Scientific Program 7th International Conference of Pakistan Phytopathological Society

Т:		Day 1: Sunday November 21, 2021		
Time	Venue: Department of Plant Pathology			
03:00-6:00 PM		Arrival of Guests & Registration		
05:00-0:00 PW		Poster Set Up and Loading of Oral Presentation		
		Day 2: Monday November 22, 2021		
		Official Welcome Ceremony		
	Ve	nue: Center for Advanced Studies (CAS) Auditorium		
9:00-10:30		Welcome Address		
		Prof. Dr. Tariq Mukhtar		
		President, Pakistan Phytopathological Society		
10:30-11:00 PM		Tea/Coffee Break		
	CAS-Lecture Room No 1	CAS Auditorium	CAS Conference Room	
	Molecular Plant Pathology	Biological control of plant pathogens	Host-pathogen interactions	
	Moderators: Dr. Muhammad Fahim	Moderators: Prof. Dr. Saleem Haider	Moderators: Dr. Manzoor H. Soomro	
	Dr. Rehana Naz Syed	Dr. Abdul Qayyum	Prof. Dr. Tariq Mukhtar	
11:00:11:20	Keynote	Keynote	Keynote	
	Translation Initiation Factor eIF4E directly	Biological nanoparticles based on natural molecules	Actinomycetes as biological control agents of	
	influences the virulence of rice blast fungus	and metabolites: significant growth promoter and	plant pathogens	
	_	defensive agents of crops		
	Ammarah Shabbir	Abhishek Mathur	İpek Kurtböke	
	Fujian Agriculture and Forestry University, Fujian,	Prathista Industries Limited, Telangana State, India	Genecology Research Centre and the School	
	Fuzhou, Cangshan District, China.		of Science, Technology and Engineering,	
			University of the Sunshine Coast,	
			Maroochydore BC, Australia	
11:20-11:40	Biology and molecular pathology of	Compatibility of myco-fungicide isolate	Ameliorative effect of Calotropis procera	
	Plasmodiophorid- transmitted rod-shaped viruses in	(Trichoderma harzianum Rifai) with fungicides and	spiked soil on incidence and severity of	
	plants- an emerging problems in Pakistan	their in-vitro synergism assessment	Fusarium wilt disease in <i>Pisum sativum</i>	
	Prof. Dr. Muhammad Arif,	Dr. Aziz Ahmad Ujjan,	Dr. Muhammad Akbar	
	Department of Plant Pathology, University of	Institute of Plant Sciences, University of Sindh,	Department of Botany, University of Gujrat,	
	Agriculture Peshawar	Allama I.I.Kazi Campus, Jamshoro, Sindh	Gujrat	

11:40-12:00	CRISPR-CAS9 based genome editing approach for	Genome-wide association identifies genomic regions	Evaluation of different chemical elicitors
	enhancing disease resistance in plants	in the biocontrol fungus <i>Clonostachys rosea</i> that	against fusarium wilt of chilies caused by
		influence antagonism and biocontrol of plant-	Fusarium oxysporum
		parasitic nematodes	
	Dr. Sohaib Sarfraz	Dr. Mudassir Iqbal	Rashad Iqbal
	University of Agriculture Faisalabad, Okara	Department of Plant Pathology University of	Institute of Horticultural Sciences, University
	Campus, Depalpur, Okara	Agriculture Faisalabad	of Agriculture Faisalabad, Pakistan
12:00-12:20	PeBb1, a novel protein elicitor derived from	Exploring biocontrol potential and mechanism of	Seed to plant to seed transmission of wheat
	Beauveria bassiana Arsef 2860 strain, induces	cultural filtrates from Verticillium leptobactrum	blast pathogen Magnaporthe oryzae Triticum
	systemic resistance in <i>Brassica rapa</i> ssp.	against Root Knot nematode, Meloidogyne	
	Pekinensis against Myzus persicae (Homoptera:	incognita, in tomato	
	Aphididae)		
	Dr. Talha Nazir	Raja Asad Ali Khan	Md. M Bahadur Meah
	Department of Plant Protection, Ghazi University,	Institute of Vegetables and Flowers, Graduate	IPM Lab, Department of Plant Pathology,
	Dera Ghazi Khan	School of Chinese Academy of Agricultural	Bangladesh Agricultural University,
		Sciences, Beijing, China	Mymensingh 2202, Bangladesh
12:20-12:40	Molecular characterization of <i>Magnaporthe oryzae</i> :	Identification of pathogens associated with	Bioherbicidal activity of Pseudomonas spp.
