam, *Impatiens balsamina* by fungal bioagents. *Pesticide Research Journal*. **17**(1): 19-22.
16. Pandey, R.K., Goswami B.K. and **Singh Satyandra** (2005). Management of disease-complex caused by root-knot nematode and wilt fungus through fungal bioagents, neem cake and / or VAM on chickpea. *International Chickpea and Pigeon Pea News letter*, **12**: 32-34.
17. **Singh Satyandra**, Goswami, B.K. and Gaur, H.S. (2006). Biocontrol efficacy of different species of *Fusarium* isolated from various agro-climatic regions against root-knot nematode, *Meloidogyne incognita* on tomato. *Pesticide Research Journal*, **17**(2): 39-43.
18. Sharma, H.K., **Singh Satyandra** and Pankaj (2007). Management of *Meloidogyne incognita* with *Paecilomyces lilacinus* and neem cake on okra. *Pesticide Research Journal*, **19**(2): 166-168.
19. Sharma, H.K., Pankaj, **Singh Satyandra** and Meher, H.C. (2007). Management of root-knot nematode, *Meloidogyne incognita* and wilt fungus, *Fusarium oxysporum* complex on cowpea. *Pesticide Research Journal*, **19**(2): 176-179.
20. **Singh Satyandra**, Dhawan, S.C. and Goswami, B.K. (2007). Histopathology of cowpea roots co-infected with root-knot nematode, *Meloidogyne incognita* and wilt fungus, *Fusarium oxysporum*. *Indian Journal of Nematology*, **37**(2): 156-160.
21. **Singh Satyandra**, Goswami, B.K. and Sharma, H.K. (2007). Role of reniform nematode, *Rotylenchulus reniformis* in reducing disease-complex on tomato caused by root-knot nematode, *Meloidogyne incognita* and wilt fungus, *Fusarium oxysporum* f.sp. *lycopersici*. *Indian Journal of Nematology*, **37**(2): 172-175.
22. Sharma, H.K., Pankaj, Lal Jagan and **Singh Satyandra** (2007). Combined effect of inorganic supplements with *Trichoderma viride* and Kalisena against root-knot nematode infecting okra. *Indian Journal of Nematology*, **37**(2): 192-195.
23. Dhawan, S.C. and **Singh Satyandra** (2008). Reaction of pigeon pea genotypes against pigeon pea cyst nematode, *Heterodera cajani*. *Indian Journal of Nematology*, **38**(1):113-115.
24. Dhawan, S.C., **Singh Satyandra** and Kamra, A. (2008). Bio-management of root-knot nematode, *Meloidogyne incognita* by *Pochonia chlamydosporia* and *Pseudomonas fluorescens* on brinjal in farmer's field. *Indian Journal of Nematology*, **38**(1):119-121.
25. Dhawan, S.C. and **Singh Satyandra** (2009). Compatibility of *Pochonia chlamydospora* with nematicide and neem cake against root-knot nematode,

