


**ICAR –INDIAN INSTITUTE of SUGARCANE RESEARCH
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Personal Information

Dr. Sanjay Kumar Goswami, Senior Scientist, Plant Pathology, Crop Protection Division	
Designation	Senior Scientist
Division/Section	Crop Protection
Research Area	Sugarcane Pathology
Patent Details	
Rapid LAMP based detection of Rhizoctonia sheath blight causing pathogens in rice (β tubulin)- application no. <u>202111020898</u>	
External Funded Projects	
<ul style="list-style-type: none">• Co-PI: Development of gene-chip for detection of major fungal plant pathogens (2017-2022).• Co-Pi- Establishment of Biotech Kisan hub at ICAR-NBAIM, Mau, DBT• Co-PI: Scale-up, fortification and dissemination of microbial agro waste bioconversion technology for empowering rural weaker sections (DST)• Co-Pi- Agrowaste management, bioconversion technology for the development of rural farmers- RKVY• Co-PI: Characterization of <i>Fusarium solani</i> isolates from chilli based on multi gene analysis (Phytofura, an ICAR network project on <i>Phytophthora</i>, <i>Fusarium</i> and <i>Ralstonia</i>) (2015-2017)• Co-PI:”Development of microarray based gene chip for fungal plant pathogens under the background of DNA barcodes using multilocus gene phylogeny (2015-2017).	
Publications	

Scientific/ technical leaf folder

1. Singh S, Raj C, Goswami SK, Roy S, Rathod NKK, Prakash B. (2022). Yellow leaf disease of sugarcane and management. ICAR-IISR, Lucknow
2. Goswami SK, Raj C, Singh S, Singh D, Roy S, Sushil SN. (2022). Wilt disease of sugarcane. ICAR-IISR, Lucknow
3. Raj C, Singh S, Goswami SK, Borase DN, Singh D, Roy S, Prakash B. (2022). Management of Pokkah Boeng disease in sugarcane. ICAR-IISR, Lucknow

Research Papers:

1. Choudhary P, Goswami SK, Chakdar H, Verma S, Thapa S, Srivastava AK and Saxena AK (2022) Colorimetric loop-mediated isothermal amplification assay for detection and ecological monitoring of *Sarocladium oryzae*, an important seed-borne pathogen of rice. *Front. Plant Sci.* 13:936766. doi: 10.3389/fpls.2022.936766
2. Shahid M, Singh BN, Verma S, Choudhary P, Das S, Chakdar H, Murugan K, Goswami SK, Saxena AK. 2021. Bioactive antifungal metabolites produced by *Streptomyces amritsarensis* V31 help to control diverse phytopathogenic fungi. *Braz J Microbiol.* Sep 30. doi: 10.1007/s42770-021-00625-w. Epub ahead of print. PMID: 34591293.
3. Goswami SK, Singh V, Singh VK, Kashyap PL, Awasthi S, Singh, PK. (2020). Novel candidate pathogenicity genes in *Rhizoctonia solani* AG11A identified with microsatellite markers. *J Mycol Pl Pathol* 50 (3): 249-262
4. Lalitha Pavani S, Vineeta Singh, Sanjay Kumar Goswami and PK Singh (2020). Screening for novel rice sheath blight resistant germplasm and their biochemical factors. *Indian Phytopathology*, 73(4), 689-694; DOI: 10.1007/s42360-020-00284-1
5. Choudhary P, Rai P, Yadav Jagriti, Shaloo Verma, Hillol Chakdar, Sanjay Kumar Goswami, Alok Kumar Srivastava, Prem Lal Kashyap & Anil Kumar Saxena. (2020). A rapid colorimetric LAMP assay for detection of *Rhizoctonia solani* AG-11A causing sheath blight of rice. *Scientific Reports*, 10:22022; <https://doi.org/10.1038/s41598-020-79117-0>. Published on 16.12.2020
6. Goswami SK, Kashyap PL., and Awasthi, S. (2019). Deciphering rhizosphere microbiome for salt tolerant bacteria and its evaluation for salt stress management in solanaceous crops in India. *Indian Phytopathology*, DOI: 10.1007/s42360-019-00174-1.
7. Choudhary P, Das S, Chakdar, H, Singh A, Goswami, SK and Saxena, AK. (2019). Rapid high throughput template preparation (rHTTP) method: A novel cost-effective method of direct PCR for plants. *BMC Biotechnology*, 19:69.
8. Chakdar H, Goswami SK, Singh E, Choudhary P, Kashyap PL, Srivastava AK, Saxena AK (2019), *noxB* based marker for *Alternaria* spp.: A new diagnostic marker for specific and early detection in crop plants. *3 Biotech* (2019) 9:249. DOI: 10.1007/s13205-019-1779-4, (IF-1.5).
9. Prassan Choudhary, Hillol Chakdar, Arjun Singh, Sunil Kumar, Sanjeev Kumar Singh, Murali Aarthy, Sanjay Kumar Goswami, Alok Kumar Srivastava & Anil Kumar Saxena (2019): Computational identification and antifungal bioassay reveals phytoosterols as potential inhibitor of *Alternaria arborescens*, *Journal of Biomolecular Structure and Dynamics*, DOI:10.1080/07391102.2019.1597767 (IF -3.1)