	the rice blast fungus in Punjab Pakistan	Convolvulus arvensis weed in wheat crop and	To suppress the allelopathic stress of
		control through microbial metabolites	Trianthema portulacastrum leaf on Vigna
			mungo
	Dr. Hafiz Muhammad Usman Aslam	Muhammad Nabeel Afzal	Sumaira Abdul Raouf
	Department of Plant Pathology, Muhammad	Department of Plant Pathology, University of	School of Botany, Minhaj University, Lahore
	Nawaz Sharif University of Agriculture, Multan	Agriculture, Faisalabad	
12:40-13:00	CRISPR/CAS based gene editing approaches for	Fungicidal activity of shoot extract of Sisymbrium	Appraisal of Pakistani wheat against Barley
	global food security	irio against Fusarium oxysporum f. sp. Cepae	Yellow Dwarf Virus and its vector in
			Peshawar, KPK
	Faizan Ali	Roma Akhtar	Usman Khalique
	Department of Plant Pathology, University of	Department of Plant Pathology, Faculty of	Nuclear Institute for Food and Agriculture
	Agriculture Faisalabad	Agricultural Sciences, University of the Punjab,	Peshawar
		Quaid-i-Azam Campus, Lahore	
13:00-14:00	Prayer & Lunch Break		
14:00-15:00	Poster Viewing		
		Technical Sessions	

	CAS-Lecture Room No 1	CAS Auditorium	CAS Conference Room
	Molecular Plant Pathology Moderators: Prof. Dr. Muhammad Arif Chohan Dr. Rana Mazhar	Biological control of plant pathogens Moderators: Prof. Dr. Rashida Atiq Dr. Naveed Aslam	Host-pathogen interactions Moderators: Dr. Ahmad Saleem Akhtar Dr. Azhar Iqbal
15:00-15:20	Biological and molecular characterization of Huanglongbing (HLB) in local citrus cultivars of Sargodha, Pakistan	Biological nanoparticles based on natural molecules and metabolites: significant growth promoter and defensive agents of crops	Seed Regulatory / Bio-security System &Seed Trade in Pakistan
	Keynote Dr. Usman Ghazanfar Department of Plant Pathology, University college of Agriculture Sargodha	Keynote Abhishek Mathur Prathista Industries Limited, Telangana State, India	Keynote Dr. Abdul Rauf Bhutta (R) Federal Seed Certification and Registration Department, Islamabad
15:20-15:40	Prevalence, incidence and molecular characterization of Panama wilt of banana at Uthal, Balochistan	Evaluation of biological control agents for management of <i>Puccinia striiformis</i> var. Tritici	How genomics is changing our understanding About the complex plant-pathogen interactions?
	Dr. Muhammad Fahim Abbas Department of Plant Pathology, Faculty of Agriculture, Lasbela University of Water, Agriculture and Marine Sciences, Balochistan	Dr. Muhammad Arslan Khan Department of Plant Pathology, Muhammad Nawaz Sharif University of Agriculture, Multan	Muhammad Amjad Nawaz Siberian Federal Scientific Center of Agrobiotechnology, Russian Academy of Sciences, Krasnoobsk, Novosibirsk 630501, Russia
15:40-16:00	First report of Cotton leaf curl Multan virus infecting Hollyhock in Pakistan	Synergistic effect of chitosan with selected plant essential oil to inhibit the <i>Aspergillus niger</i> development in apricot (<i>Prunus armeniaca</i> L.)	Sanitary and phytosanitary measures (SPS) and Pest risk analysis for mangoes through hot water treatment for export consignments in Pakistan
	Hajra Azeem Department of Plant Pathology, Bahauddin Zakariya University, Multan	Dr. Gulshan Irshad Department of Plant Pathology, PMAS Arid Agriculture University, Rawalpindi	Shahid Hussain Department of Plant Protection, Ministry of National food Security and Research, Islamabad

16:00-16:20	Role of quorum quenching bacterial consortia in tackling Pectobacterium; a quorum sensing pathogen	Antifungal efficacy of leaf extract of <i>Chenopodium</i> murale against Fusarium oxysporum f. Sp. Lycopersici	Standardization of inoculation methods for induction of <i>Sporisorium scitamineum</i> infection in sugarcane and efficacy of different fungicides for its control