- Meloidogyne incognita* infesting okra. *Indian Journal of Nematology*, 39(1):85-89.
26. **Singh Satyendra**, Rai, A.B. and Rai, M. (2009). Community analysis of plant parasitic nematodes associated with vegetable crops in Varanasi. *Vegetable Science*, **36**(2):100-102. (New Report)
  27. **Singh Satyendra** and Mathur, Nita (2010). *In vitro* studies of antagonistic fungi against root-knot nematode, *Meloidogyne incognita*. *Bio-control Science and Technology*, 20(3):275-282.
  28. **Singh Satyendra** and Mathur, Nita (2010). Biocontrol of root-knot nematode, *Meloidogyne incognita* infesting tomato. *Bio-control Science and Technology*, 20(8):865-874.
  29. Dhawan, S.C. and **Singh Satyendra** (2010). Management of root-knot nematode, *Meloidogyne incognita* using *Pochonia chlamydosporia* on okra. *Indian Journal of Nematology*, 40(2):171-178.
  30. Rai, N., **Singh Satyendra** and Singh, R.K. (2010). Resistance Response of Tomato Genotypes against Root-Knot Nematode, *Meloidogyne incognita*. *Indian Journal of Nematology*, 40(2):237-239.
  31. **Singh Satyendra**, Bhagawati, B. and Goswami, B.K. (2011). Integrated management of root-knot disease of chickpea caused by *Meloidogyne incognita*. *Annals of Plant Protection*, 19(1):159-163.
  32. **Singh Satyendra**, Rai, AB and Singh, RK (2011). Bio-management of root-knot disease of chili (*Capsicum annum*) caused by *Meloidogyne incognita*. *Vegetable Science* 38(1): 63-67.
  33. Dhawan, S.C and **Singh Satyendra** (2011). Biological control activity of *Arthrobotrys oligospora* against root-knot nematode, *Meloidogyne incognita* infesting okra. *Indian Journal of Nematology*, 41(1): 70-78.
  34. **Singh Satyendra**, Rai, A.B. Singh Rameshwar and Singh, A.K. (2011). Population dynamics of phytoparasitic nematodes in vegetable crops. *Annals of Plant Protection*, 19(2):503-504.
  35. Singh, R., Singh, P.M., Rai, A.B. and **Singh Satyendra** (2011). Effect of malathion and chlorpyrifos on health of cowpea. *Annals of Plant Protection*, 19(2):505-507.
  36. Dhawan, S.C. and Singh Satyendra (2011). Bio-management of root-knot nematode, *Meloidogyne incognita* by egg parasitic fungus, *Pochonia Chlamydosporia* on okra. *Vegetable Science* 38(2):128-134.
  37. **Singh Satyendra** and Singh, R.K. (2012). Development of an integrated approach for managing root-knot disease of chili (*Capsicum annum* L.) under field condition. *Russian Journal of Nematology*, 20(1): 65-73.
  38. Singh, A.K. Rai, N., Singh, R.K., Singh, M. Singh, R.P., Singh Smita and **Singh Satyendra** (2012). Selection of resistant sources of tomato against early blight disease among the *Solanum* species. *Journal of Applied Horticulture*, 14(1):40-46.
  39. **Singh Satyendra** (2013). Integrated approach for the management of root-knot nematode, *Meloidogyne incognita* on eggplant under field conditions. *Nematology*, 32:1-9.

40. **Singh Satyandra**, Pandey, P.K. and Goswami, B.K. (2013). Biological control activity of *Purpureocillium lilacinum* strains in managing root-knot disease of tomato caused by *Meloidogyne incognita*. *Biocontrol Science & Technology*, 23: 1469-1489.
41. **Singh, Satyandra**, Singh, B. and Singh, A.P. (2014). Integrated management of root-knot disease of okra caused by root-knot nematode, *Meloidogyne incognita*. *Indian Journal of Nematology*, 44:172-178.
42. Goswami, B.K., Singh, A., Singh, N. and **Singh Satyandra** (2015). Infestation of an endoparasitic migratory rice root-knot nematode, *Hirschmanniella oryzae* - a serious threat to the paddy growers of Western U.P. – A First Report. *Plant Archives*, 15:1195-1196.
43. Reddy, Y.S., Sellaperumal, C., Prasanna, H.C., Yadav, A., Kashyap, S.P., Singh Satyandra, Rai, N. and Singh, M. (2016). Screening of tomato genotypes against root-knot nematode and validation of Mi 1 gene linked markers. *Proceedings of National Academy of Sciences, India, Section-B, Biological Sciences*. DOI 10.1007/s40011-016-0731-1. Published online: 27 April 2016.
44. Singh Satyandra, B. Singh, A.P. Singh and C. Sellaperumal. (2016). Effect of botanical extracts and *Purpureocillium lilacinum* on root-knot nematode, *Meloidogyne incognita* infection and growth of okra. *Indian Journal of Nematology* (accepted for publication).