10. Goswami S, Singh, Vineeta, Kashyap, PL and Singh, PK. (2019). Morphological characterization and screening for sheath blight resistance using Indian isolates of *Rhizoctonia solani* AG11A. *Indian Phytopathology*, 72(1):107-124. DOI 10.1007/s42360-018-0103-2.
11. Goswami S, Kumar S, Singh V and Thind TS (2018). Efficacy of fungicides against *Rhizoctonia solani* causing black scurf of potato, *Life Sciences leaflets*, 106: 5-9.
12. Goswami S and Thind TS. (2018). Evaluation of novel action fungicides against *Ustilaginoidea virens* causing false smut of rice, *Journal of Biotechnology and Crop Sciences BHU*, 7(10), 45-47.
13. Choudhary P, Kashyap PL, Goswami SK, Chakdar H, Srivastava AK, Saxena AK(2017). Genome-wide Analysis of Microsatellites in *Alternaria arborescens* and elucidation of the function of *Polyketide synthase* (PksJ). *Interdisciplinary Sciences: Computational Life Sciences*, DOI 10.1007/s12539-017-0251-6, (IF 0.853).
14. Goswami S, Singh V and Kashyap PL (2017). Population genetics structure of *Rhizoctonia solani* AG-11A from rice field in North India. *Phytoparasitica*. 45: 299-316 (NAAS =7.03). DOI 10.1007/s12600-017-0600-3.
15. Kumari R, Singh V, Pavani L, Goswami S, Pothiraj G. (2016). Morphological and pathological characterization of *Rhizoctonia solani* causing sheath blight of rice. *Life Sciences Leaflets*. 78: 18-29.
16. Joshi, M., Singh, P.K., Waza S.A., Singh, V., Goswami, S., Pallavi., Kumar S., Singh, A.K., Zaidi, N.W and Singh U.S. (2016). Establishment an association between molecular markers and sheath blight (*Rhizoctonia solani* Kuhn) resistance in rice. *Plant Omics J*. 9(4):281-288. DOI: 10.21475/poj.16.09.04.p7887. (NAAS =6.00).
17. Goswami S, Thind TS, Kaur R, Raheja S and Bala A and Kumar P. (2011). Monitoring for metalaxyl resistance in *Phytophthora parasitica*, molecular characterization of resistant strain and its management with novel action fungicides. *J Mycol Plant Pathol*. 41(3):382-386. (NAAS=5.79)
18. Sharma L, Goswami S and Nagrale DT. (2013). Cultural and physiological variability in *R. solani*, responsible for foliar and lesions on aerial part of soybean. *J. Applied Nat. Sci*. 5(1):41-46. (NAAS=5.08).
19. Nagrale DT, Gaikwad AP and Goswami S. (2013). Varietal screening of *Gerbera jamesonii* for resistance to *Alternaria blight*. *Indian Phytopath*. 66 (2) 199-203. (NAAS=5.9).
20. Thind TS, Goswami S, Kaur R, Raheja, S and Mohan C. (2010). Development of metalaxyl resistance in *Pseudoperonospora cubensis* and management options with novel action fungicides. *Indian Phytopath*. 63(4) 387-91.
21. Nagrale DT, Gaikwad AP, Goswami S and Sharma L. (2012). Fungicidal management of *Alternaria alternata* (Fr.) Keissler causing blight of Gerbera (*Gerbera jamesonii* H. Bolus ex J. D. Hook). *Journal of Applied and Natural Sciences* 4(2):220-227. (NAAS=5.08).
22. Goswami S, Kaur R and Nagrale DT. (2012). *In vitro* study of Base line sensitivity of important fungi against different fungicides. *Journal of Applied and Natural Sciences* 4(2): 264-265. (NAAS=5.08).
23. Kaur R, Thind TS, Goswami S (2010). Profiling of *Phytophthora infestans* populations for metalaxyl resistance and its management with novel action fungicides. *J Mycol Plant Pathol*. 40(1): 14-21 (Award paper).
24. Goswami S and Pannu PPS (2008). Effect of pesticides on germination of