	Dr. Akhtar Hameed Department of Plant Pathology, Muhammad Nawaz Sharif University of Agriculture, Multan	Syeda Fakehha Naqvi Department of Plant Pathology, Faculty of Agricultural Sciences, University of the Punjab, Quaid-i-Azam Campus, Lahore	Muhammad Aslam Rajput National Sugar and Tropical Horticulture Research Institute, PARC, Thatta, Sindh
16:20-16:40	Incidence and molecular identification of root knot nematodes infecting tomato in Gilgit Baltistan	Comparative efficacy of commercial fungicides and <i>Trichoderma harzianum</i> against Fusarium wilt in strawberry	Soil-borne fungi isolated from potato fields of districts Gilgit, Hunza and Nagar of Gilgit- Baltistan
	Dr. Ishrat Naz Institute of Vegetables and Flowers, Graduate School of Chinese Academy of Agricultural Sciences Beijing, China	Abdul Hanan Department of Plant Protection, Ghazi University, Dera Ghazi Khan	Riaz Ahmad Pest & Diseases Research Lab., Department of Agriculture and Agribusiness Management, University of Karachi, Karachi
16:40-17:00	Ageratum enation virus and associated DNA- satellites complex infecting woody plant, first time reported from Pakistan	Impact of chromium on <i>Trichoderma harzianum</i> Rifai.	Status of black leaf spot of strawberry in Pakistan and morpho-molecular characterization of it's associated pathogen
	Fasiha Qurashi Department of Forestry, Range & Wildlife Management, FA & ES, The Islamia University of Bahawalpur, Bahawalpur	Syeda Mariam Sherazi School of Botany, Minhaj University Lahore, Pakistan.	Dr. Abid Riaz Department of Plant Pathology, PMAS Arid Agriculture University, Rawalpindi
17:00-17:30	After Noon Tea		
19:30-21:30	Conference Dinner and Social Night		

	Day 2 Tuesday November 23, 2021				
	CAS-Lecture Room No 1	CAS Auditorium	CAS Conference Room		
	Molecular Plant Pathology / Misc. Moderators: Prof. Dr. Saleem Haider Dr. Farah Naz	Plant Disease Management Moderators: Prof. Dr. Sultan Mahmood Khan Dr. Sobia Chohan	Insect in relation to Plant Pathogens/ Plant Nematology Moderators: Prof. Dr. Riaz A. Chohan Dr. Anjum Munir		
09:00-9:15	Keynote Study on the production of varying percentage of organic acids for preparation of antimicrobial agent/ preservatives using Black wheat glucose as the substrate	Keynote Effectiveness of neem on soil borne pests/organisms/contaminants (fungi, bacteria, nematodes and weeds) using a non-poisonous, non-pollutant and environment friendly technique in the state of Kuwait	Keynote Biocontrol potential of entomopathogenic nematode isolates recovered from potato-growing areas of Turkey against the larvae of <i>Agriotes rufipalpis</i> (Brulle, 1832) and <i>Agriotes sputator</i> (Linnaeus, 1758) (Coleoptera: Elateridae)		
	Anusha Manikonda Department of Environmental Science, CMJ University, Shillong, Meghalaya, India	DR. M. Ashraf Randhawa (R) Department of Plant Pathology, University of Agriculture, Faisalabad	Arife GÜMÜŞ ASKAR Istanbul Directorate of Agricultural Quarantine, 34149 Bakırköy, Istanbul		
09:15-09:30	Functional analysis of autophagy related gene ATG12 in potato dry rot fungus <i>Fusarium</i> oxysporum	Management of early blight of tomato through resistant germplasm and nutrients in relation to environmental factors			
	Dr. Rehman Khalid Department of Plant Pathology, University of Poonch Rawlakot, Azad Jammu and Kashmir	Ayesha Fatima Department of Plant Pathology, University of Agriculture, Faisalabad, Pakistan	Dr. Safdar A. Anwar Department of Nematology, University of California, Riverside, USA		
09:30:09:45	Isolation and ITS-rDNA based molecular characterization of plant pathogenic fungal species in postharvest citrus fruits	Screening of polyembryonic varieties of mango against <i>Ceratocystis manginecans</i> , A case of sudden death of mango	Pasteuria penetrans endospore encumbrance levels and soil texture regime influence the population dynamics of <i>Meloidogyne incognita</i> and development of Pasteuria		
	Iram Zaheer Department of Environmental Sciences, Fatima Jinnah Women University, Rawapindi	Dr. Atiq Ur Rehman Department of Plant Pathology Bahauddin Zakariya University, Multan	Dr Muhammad Kamran Plant Pathology Research Institute, Ayub Agriculture Research Institute, Faisalabad		