## LEAD TALK/PAPER

1. Goswami, B.K. and **Singh Satyandra** (2001). Management of disease-complexes caused by plant parasitic nematodes and fungi. National congress on centenary of Nematology in India-Appraisal and Future plans, 5-7 December, 2001, Division of Nematology, IARI, New Delhi-12. pp 59.
2. Goswami, B.K. and **Singh Satyandra** (2002). Fungal Biocontrol of root-knot and cyst nematodes. Lecture delivered at Short Term Training Program on “Recent Specialized Developments in Identification, Characterization, Tissue Culture and Management of Cyst and Root-Knot Nematodes on 12-21 August (2002) organized by Division of Nematology, IARI, New Delhi-110012.
3. Goswami B.K., **Singh Satyandra** and Pandey, R.K. (2004). Management of disease and disease-complex caused by Plant parasitic nematodes and fungi. In “Nat Seminar on Biotechnological approaches towards the Integrated Management of Crop diseases” on 30<sup>th</sup> to 31<sup>st</sup> July (2004) at Department of Botany, Marathwada University Aurangabad, MS. pp 29-30.
4. **Singh Satyandra**, Rai, A.B., Kumar, A. and Rai, M. (2010). Role of Plant Biotechnology in management of phytoparasitic nematodes. In “8<sup>th</sup> National Symposium on Problems and Perspectives in Ecofriendly Innovatives to Plant Protection” on 24<sup>th</sup>-25<sup>th</sup> January, 2010 at C.S. Azad University of Agriculture and Technology, Kanpur-208 002 (UP). pp. 5-6.
5. **Singh Satyandra** (2012). Extraction and identification of phytoparasitic nematodes of vegetables grown in protected cultivation. 5<sup>th</sup> to 12<sup>th</sup> Nov., 2012, winter school on Modern approaches in diagnostics and management of pest and diseases in vegetable crops under protected conditions, IIVR, Varanasi, UP.
6. **Singh Satyandra** (2013). Phyto-nematodes infesting vegetables and their management. Modal training course on Integrated Pest Management in vegetable crops. 16<sup>th</sup> to 23<sup>rd</sup>, December, 2013 at IIVR, Varanasi, UP, Sponsored by DoE, DAC, MoA, Govt of India, New Delhi.
7. **Singh Satyandra** (2014). Plant Parasitic Nematodes and their management under vegetable Production System. Modal training Course-Pesticide: Application Technology and residue management in vegetable crops. 11<sup>th</sup> to 18<sup>th</sup> Nov., 2014 at IIVR, Varanasi, UP. Sponsored by DoE, DAC, MoA, Govt of India, New Delhi.
8. **Singh Satyandra** (2015). Hands on Major Plant Parasitic Nematodes. Modal Training Course on Improved Production Technology of vegetable crops and Nematodes: The Hidden enemy – their extraction, identification and management of pest and diseases in vegetable crops under protected conditions at ICAR-Winter school at IIVR, Varanasi, UP.

## AWARD / RECOGNITION

### Best Poster Presentation

1. Goswami, B.K. Mittal A., Chaudhary, P.N. and **Singh Satyandra** (1999). Fungi associated with root-knot nematode infected vegetables around Yamuna river belt in Delhi. In National Seminar on Nematological Research in India challenges and preparedness for the New Millennium, 17 December, 1999 held at CSA University of Agriculture and Technology, Kanpur-208002, Page-38.

2. Best Research Paper (2011) published in Vegetable Sciences. ISVS, IIVR, Varanasi, UP.
3. Dr Harbhajan Singh Gold Medal Award (2014) by ISVS, IIVR, Varanasi, UP.

#### THESIS

1. **Singh Satyandra** (1984). Field studies and collection of “**Angiosperms, Sub-Group-Dicotyledons of Baraut Region**”. M.Sc. Thesis submitted to J. V. College, Baraut, Meerut University, Meerut, Uttar Pradesh. pp. 156.
2. **Singh Satyandra** (1996). **Studies on interrelationships between root-knot nematode, *Meloidogyne incognita* and wilt fungus, *Fusarium oxysporum* on susceptible and resistant cultivars of cowpea, *Vigna unguiculata* and their management by non-chemical methods.** Ph.D Thesis submitted to P.G. School, I.A.R.I, New Delhi-12. 126 pp.

#### STUDENT GUIDED

1. Mahesh Kumar (2004). **Studies on the Mycoflora associated with urban waste of Delhi.** M.Sc., Thesis submitted to Sikkim Manipal University of Health, Medical and Technological Sciences, Gangtok (India), p.83.