- teliospores of *Tilletia indica*. *J. Mycol. Pl. Pathol.* 38 (3): 577-579.
25. Pannu PPS, Goswami S, Chahal SS and Kaur M (2007). Upward movement of teliospores of *Tilletia indica* in wheat seedlings and vulnerable stages of ear heads to Karnal bunt infection. *J Mycol Plant Pathol.* 37(2): 205-207.

Short communications=12

- 1) Goswami SK, Chakdar H, Choudhary P, Verma S, Tiwari P, Shahid M, Singh BN, Das S, Kumar M, Srivastava AK and Saxena AK (2022) Characterization of *Ustilaginoidea virens* causing false smut of rice and its biocontrol in north india, *Indian Phytopathology* <https://doi.org/10.1007/s42360-022-00460-5>
- 2) Pothi R, Singh V, Naveen KR, Goswami SK (2021). Development of Systemic acquired resistance (SAR) by triggering the plant defense enzymes in tomato (*Lycopersicon esculentum*) through *Alternaria solani* infection. *Ind J Ag. Sci.* 91 (4): 644-646 NAAS rating >6
- 3) Goswami S and Thind TS. (2018). Efficacy of fungicides against grain discoloration of rice under natural conditions, *Indian Phytopathology*, DOI, <https://doi.org/10.1007/s42360-018-0063-6>.
- 4) Goswami S and Thind TS. (2012). Management of powdery mildew (*Sphaerotheca fuliginea*) of summer squash with new fungicides and natural products. *Indian Phytopath.* 65(2):198-199.
- 5) Goswami S, Thind TS and Nagrale DT. (2013). Efficacy of new fungicides against anthracnose of chilli (*Capsicum annum*) caused by *Colletotrichum capsici*. *Indian Phytopath.* 66(2)207-208.
- 6) Goswami S, Kaur R, Raheja S and Thind T. S. (2012). Potential of novel action fungicide against late blight of potato caused by *Phytophthora infestans*. *J.Mycol Plant Pathol*, 42(4): 531-533.
- 7) Goswami S, Thind T. S and Kaur R (2012). Sensitivity response of populations of *Erysiphe necator* to triadimefon and *Gloeosporium ampelophagum* to carbendazim in grapes in Punjab. *J Mycol Plant Pathol.* 42(2): 267-269.
- 8) Goswami S, Thind T. S, Kaur and M Kaur (2012). Management of sheath blight of rice with novel action fungicides. *Indian Phytopath*, 65 (1):92-93.
- 9) Goswami S, Thind T. S, Sandeep Raheja and VK Vashisht (2011). Screening of muskmelon lines against downy mildew caused by *Psuedoperonospora cubensis* under field conditions. *Indian Phytopathology* 64 (4):374-375.
- 10) Aujla SS, Goswami, S, Thind TS, and Raheja S, Kumar P (2010) Relative effectiveness of fungicides in controlling purple blotch of onion seed crop. *Plant Dis. Res.* 25 (1): 73-74. (NAAS=4.58).
- 11) Pannu PPS, Thind TS and Goswami S (2010). Standardization of technique for artificial inoculation of false smut of rice and its effective management. *Indian Phytopathol.* 63(2) 234-235.
- 12) Thind TS, Goswami S, Thind, SK and C. Mohan (2009). Resistance in *Phytophthora parasitica* against metalaxyl in citrus. *Indian Phytopath.* 62 (4):536-53.