09:45-10:00	Characterization of chemical composition of plant essential oils and evaluation of their potential as oviposition deterrents, pupicidal, and adult repellants against <i>Bactrocera zonata</i>	Guava Fruit canker: An emerging threat to the Guava orchards in Pakistan	Distribution of Cyst Nematodes in Gilgit-Baltistan, Pakistan		
	Asma Nawaz Department of Entomology, Bahauddin Zakariya University, Multan	Nabeeha Aslam Khan Department of Plant Pathology University of Agriculture Faisalabad	Sagir Hussain Department of Biological Sciences, Karakorum International University, Gilgit		

10:00-10:15	Genetic characterization of distinct	Adaptability trials of sesame germplasm against	Identification of behaviorally repellent and antennal
	recombinant Begomovirus infecting	Macrophomina phaseolina by using AMMI	active compounds of different plant essential oils
	Euphorbia pulcherrima in Pakistan	biplot analysis in Pakistan	against a dengue vector, Aedes aegypti
	Dr. Hasan Riaz	Dr. Muhammad Rizwan Bahir	Muhammad Binyameen
	Department of Plant Pathology, Muhammad	Oil seed Research Institute, Ayub Agriculture	Department of Entomology, Bahauddin Zakariya
	Nawaz Sharif University of Agriculture, Multan	Research Institute, Faisalabad	University, Multan.
10:15-10:30	Molecular Record of Potato Leafroll Virus Naturally Infecting Tomato in Pakistan	Identification of anthracnose resistance in lentil	Plant parasitic and soil nematodes from Lawat District, Neelum, Azad Jamu Kashmir
	Muhammad Taimoor Shakeel	Dr. Rubab Altaf	Junaid Bashir
	Department of Plant Pathology, Islamia University, Bahawalpur	Lecturer, Department of Entomology, University of Haripur, Haripur, KPK	National Nematological Research Centre, University of Karachi, Karachi
10:30-10:45	Challenges and Opportunities of Cotton in Pakistan	Citrus Greening: A serious threat to citrus industry	Occurrence and distribution of plant parasitic nematodes in different fruits growing areas of Sindh
	Dr. Wajad Nazeer	Prof. Dr. Muhammad Asif	Nasir Mahmood
	Department of Plant Breeding and Genetics, Faculty of Agricultural Sciences, Ghazi University, Dera Ghazi Khan	Institute of Plant Protection, Muhammad Nawaz Sharif University of Agriculture, Multan	National Nematological Research Centre, University of Karachi, Karachi
10:45-11-00	Effect of different sowing dates and sowing methods on Growth, Yield and Forage Quality of Rhodes Grass (Chloris gayana)	Susceptibility of the peach fruit fly Bactrocera zonata (Saunders) (Diptera: Tephritidae) to entomopathogenic fungi	Effectiveness of neem on soil borne pests/organisms/contaminants (fungi, bacteria, nematodes and weeds) using a non-poisonous, non-pollutant and environment friendly technique in the state of Kuwait
	Sadia Aslam	Dr. Shahbaz Ahmad	DR. M. Ashraf Randhawa (R)
	Department of Plant Pathology, University of	Department of Entomology, Faculty of	Department of Plant Pathology, University of
	Agriculture, Faisalabad	Agriculture Sciences, University of the Punjab, Lahore	Agriculture, Faisalabad
11-00:11:30	Morning Tea /Coffee Break		

11:30-12:00	Syngenta Pakistan Rust Management in Wheat and Sustainability in Agriculture		
	CAS-Lecture Room No 1	CAS Auditorium	CAS Conference Room
	Seed and Post-Harvest Pathology Moderators: Prof. Dr. Abdul Mubeen Lodhi Dr. Abid Riaz	Natural and Chemical Pesticides Moderators: Prof. Dr. Manzoor Ali Abro Dr. Hafiz Muhammad Atif	Climate Change and Plant Disease Moderators: Prof. Dr. Saleem Shahzad Dr. Usman Ghazanfar
12:00:12:15	Keynote Pre-storage aloe vera gell application reduces disease incidence and decay of sweet cherry fruit	Keynote Natural antifungal compounds from quinoa leaves against <i>Macrophomina phaseolina</i>	Keynote Impacts of climate change on banana farming in Bangladesh: Current status and future prospects.