#### BOOKS / BOOK CHAPTERS

1. Goswami, B.K. and **Singh Satyandra** (1995). Role of Fungi in Management of Plant Parasitic Nematodes. In *Potential IPM Tactics*. (Eds. Prasad, D. and Gautam, R. D.) Westvill Publishing House, New Delhi-63. Pp.217-231.
2. Ganguly, A.K., Sharma, H.K. and **Singh Satyandra** (2009). Nematode Infestation of Legume Vegetables. In: Nematode Infestation (Part I) Field Crops. Eds. Khan, M.R. National Academy of Sciences, India.
3. **Singh Satyandra** and Dhawan S.C. (2011). Nematophagous fungi in biocontrol of plant parasitic nematodes. In: *Potential Plant Protection strategies*. Ed; D. Prasad. I.K. International Publishing house Pvt. Ltd. New Delhi. Pp570.
4. **Singh Satyandra** and Dhawan S.C. (2011). Bacterial antagonists in biocontrol of plant parasitic nematodes. In: *Potential Plant Protection strategies*. Ed; D. Prasad. I.K. International Publishing house Pvt. Ltd. New Delhi. Pp570.
5. Sharma, H.K. and **Singh Satyandra** (2011). Nematode – Fusarium wilt complex. In Plant Protection, Diversity and Conservation (Eds. Prasad, D. and Kumar, S.), Biotech Books, New Delhi-110002. 79-97pp.
6. **Singh Satyandra** (2015). Kheto me Sutrakrimi Parnbandhan (Hindi). In Krishi me Sabjiyo Dwara Vivedhikaran, ICAR-IIVR, Varanasi, UP.

#### TECHNICAL BULLETIN/MANUAL

1. Rai, A.B., Shivalingaswamy, T.M., Kodandaram, M.H., Saha, S., **Singh, Satyandra**, Saritha, R.K. and Rai, M. (2009). Integrated Pest and Disease Management, Training Manual, IIVR, Varanasi, p.136.

#### POPULAR ARTICLES

1. **Singh Satyandra** and Sharma, B.B. (2005). Mushroom, Ek- Osdhiya. Kheti Duniya, 24 December, 2005, 10 (52).

2. Sharma, H.K. and **Singh Satyandra** (2008). Management of Molya disease of wheat. Indian farming, September-October, 2008:19-21.
3. **Singh Satyandra** (2012). Nematode management in organic crops. Indian Horticulture (*Technology*).

#### **TECHNOLOGY ARTICLES**

1. **Singh Satyandra**, Sharma, H.K. and Pankaj. (2009). Have Healthy nematode free Vegetables. Indian Horticulture (*Technology*), November-December, 2009:30-31.
2. **Singh Satyandra** and Singh R.K. (2011). Friendly ways to escape chickpea from hidden enemies. Indian Horticulture (*Technology*), Nov-Dec, 2011

#### **NATIONAL NEWS ITEM**

1. **Ab Sabjiyo Ki Dhal Banega Fafund**. In National Hindi Danik –**Hindustan**. Tuesday, 21st December, 2010, Varanasi, Volume-141, Pp-4.

#### **Radio Talk**

1. All India Radio Akashvani Kayakaram (Prashar Bharti), Varanasi kendra, Title: **Nematode aur Eska Sabjiyo par Prabhav avam roktham**. KRISHI JAGAT, 18.02.2011.
2. All India Radio Akashvani Kayakaram (Prashar Bharti), Varanasi kendra, Title: **Mushroom ki kheti ko Nematode se kaise bachay**. KRISHI JAGAT, 18 August, 2011.