Review article

- 1) Goswami SK, Singh D, Joshi D and Singh SP (2020). An insight into sugarcane wilts in India. *Agric Res J* 57(5): 641-647. (invited review).
- 2) Goswami SK, Singh V, Chakdar H and Choudhary P. (2018). Harmful effects of fungicides-Current status, *International Journal of Agriculture, Environment and Biotechnology*: pp, 1025-1033, special issue, BHU, Varanasi. Print ISSN: 1974-1712; Online ISSN: 2230-732X.

- 3) Goswami S, Bala A, Thind TS, Raheja S, Kaur R and Hunjan M (2016). Non-target effect of fungicides. *Rev. of Plant. Pathol.* Vol. 6, 501-518.
- 4) Bala A, Thind TS, Goswami S, and Raheja S (2012). *Agrobacterium tumefaciens*; practical implications in agriculture. *Rev. Plant. Pathol.* Vol. 5, 427-444.
- 5) Bala A, Thind TS, Goswami S, and Raheja S (2012). Managing plant diseases in organic agriculture. *Rev. Plant. Pathol.* Vol. 5, 123-138.

Technical Bulletin

1. Singh DP, Renu, Goswami SK (2019), Scale up fortification and Dissemination of Microbial agro waste bioconversion technology for empowering rural weaker sections. ICAR-NBAIM, Mau, UP, pp15. SCSP programme.

2 Singh DP, Renu, Goswami SK (2019). Experimental farmers training on applications of microbial technology, 14-18 Nov, 2019 -5 days, Biotech Kisan Hub, DBT, ICAR-NBAIM, Mau, 39 pages.

Popular articles

1. Roy S. Goswami SK et al., (2021). Seventy years of crop protection research achievements at IISR **10(2):** 43-61
2. शर्मिला रॉय, गोस्वामी एस के एट अल (2021)। भारतीय गन्ना अनुसंधान संस्थान, लखनऊ की यात्रा में फसल सुरक्षा अनुसंधान के सत्तर साल इक्षु **10(2):** 11-23
3. संजय कुमार गोस्वामी, चंद्रमणि राज और श्वेता सिंह (2021). गन्ने के मुख्य कवक रोग और उनका प्रबंधन. *Ikshu 10(1):* 32-34
4. Goswami SK, Singh D, Joshi D and Raj C, Singh S and Singh MR. 2021. गन्ने का उकठा रोग: परिचय और प्रबंधन. *Ikshu 9(2)* 90-92.
5. Sanjay Kumar Goswami (2020). कवक से होने वाले धान के प्रमुख रोग एवम निदान. कृषि किरण अंक-10, दिसंबर 2020: पृष्ठ 10-14, <http://saaer.org.in>
6. Sanjay Kumar Goswami (2020). Guava wilt: A challenge in Plant Pathology. *Krishi Jagran*, <https://krishijagran.com/featured/guava-wilt-a-challenge-in-plant-pathology/>. July issue, 2020
7. Sanjay Goswami, (2020). Crop residu burning: Insight into issues, challenges and management. (English version) *Popular Kheti*, 8(2)175-177 (April-June), 2020, eISSN: 2321-0001.
8. Sanjay Goswami, Vineeta Singh, Ravindra Kumar, Hillol Chakdar, and AK Srivastava (2017). Rice diseases and their management. (English version) *Kisan Gyan*. Vol. 1 (9): 10-12.
9. Sanjay Goswami and Ravindra Kumar (2017). Mango malformation: A national problem. (English version) *Kisan Gyan*. Vol. 1 (6): 9-11.
10. Sanjay Goswami and Ravindra Kumar (2017). Bordeaux mixture: Holy water of Plant Pathology. (English version) *Kisan Gyan*. 1(5):12-13.
11. Thind TS, Singh P and Goswami S (2009). Seed treatment and tips for management of late blight of potato (Punjabi version) *Changi Kheti*, 45 (10) pp 25.
12. Thind TS, Rewal HS and Goswami S (2008). Management of late blight of potato. (Punjabi version) *Changi Kheti*, 43 (1) pp 23.