	Dr. Ahmad Sattar Khan Institute of Horticultural Science, University of Agriculture Faisalabad	Dr. Arshad Javaid Department of Plant Pathology, Faculty of Agricultural Sciences, University of the Punjab, Lahore	Md. Anowar Hossain Plant Molecular Biotechnology Lab, Department of Blochemistry & Molecular Biology, University of Rajshahi
12:15-12:30	Post-harvest management of crown rot of banana caused by Fusarium species through essential oils	Identification of possible antifungal constituents in leaves of <i>Kochia indica</i> for control of <i>Macrophomina phaseolina</i>	Environmental pollution and its smart solution by plantation in changing climate
	Muhammad Waris Baluchistan College of Agriculture, Quetta	Sidra Javed Department of Plant Pathology, Faculty of Agricultural Sciences, University of the Punjab, Lahore, Pakistan	Dr. Muhammad Kabir University of Sargodha, Sub-Campus Bhakkar, Bhakkar-30000, Punjab
12:30-12:45	Combine application of essential oils and gum arabic coating influences postharvest Stem End Rot and quality of Mango fruit	Biological nanoparticles based on natural molecules and metabolites: significant growth promoter and defensive agents of crops	Impact of climate change on potential distribution of bacterial stalk rot of maize disease in Sialkot district, Pakistan
	Dr. Muhammad Waqar Alam Institute of Molecular Biology and Biotechnology, The University of Lahore	Dr. Abhishek Mathur Prathista Industries Limited, Telangana State, India	Dr. Sajjad Hyder Department of Botany, G.C. Women University, Sialkot.
12:45-13:00	Seed borne mycobiota associated with <i>Cyamopsis tetragonoloba</i> L. accompanied with its chemical control	In vitro effect of fungicides against fruit rot of grapes caused by Alternaria alternata	The challenge of food security under climate change nexus: Responsibilities of phyto fighters
	Filza Shreen Department of Botany, University of Karachi, Karachi	Ghalib Ayaz Kachelo Department of Plant Pathology, University of Agriculture, Faisalabad Pakistan	Ghayoor Husnain Department of Plant Pathology, College of Agriculture, University of Sargodha, Sargodha

13:00-13:15	Post-harvest management of <i>Botrytis cinerea</i> causing gray mold in pomegranate through essential oils	Critical Issues in Green Biotechnologies and the production of some safe pesticidal agents	Combining ability estimates for cotton leaf curl virus through diallel analysis in changing environment
	Atifa Akhtar Department of Plant Pathology, Balochistan Agriculture College, Quetta	Dr. Eman A. Alam Faculty of Science, Al-Azhar University, Cairo, Egypt	Abdul Wahab Soomro Central Cotton Research Institute Sakrand, Sindh
13:15-13:30	Effect of UV-C and microwave radiation on seed germination and plant growth in corn and pea	Comparative efficacy of fungicides and biocontrol agents against <i>Rhizoctonia solani</i> , the causal agent of root rot disease in common beans	Assessment of bacterial leaf blight of rice in agro-climate of Sindh province and characterization of its associated pathogen
	Sumbal Musa Department of Plant Pathology, Balochistan Agriculture College, Quetta	Dr. Abdul Qayoom Department of Agriculture and Agribusiness Management, University of Karachi, Pakistan.	Dr. Javed Asghar Tariq Senior Scientist, Nuclear Institute of Agri. (NIA), Tandojam, Sindh
13:30-13:45	Resistance status of 45 wheat lines/mutants against yellow /stripe rust under field condition	Analysis of biological characteristics and fungicide sensitivity of <i>Paramyrothecium breviseta</i> causing coffee leaf spot	Extreme temperature effect on 19 germplasm of <i>Vigna radiata</i>
	Dr. Muhammad Mohsan National Institute for Biotechnology and Genetic Engineering, Faisalabad	WU Weihuai Environment and Plant Protection Institute, Chinese Academy of Tropical Agricultural Sciences, Haikou, China	Ansa Javaid School of Botany Minhaj universty Lahore, Pakistan