## ABSTRACTS OF PAPER PRESENTED

1. Chawla, M.L., Prasad, D. and **Singh Satyandra** (1989). Interaction between *Hoplolaimus indicus* and *Meloidogyne incognita* infesting *Glycine max*. In National symposium on environmental management strategies for pathogenesis in parasitic diseases, October 13-15, 1989. Parasitology laboratory, Department of Zoology, University of Allahabad, Allahabad. Pp.24.
2. Chawla, M.L. **Singh Satyandra** and Prasad, D. (1991). A dyssaprobic nematode *Acrobeloides butschlii* (Ab) in rhizobial (R) nodules of soybean (Gm). In Second Annual Meeting on 'PESTICIDES AND MICROBIAL AGENTS' Wednesday, October 30, 1991 organised by Indian Phytopathological Society (Delhi Chapter), Division of Mycology and Plant Pathology, IARI, New Delhi-12, page-6&7.
3. **Singh Satyandra**, Singh, S.B. and Goswami, B.K. (1995). Nematicidal activity of Pyrano [2,3-d] on *Meloidogyne incognita*. In National symposium on nematode problems of India..... and biocomponents, Society of Indian Nematologists, Division of Nematology, March 24-26, 1995. at IARI, New Delhi 93p.
4. Goswami, B.K., Rao Uma and **Singh Satyandra** (1997). Potentiality of some fungal bioagents against root-knot nematode, *Meloidogyne incognita* infected tomato. In First National Symposium on Pest Management in Horticultural Crops: Environmental Implications and Thrusts, October 15-17, 1997 at Institution of Agricultural Technologists, Bangalore-560052 by Association for Advancement of Pest Management in Horticultural Ecosystems, Division of Entomology and Nematology, Indian Institute of Horticulture Research, Hassaraghatta Lake Post, Bangalore-560089, PP- 86.
5. Goswami B.K., **Singh Satyandra** and Majid Olia (1998). Role of mustard oilseed cake in the management of disease-complex caused by *Rhizoctonia bataticola* and *Meloidogyne incognita* Infecting tomato. In National Symposium on Rationale Approaches in Nematode Management for Sustainable Agriculture, November 23-25, 1998 sponsored by NSI and Gujrat Agricultural University, held at B. A. College of Agriculture, Anand Campus, Anand, (Gujrat), page-4.
6. Goswami B.K., **Singh Satyandra** and Majid Olia (1998). Management of root-knot nematode, *Meloidogyne incognita* infesting tomato through combination of fungal bioagents. In National Symposium on Rationale Approaches in Nematode Management for Sustainable Agriculture, November 23-25, 1998 sponsored by NSI and Gujrat Agricultural University, held at B. A. College of Agriculture, Anand Campus, Anand, (Gujrat), page-18.
7. Goswami, B.K. Mittal A., Chaudhary, P.N. and **Singh Satyandra** (1999). Fungi associated with root-knot nematode infected vegetables around Yamuna river belt in Delhi. In National Seminar on Nematological Research in India challenges and preparedness for the New Millennium, 17 December, 1999 held at CSA University of Agriculture and Technology, Kanpur-208002, Page-38.
8. Mohan, S., **Singh Satyandra** and Goswami, B.K. (2001). Influence of fungal extracts on survival and potency of *Heteroderhabditis indica*. In National congress on centenary of Nematology in India-Appraisal and Future plans, 5-7 December, 2001, sponsored by NSI, ICAR, NAAS, DST and Society of Plant Protection Sciences, organized by Division of Nematology, IARI, New Delhi-12, page-127.

9. **Singh Satyandra** and Goswami, B.K. (2001). Comparative efficacy of different hypomycetes fungi associated with rhizosphere and / or rhizoplane of vegetable against root-knot nematode, *Meloidogyne incognita* infecting tomato. In National congress on centenary of Nematology in India-Appraisal and Future plans, 5-7 December, 2001, sponsored by NSI, ICAR, NAAS, DST and Society of Plant Protection Sciences, organized by Division of Nematology, IARI, New Delhi-12, page-145&146.
10. Goswami, B.K. and **Singh Satyandra** (2001). Bio-management of disease-complex caused by *Meloidogyne incognita* and *Fusarium oxysporum* on tomato. In National congress on centenary of Nematology in India-Appraisal and Future plans, 5-7 December, 2001, sponsored by NSI, ICAR, NAAS, DST and Society of Plant Protection Sciences, organized by Division of Nematology, IARI, New Delhi-12, page-169.
11. Sharma, H.K., Goswami, B.K. and **Singh Satyandra** (2001). Neem kernal a curative for root-knot nematode, *Meloidogyne incognita-Fusarium oxysporum* wilt on okra. In National Symposium on Plant Protection Strategies for Sustainable Agri-Horticulture, 12-13 October, 2001 organized by Society of Plant Protection Sciences and S.K. University of Agricultural Science and Technology. R.S. Pura, Jammu-181102, page-135&136.
12. Goswami, B.K. Mittal, A. **Singh Satyandra** and Sharma, B.B. (2002). Performance of fungal bioagents along with mustard cake for the management of root-knot nematode infecting brinjal. In National Symposium on Biodiversity and Management of Nematodes in Cropping Systems for Sustainable Agriculture, 11-13 November, 2002, Organized by NSI of India, ICAR and Rajasthan Agricultural University, Bikaner at Department of Nematology, Agriculture Research Station, Durgapura, Jaipur-302018 (Rajasthan). PP.79, page-64&65.
13. **Singh Satyandra**, Goswami, B.K. Mittal, A. and Sharma, B.B. (2002). An ecofriendly management of root-knot Nematode in Okra. In National Symposium on Biodiversity and Management of Nematodes in Cropping Systems for Sustainable Agriculture, 11-13 November, 2002, Organized by NSI of India, ICAR and Rajasthan Agricultural University, Bikaner at Department of Nematology, Agriculture Research Station, Durgapura, Jaipur-302018 (Rajasthan). PP.80, page-65.
14. **Singh Satyandra** and Goswami, B.K. (2002). Comparative efficacy of different hypomycetous fungi associated with rhizosphere and / or rhizoplane of vegetables against root-knot nematode, *Meloidogyne incognita* infecting tomato. In National Symposium on Biodiversity and Management of Nematodes in Cropping Systems for Sustainable Agriculture, 11-13 November, 2002, Organized by NSI of India, ICAR and Rajasthan Agricultural University, Bikaner at Department of Nematology, Agriculture Research Station, Durgapura, Jaipur-302018 (Rajasthan). PP.81, page-65-66.
15. Goswami, B.K., **Singh Satyandra** and Sharma, B.B. (2002). Antagonistic efficacy of *Paecilomyces lilacinus* and *Trichoderma* spp. against *Rhizoctonia bataticola* and *Fusarium solani*. In IPS (MEZ) Annual Meet and National symposium on "Integrated Management of Plant Diseases of Mid Eastern India with a Cropping Systems Perspectives", 5-7 December, 2002 organized by IPS at N.D. University of Agriculture and Technology, Faizabad-224224, UP. No-6.