Manual chapter

- Goswami SK, Chakdar H, Singh A, Choudhary P (2019). Sampling and isolation of important fungus plant pathogens, National Training on “Current approaches in fungal biology: Diversity analysis, identification and taxonomy of Oomycetes and Deuteromycetes fungi” 4-13 Nov., 2019. Pp175, ICAR, NBAIM, Mau pp3
- Goswami SK, Srivastava AK and Chakdar H (2019). Oomycetes fungi- an overview, National Training on “Current approaches in fungal biology: Diversity analysis, identification and taxonomy of Oomycetes and Deuteromycetes fungi” 4-13 Nov., 2019. Pp175, ICAR, NBAIM, Mau, pp10
- Goswami SK (2019). Deuteromycetes fungi- latest updates, National Training on “Current approaches in fungal biology: Diversity analysis, identification and taxonomy of Oomycetes and Deuteromycetes fungi” 4-13 Nov., 2019. Pp175, ICAR, NBAIM, Mau, pp35
- Srivastava AK, Goswami SK, and Srivastava AK (2019). Fungal taxonomy and nomenclature- recent updates, National Training on “Current approaches in fungal biology: Diversity analysis, identification and taxonomy of Oomycetes and Deuteromycetes fungi” 4-13 Nov., 2019. Pp175, ICAR, NBAIM, Mau, pp71
- Choudhary P, Goswami SK, Chakdar H, Verma S (2019) Systematics of Rhizoctonia, National Training on “Current approaches in fungal biology: Diversity analysis, identification and taxonomy of Oomycetes and Deuteromycetes fungi” 4-13 Nov., 2019. Pp175, ICAR, NBAIM, Mau, pp94
- Verma S, Goswami SK, Chakdar H and Choudhary P (2019). Classification of alternaria in Current approaches in fungal biology: Diversity analysis, identification and taxonomy of Oomycetes and Deuteromycetes fungi” 4-13 Nov., 2019. Pp175, ICAR, NBAIM, Mau, pp113
- Choudhary P, Goswami SK, Chakdar H (2019) Role of DNA barcoding in plant disease identification, National Training on “Current approaches in fungal biology: Diversity analysis, identification and taxonomy of Oomycetes and Deuteromycetes fungi” 4-13 Nov., 2019. Pp175, ICAR, NBAIM, Mau, pp149
- Sanjay Kumar Goswami, Hillol Chakdar and Prassan Choudhary (2019). DNA microarray and gene chip based approaches for detection of plant pathogens; National Training on “Biocontrol strategies for invasive and emerging plant pathogens” Sep. 21-30, 2019. Pp---, ICAR, NBAIM, Mau
- Sanjay Kumar Goswami, (2018). On field identification and sampling of soil and diseased plant specimens; National Training on “Current approaches in fungal biology: Diversity analysis, identification and taxonomy of Deuteromycetes fungi” Nov. 28- Dec. 7, 2018. Pp185, ICAR, NBAIM, Mau
- Sanjay Kumar Goswami, (2018). Deuteromycetes fungi- An overview; National Training on “Current approaches in fungal biology: Diversity analysis, identification and taxonomy of Deuteromycetes fungi” Nov. 28- Dec. 7, 2018. Pp185, ICAR, NBAIM, Mau
- Sanjay Kumar Goswami, (2018). The species concept in fungi; National Training on “Current approaches in fungal biology: Diversity analysis, identification and taxonomy of Deuteromycetes fungi” Nov. 28- Dec. 7, 2018. Pp185, ICAR, NBAIM, Mau
- AK Srivastva, Sanajy Kumar Goswami and Anchal Kumar Srivastva (2018). Recent concepts in fungal taxonomy and nomenclature; National Training on “Current approaches in fungal biology: Diversity analysis, identification and taxonomy of Deuteromycetes fungi” Nov. 28- Dec. 7, 2018. Pp185, ICAR,