13:45-14:30	Lunch and Payer Break		
	CAS-Lecture Room No 1	CAS Auditorium	CAS Conference Room
	Disease Modelling and Epidemiology Moderators: Dr. M. Usman Ghazanfar Dr. Muhammad Atiq	Natural and Chemical Pesticides Moderators: Prof. Dr. M. Inam Ul Haq Dr. Arshad Javed	Disease Resistance Moderators: Dr. M. Ashraf Randhawa Dr. Nasir Subhani
14:30-14:45	Keynote Designing of a sensor and mobile application for identification of tomato plant physiological state	Keynote Influence of Western corn rootworm seed coating and granular insecticides on soil nematode communities	Keynote Anti-phytopathogenic potential of curcumin- chitosan fused nanoparticles against Phyto- pathogens
	Dr. Teuma Mbezi Laboratory of Biophysics, Department of Physics, Faculty of Sciences, University of Yaoundé I, P.O. Box 812, Yaoundé, Cameroon.	Dr. Andrea Čerevková Institute of Parasitology SAS, Hlinkova 3, 040 01 Košice, Slovak Republic	Akshma Koul Research Scholar, Himalayan University, Arunachal Pradesh, India; 2 Prathista Industries Limited, Telangana State, India

16:30-17:00		Closing Ceremony	
16:00-16:30	Business Session		
15:45-16:00	After noon Tea		
	Muhammad Rashid Department of Plant Pathology, Faculty of Agricultural Sciences and Technology, Bahauddin Zakariya University Multan	Muhammad Ghazanfar Abbas Department of Entomology, Bahauddin Zakariya University, Multan.	Tariq Mahmood Department of Bioinformatics, Hazara University Mansehra. KPK
15:30-15:45	Epidemiological and biochemical factors for the development of bacterial blight of pomegranate	Chemical composition, repellent and insecticidal potential of six plants essential oils against <i>Aedes aegypti</i>	Insilico binding analyses of bacterial TAL effectors to their naturally evolved specific effector binding elements in rice
	Dr. Aqeela Saghir Institute of Agricultural Extension Education and Rural Development, University of Agriculture, Faisalabad	Muhammad Ali Tabassum Department of Agriculture Research Skardu, Gilgit Batistan	Sidra Noor Department of Botany, University of Karachi, Karachi
15:15-15:30	Awareness of maize growers regarding pest management in district Sahiwal	Evaluation of chemicals to control the root / collar rot disease of bell pepper in Gilgit Baltistan	Exogenous application of coumarin and catechol modulating biochemical changes in mung bean to induce resistance against fusarium rot
	Asma Mehak Department of Botanany PMAS Arid Agriculture University, Rawalpindi	Dr. Madeiha Ambreen Department of Botany, G.C. University, Lahore	Dr. Muhammad Tariq Khan Department of Plant Pathology, University of Poonch Rawlakot, Azad Jammu and Kashmir
15:00-15:15	Screening of Oil Seed Cakes & their Ameliorative Potential for Root Knot Nematode Management in <i>Cyamopsis tetragonoloba</i> L.	Evaluation of plant extracts used to control the seed born fungal contamination and antifungal potential of tannins extracted from callus cultures of <i>Achyranthes aspera</i> L.	Phytotherapeutic impact of botanicals aqueous extracts on tomato (<i>Lycopersicon esculentum</i> L.) crop infested by root-knot nematodes (Meloidogyne spp.)
	Dr. Akhtar Hameed Department of Plant Pathology, Muhammad Nawaz Sharif University of Agriculture, Multan	Dr. Abdul Hannan Department of Plant Protection, Ghazi University, Dera Ghazi Khan	Wajahat Azeem Department of Plant Pathology, PMAS Arid Agriculture University, Rawalpindi
14:45-15:00	Epidemiological markers against <i>Xanthomonas citri</i> pv. citri: A potential threat to global citrus industry	Comparative efficacy of commercial fungicides and <i>Trichoderma harzianum</i> against Fusarium wilt in strawberry	Induction of resistance in tomato against root-knot nematodes using rhizobacteria