16. Sharma, B.B., Goswami, B.K. and **Singh Satyandra** (2002). Role of *Aspergillus niger* and *Trichoderma viride* on disease-complex caused by root-knot nematode, *Meloidogyne incognita* and root-rot fungus *Rhizoctonia bataticola* infecting tomato. In IPS (MEZ) Annual Meet and National symposium on “Integrated Management of Plant Diseases of Mid Eastern India with a Cropping Systems Perspectives”, 5-7 December, 2002 organized by IPS at N.D. University of Agriculture and Technology, Faizabad-224224, UP. No-7
17. Pandey, R.K., Goswami, B.K. and **Singh Satyandra** (2004). Management of Pigeon pea wilt through the use of VAM and study of biotechnological changes at cellular level. In “National Seminar on Biotechnological approaches towards the Integrated Management of Crop diseases” (30-31 July, 2004) at Department of Botany, Marathwada University Aurangabad, MS. OP-8, page-41-42.
18. Pandey, R.K., Goswami, B.K. and **Singh Satyandra** (2004). Integrated management of disease-complex caused by root-knot nematode and wilt fungus through use of fungal bioagents, neem oilseed cake and /or VA-Mycorrhiza on chickpea (*Cicer arietinum* L.). In 26<sup>th</sup> Annual Conference of ISMPP and National symposium on advances in Fungal Diversity and Host Pathogen Interactions (7-9, October, 2004) at Department of Botany, Goa University, Taleigao, Goa-403206 page-145&146.
19. **Singh Satyandra**, Goswami, B.K. and Pandey, R.K. (2004). Biocontrol efficacy of different species of *Fusarium* isolated from rhizosphere and rhizoplane against *Meloidogyne incognita* on tomato. In 26<sup>th</sup> Annual Conference of ISMPP and National symposium on advances in Fungal Diversity and Host Pathogen Interactions (7-9, October, 2004) at Department of Botany, Goa University, Taleigao, Goa-403206 page-149.
20. Dhawan, S.C., Prakash Babu, N. and **Singh Satyandra** (2007). Biomangement of root-knot nematode, *Meloidogyne incognita* on okra by egg parasitic fungus, *Pochonia chlamydosporia*. Paper presented in “National symposium on Nematology in 21<sup>st</sup> Century: Emerging paradigms. 22-23, November, 2007 organised by NSI, New Delhi, ICAR, New Delhi and AAU, Jorhat at Assam Agriculture University, Jorhat, Assam, India, page-102
21. **Singh, Satyandra**, Rai, A.B. and Kumar, A. (2009). Biological control of root-knot nematode, *Meloidogyne incognita* in chilli, *Capsicum annum* by *Trichoderma viride* and *Pochonia chlamydosporia*. Paper presented in “National seminar on Spices- improving productivity and quality with focus on Himalayan spices” (NSS-2009) on 22<sup>nd</sup> – 24<sup>th</sup> October, 2009 at Sher-e-Kashmir, University of Agricultural Sciences and Technology of Jammu, Division of Vegetable Science and floriculture, Main Campus Chatha, Jammu-180 009 (J&K), India. **IPM-IV-09**. pp 65.
22. **Singh Satyandra**, Bhagwati, B. and Goswami, B.K. (2010). Biomangement of root-knot nematode, *Meloidogyne incognita* infecting chickpea. Paper presented in “8<sup>th</sup> National Symposium on Problems and Perspectives in Ecofriendly Innovatives to Plant Protection” on 24<sup>th</sup>-25<sup>th</sup> January, 2010 at C.S. Azad University of Agriculture and Technology, Kanpur-208 002 (UP). pp. 139.
23. **Singh Satyandra**, Rai, A.B., Singh, A.K., Goswami, A. and Singh, R.K. (2010). Integrated management of root-knot nematode, *Meloidogyne incognita* in egg plant under field condition. Paper presented in “National conference on