NBAIM, Mau

- Sanjay Kumar Goswami, (2018). Integrative taxonomy; National Training on “Current approaches in fungal biology: Diversity analysis, identification and taxonomy of Deuteromycetes fungi” Nov. 28- Dec. 7, 2018. Pp185, ICAR, NBAIM, Mau
- Prassan Choudhary, Hillol Chakdar, Sanjay K Goswami and Shaloo Verma, (2018). Taxonomy, identification and classification of *Rhizoctonia*; National Training on “Current approaches in fungal biology: Diversity analysis, identification and taxonomy of Deuteromycetes fungi” Nov. 28- Dec. 7, 2018. Pp185, ICAR, NBAIM, Mau
- Shaloo Verma, Sanjay Kumar Goswami, and Hillol Chakdar (2018). Advances in taxonomy and systematics of *Alternaria* sp; National Training on “Current approaches in fungal biology: Diversity analysis, identification and taxonomy of Deuteromycetes fungi” Nov. 28- Dec. 7, 2018. Pp185, ICAR, NBAIM, Mau
- Prassan Choudhary, Sanjay Kumar Goswami and Hillol Chakdar (2018). DNA barcoding in plant disease diagnostics; National Training on “Current approaches in fungal biology: Diversity analysis, identification and taxonomy of Deuteromycetes fungi” Nov. 28- Dec. 7, 2018. Pp185, ICAR, NBAIM, Mau.
- Goswami S, Chakdar, H and Choudhary, P. (2018). Gene-chip for detection and diagnosis of important plant pathogens. National Training on Emerging Trends in Biological Control of Plant Pathogens (January 23-31, 2018), at ICAR-NBAIM, pp 43-45.
- Goswami S (2018). Bio-control of fungal plant pathogens of horticultural and vegetable crops. National Training on Emerging Trends in Biological Control of Plant Pathogens (January 23-31, 2018) at ICAR-NBAIM, Pp 53-55.
- Sanjay Kumar Goswami (2017). Seed bio-prospecting: Overview on disease management. Certified farm advisor programme by ICAR-IISS, 23 Oct. to 6 Nov. 2017, pp. 184-187.
- Sanjay Kumar Goswami (2017). Bio-control of fungal plant pathogens of vegetable crops. National training of plant pathogens: classical to modern approach, Feb 21-28, 2017 at NBAIM, Mau. Pp.40-42.
- Sanjay Kumar Goswami (2016). Role of bio-fertilizers in organic farming of vegetables. Improved production techniques for organic vegetable farming. Edi. SK Singh, Neeraj Singh, Shubhadeep Roy, Paresch Chaukhande, AB Rai, B. Singh, IIVR training manual no. 70. Varanasi, Dec. 13-20, 2016. Pp. 212-219.
- Dipak T, Nagrale, Renu, Sanjay Goswami (2016). Preservation of Fungi in mineral oil; in the manual “Microbial culture handling and maintenance-2-11 Aug, 2016, A training manual, NBAIM, Mau, pp. 26-29.
- Pooja Kannaujia, Sanjay Goswami, Udai Bhan Singh and PK Sharma (2016). Haloarchaea: Methods of isolation, conservation and maintenance; in the manual “Microbial culture handling and maintenance-2-11 Aug, 2016, A training manual, NBAIM, Mau, pp. 79-81.
- Sanjay Kumar Goswami, Arjun Singh, Kumar M, Pandiyan K, Mahendra Vikram Singh Rajawat and AK Saxena (2016). Sampling methods; in the manual Techniques in Microbiology- 5-18 Nov. 2016, A training manual, NBAIM, Mau, p 9-12.
- Sanjay Kumar Goswami, Ravindra Kumar, Dipak T Nagrale, Hillol Chakdar, Mahendra Vikram Singh Rajawat, AK Srivastava and AK Saxena. (2016). Bio-safety; in the manual Techniques in Microbiology- 5-18 Nov. 2016, A training manual, NBAIM, Mau, p 83-86.

- Mahendra Vikram Singh Rajawat, Kumar M, Arjun Singh, Hillol Chakdar and Sanjay Kumar Goswami (2016). Isolation of microorganisms: fungi, bacteria, actinomycetes and cyanobacteria from soil and *Rhizobium* from nodules; in the manual Techniques in Microbiology- 5-18 Nov. 2016, training manual, NBAIM, Mau, p 18-22.
- Mahendra Vikram Singh Rajawat, Kumar M, Hillol Chakdar, Arjun Singh, Sanjay Kumar Goswami and A K Saxena (2016). Enumeration of *Azospirillum* by Most Probable Number (MPN) method; in the manual Techniques in Microbiology- 5-18 Nov. 2016, training manual, NBAIM, Mau, p 23-24.
- Manish Roy, UB Singh and Sanjay Kumar Goswami (2016). Introduction to Scanning Electron Microscopy (SEM); in the manual Techniques in Microbiology- 5-18 Nov. 2016, training manual, NBAIM, Mau, p 48-51.
- Arjun Singh, Kumar M, Pandiyan K, Hillol Chakdar, Mahendra Vikram Singh Rajawat, Alok K Srivastava and Sanjay Kumar Goswami. (2016). Determination of agriculturally important traits of microorganisms; in the manual Techniques in Microbiology- 5-18 Nov. 2016, A training manual, NBAIM, Mau, p 52-63.
- Ankita Tripathi, Sanjay Kumar Goswami, Ekta Singh, Pallavi Rai, Prassan Choudhary and Pragya Saxena (2016). Laboratory solutions and reagents preparation; in the manual Techniques in Microbiology- 5-18 Nov. 2016, A training manual, NBAIM, Mau, pp 87-89.
- Sanjay Goswami, P. L. Kashyap, Lalan Sharma, Dipak Nagrale and D.K. Arora (2011). Culture Collection Catalogue for the year 2011. National Bureau of Agriculturally Important Microorganisms: A Profile. Pp 172-175.
- Mahesh Yandigeri, Lalan Sharma, Sanjay Goswami and D.K. Arora. (2011). Culture Collection Catalogue for the year 2011. Intellectual Property Rights (IPR). Pp142-148.

Misc. Publications

- Yandigeri M., Meena K.K., Sharma L and Goswami S. (2010). NBAIM Newsletter, Jan 2010-Jun 2010, Vol. X, pages 1-8.
- Alok Shrivastava, Sudhir Kumar, Sanjay Goswami, and Dipak T Nagrale, AMAAS Annual report, 2012.
- Alok Shrivastava, Sudhir Kumar, Sanjay Goswami Renu, and Dipak T Nagrale, 2012 NEWSLETTER, July – December 2011 Volume – XIII

Books or Chapter Published

1. Sanjay Goswami, Nazia Manzar, Abhijeet Shankar Kashyap and Ravindra Kumar (2020). Contribution of individuals and organizations in the development of seed pathology. Seed Borne Diseases of Agricultural Crops: Detection, Diagnosis & Management. Springer Nature, Eds. Ravindra Kumar and Anuja Gupta, DOI;10.1007/978-981-32-9046-4 I SBN-978-981-329-045-7, ISBN 978-981-329-046-4-e, pp925
2. Ravindra Kumar, Anuja Gupta, Seweta Srivastava, Geeta Devi, Vaibhav Kumar Singh, Sanjay K Goswami, Malkhan Singh Gurjar and Rashmi Aggarwal (2020). Detection of Seed Borne Fungi by Conventional and Modern Methods. Seed Borne Diseases of Agricultural Crops: Diagnosis and of seed borne fungal phytopathogens. Springer Nature, Eds. Ravindra Kumar and Anuja Gupta, DOI;10.1007/978-981-32-9046-4 ISBN-978-981-329-045-7, ISBN 978-981-329-046-4-e, pp925
3. Sanjay Goswami and Vineeta Singh (2020). RNA Interference Technology: Latest Advances and Applications in Crop Protection. Biotechnology in Food Production