Innovations in Nematological Research- Challenges and a Roadmap Ahead”at TNAU, Coimbatore on 23<sup>rd</sup> -25<sup>th</sup> February, 2010. pp.

24. Sellaperumal, C., **Singh, Satyandra** and Halder, J. (2014). In-vitro studies of bio-efficacy of dhatura extract against root-knot nematode, *Meloidogyne incognita*. Paper presented in National conference on Pre/Post harvest losses and value addition in vegetables organized by Association for Production and Innovations in Vegetables, ICAR-IIVR, Varanasi, UP.

#### **ABSTRACTS OF PAPERS PRESENTED IN INTERNATIONAL SYMPOSIA / SEMINAR / CONFERENCE**

1. Chaitali, Singh, L. **Singh Satyandra** and Goswami, B.K. (2002). Biomangement of root-knot nematode, *Meloidogyne incognita* infecting brinjal through combination of fungal bioagents, *Aspergillus terreus* and *Trichoderma viride*. In Asian Congress of Mycology and Plant Pathology (October, 1-4, 2002) Plant Health for Food Security, organized by University of Mysore, Mysore and Indian Society of Mycology and Plant Pathology at Department of Applied Botany, Seed Pathology and Biotechnology, University of Mysore, Manasagangothri, Mysore-570006 (India). PP-290, page-177
2. Goswami, B.K., Sharma, B.B., **Singh Satyandra** and Mittal, A (2002). Potentiality test of some fungal bioagents isolated from rhizoplane and rhizosphere of root-knot nematode affecting vegetables against *Meloidogyne incognita*. In Asian Congress of Mycology and Plant Pathology (October, 1-4, 2002) Plant Health for Food Security, organized by University of Mysore, Mysore and Indian Society of Mycology and Plant Pathology at Department of Applied Botany, Seed Pathology and Biotechnology, University of Mysore, Manasagangothri, Mysore-570006 (India). PP-418, page-233
3. **Singh Satyandra**, Chaitali and Goswami, B.K. (2002) Role of *Rotylenchulus reniformis* in disease-complex caused *Meloidogyne incognita* and *Sclerotium rolfsii* on tomato. In Asian Congress of Mycology and Plant Pathology (October, 1-4, 2002) Plant Health for Food Security, organized by University of Mysore, Mysore and Indian Society of Mycology and Plant Pathology at Department of Applied Botany, Seed Pathology and Biotechnology, University of Mysore, Manasagangothri, Mysore-570006 (India). PP-451, page-253
4. **Singh Satyandra**, A. B. Rai and R.K. Singh (2012). Integrated approach for the management of root-knot nematode, *Meloidogyne incognita* on tomato under field conditions. *International conference on Mycology and Plant Pathology: Biotechnological Approaches (ICMPB)*, Center of advanced study in Botany, BHU, Varanasi. Paper presentation on 27-29 February, 2012, pp-107-108.
5. **Singh Satyanadra**, Singh, B. and Singh, A.P. (2014). Incidence and population density of plant parasitic nematodes infecting vegetable crops and associated yield losses in Eastern Uttar Pradesh. Paper presented in International Conference: Changing scenario of Pest Problems in Agri-Horti Ecosystem and their Management organized by Entomological Research Association, RCA, MP Univ. of Agri. and Tech., Udaipur (RAJ).
6. **Singh Satyandra** and Singh. B. (2014). Nematodes: a threat to sustainability of Agriculture. Accepted for Poster presentation in International Conference on “Agriculture and Climate Change-Adapting crops to increased uncertainty organized by Current Opinion Conferences, Amsterdam, The Netherlands.