- and Food Security by Tuhina Verma and Shambhoo Prasad and ISBN: 978-81-8329-997-8. Shree Publishers & Distributors, New Delhi pp13-35.
4. Sujata Das, Vineeta Singh and Sanjay K Goswami (2020). Recent Advances in Molecular Detection and Diagnosis of Plant Pathogens. Biotechnology in Food Production and Food Security by Tuhina Verma and Shambhoo Prasad and ISBN: 978-81-8329-997-8. Shree Publishers & Distributors, New Delhi pp 122-148.
 5. Prassan Choudhary, Vineeta Singh, Sanjay Goswami, Hillol Chakdar (2017). Plant disease diagnostics at nanoscale. Editor RK Rao, PK Sharma, M Raghuraman and JK Singh, MRFSW, BHU, Varanasi, pp 365-372. ISBN; 978-81-926935-8-3.
 6. Dipak T. Nagrale, Sanjay Goswami. (2017). Phytoplasma. Springer
 7. Vineeta Singh and Sanjay Goswami. (2016). Population biology of *Rhizoctonia solani* AG-IIA from India. Edited book, Technological Advances in Plant Science. Nova Science Publishers, Inc.400 Oser Avenue, Suite 1600 Hauppauge, New York, 11788 USA, pp189-206.
 8. Vineeta Singh and Sanjay Goswami. (2016).Technology and innovations for sustainable growth. Edited Book on “*Skilling Strategy for Startup*”. Edts. K.P. Singh, Dr Harnam Singh and Dr Vinod Kumar., publishing by Bookwell New Delhi India. Pp 123-135.
 9. Sanjay Goswami and Lalan Sharma (2011). Plant Diseases and their Biological control. Aavishkar Publishers, Distributers, Jaipur 302003, Raj, Edition 1st. Pp 239-249.
 10. Sanjay Goswami, Lalan Sharma and Dipak T. Nagrale (2013). Plant disease management for food security. Lambert Academic Publishing. Editor C. R. Prajapati, KP Singh, AK Gupta. PP 275-290.
 11. Sanjay Goswami, Ravindra Kumar and A Sinha (2015). Diversity and role of plant growth promoting rhizobacteria in agriculture Microbial Diversity, Biotech Books, New Delhi, 2015, edi, Asha Sinha, Sewata Srivastava and Ravindra Kumar, pp.127-143.
 12. Ravindra Kumar and A Sinha, Sewata Srivastava, Sanjay Goswami Manish Srivastava and Kamal Khilari. (2015). Contributions of rhizosphere microorganisms to plant Health and agriculture. Microbial Diversity, Biotech Books, New Delhi, 2015, edi, Asha Sinha, Sewata Srivastava and Ravindra Kumar, pp.59-75.
 13. Bala A, Thind TS, Goswami S, and Raheja S (2013). *Plant Pathology and Mycology: a Treatise. Scientific Publishers (INDIA). Agrobacterium tumefaciens; practical implications in agriculture.* ISBN -9788172338497. Editor Bagyanarayan et al. PP. 123-138.
 14. Bala A, Thind TS, Goswami S, and Raheja S (2013). *Plant Pathology and Mycology: a Treatise. Scientific Publishers (INDIA).* Managing plant diseases in organic agriculture. ISBN -9788172338497. Editor Bagyanarayan et al. PP. 427-444.

Awards

1. Best poster award in 7th international conference, 6-20, Jan, 2020 at IARI, New Delhi, on Phytopathology in achieving UN sustainable development goals, on the topic Characterization of *Villosiclava virens* causing false smut of rice and its bio control in India, pp. 106-107.
2. Got first prize for “P.P. Singhal Memorial Pesticide India Award” 2009 by Indian Society of Mycology and Plant Pathology, Udaipur, for research work on “Profiling of *Phytophthora infestans* populations for metalaxyl resistance and its management with novel action fungicides.