

ipm Integrated Pest Management
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7th International
Integrated Pest
Management
Symposium

IPM on the World Stage
March 27-29, 2012
Memphis, Tennessee



welcome

IPM on the World Stage

It is our great pleasure to welcome you to the Seventh International IPM Symposium in Memphis! Our all-volunteer planning committees have worked long and hard to bring you an exciting event focusing on solutions to global pest challenges in agriculture and communities.

The program committee has designed a format that will bring us together for stimulating plenary sessions throughout our three days together. We'll hear keynotes from international experts from government, academia, Extension and industry, interspersed with informative breakouts, poster sessions and social events.

Our goal is to send you home refreshed and invigorated by the energy created by having so many friends and colleagues in one place, and by the research, implementation and outreach challenges and opportunities we'll explore together.

We hope you will enjoy the many cultural and outdoor offerings, including the opening reception at the Memphis Rock 'n' Soul Museum and the special tours of the Memphis Zoo and Shelby Farms Park. Finally, we thank all of our sponsors, contributors, volunteers, presenters and attendees for the time and resources you have all committed to make this event possible!

Welcome and enjoy!

Margaret Appleby, Rubella Goswami, Thomas Green and Jill Schroeder
Co-chairs, Seventh International IPM Symposium



ILLINOIS

7th International IPM Symposium
coordinated by Online & Continuing Education

University of Illinois at Urbana-Champaign

www.ipmcenters.org/ipmsymposium12/



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exhibitors

Exhibits are located in the Grand Lobby, on the Lobby (ground) level of the Memphis Cook Convention Center. Poster sessions, continental breakfasts, and breaks will be served in the exhibit room.

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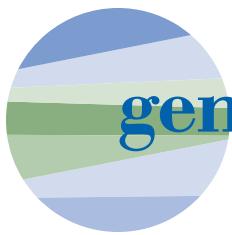
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general information

Registration and Information Desk

The Registration Desk will be located in the Grand Lobby, on the Lobby (ground) level of the Memphis Cook Convention Center.

The desk will be open:

Monday, March 26, 1:00–5:00 PM
Tuesday, March 27, 7:00 AM–5:00 PM
Wednesday, March 28, 7:30 AM–5:00 PM
Thursday, March 29, 7:30 AM–12:00 NOON

Abstracts, Presentations, and Posters

Complete abstracts can be found at the Web site:
www.ipmcenters.org/ipmsymposium12

Presentations and posters will be added to the Web site after the symposium.

Wireless Access

Look for the network name: IPM. Password: ecological

IPM7 Symposium App

The IPM7 Symposium mobile app was developed by the NSF Center for Integrated Pest Management (CIPM) at North Carolina State University in cooperation with the organizers of the symposium.

Both Android and iOS versions of this app are available from the Android Marketplace (Android) and from the Apple iTunes App Store (iOS).

Poster Sessions

Two poster sessions will be held: Tuesday, March 27, 5:30–7:00 PM and Wednesday, March 28, 5:30–7:00 PM in the Grand Lobby, on the Lobby (ground) level of the Memphis Cook Convention Center. While all posters will be displayed throughout the symposium, authors are asked to be by their posters according to their final poster number: odd numbers on Tuesday and even numbers on Wednesday.

Posters can be set up beginning at 9:30 AM on Tuesday and should be in place by 5:00 PM on Tuesday. They can be

removed after the Wednesday session is over at 7:00 PM. They must be removed by noon on Thursday.

If you would like to have your poster posted on the 2012 IPM Symposium web site, copy your poster as a .pdf file and send to the symposium email address: ipmsymposium@ad.uiuc.edu.

Poster Session Receptions

All registered participants and their registered guests are invited to attend the receptions, held during the poster sessions on Tuesday, March 27 and Wednesday, March 28 from 5:30–7:00 PM each night in the Grand Lobby, on the Lobby (ground) level of the Memphis Cook Convention Center. Hors d'oeuvres and a cash bar will be provided during the reception.

Presenter Practice Room

If presenters need to preview their presentations, come to the Registration Desk during its hours of operation.

Media

The Registration Desk will serve as the media desk, located in the Grand Lobby, on the Lobby (ground) level of the Memphis Cook Convention Center. Reporters and other members of the media should register.

Session Moderators

If you have technical difficulties during your session, please find the volunteer monitors with red ribbons in the hallways or come to the Registration Desk.

Continuing Education Credits

Sign-in sheets will be located in the sessions that qualify. Stop at the Registration Desk for more information.

Symposium Evaluation

An online evaluation survey will be conducted after the symposium. An e-mail message will be sent to you with the details; we hope you will take a few minutes to complete the survey. Your feedback has significant impact on the Steering Committee's evaluation for this year's Symposium and planning decisions for the next.



daily schedules

Monday, March 26

Title	Room	7AM	8	9	10	11	12	1PM	2	3	4	5	6	7	8	9
IPM CRSP Technical Meeting	L10															
Multi-Region IPM Coordinator Meeting	L2															
WERA-1017 (formerly WERA-069) Meeting	L6															
SERA-3 Meeting	L4															
NEREAP Meeting	L5															
NCERA 222 Meeting	L3															
ARM 9 Overview	L8															
Native American Small Farm Working Group	L9															
Internal EPA School IPM Meeting	L9															
Tours																
Memphis Zoo	Meet by registration desk in Grand Lobby															
International AgriCenter & Shelby Farms Park	Meet by registration desk in Grand Lobby															
Functions																
Reception at Memphis Rock 'n' Soul Museum	Transportation on own															
Registration	Grand Lobby															
		7AM	8	9	10	11	12	1PM	2	3	4	5	6	7	8	9

Tuesday, March 27

Title	Room	7AM	8	9	10	11	12	1PM	2	3	4	5	6	7	8	9
Plenary Sessions																
Opening Plenary Session—Management	Ballroom B								■							
Plenary Session—Research	Ballroom B										■					
Concurrent Sessions																
M1 • Conducting IPM in schools demonstration projects: Perspectives and lessons learned	L2						■									
M2 • Capacity building and short term training: Requirements for successful technology transfer for IPM	L3				■	■										
M3 • Is IPM dead? What policymakers, taxpayers, consumers and practitioners need to know about IPM	L4				■	■										
M4 • Economics of IPM: Impact assessment, natural enemies, diffusion, and marketing	L5				■	■										
M5 • Doesn't the EPA regulate pesticide use? Why do we need the Pesticide Risk Mitigation Engine?	L6				■	■										
M6 • Managing IPM is not just bugs: An approach by two multi-disciplinary agencies—Australian vegetables and Santa Clara County	L8					■										
M7 • State extension IPM programs—Trials and triumphs	L9				■	■										
M8 • IPM delivery: Got an app for that?	L10				■	■										
M9 • Applying the findings and recommendations of the 2011 OECD IPM workshop at a national level	L11				■	■										
M10 • Brainstorming: Effective IPM with pesticide prohibitions	L12				■											
M11 • Government IPM partnerships for better public health	L13				■											
M12 • Adventures in community IPM: Systems that work the bed bugs out	L14				■	■										
M13 • Creative monitoring and natural resources	L2					■										
M14 • Marketing IPM: Integrating IPM with local, sustainable, safe and fair	L8					■										
M15 • Making the handoff: Moving invasive species from regulation to management	L12					■										
M16 • Use of weather-based pest, crop and natural resource information systems to facilitate effective IPM decision-making world-wide	L13						■									
R17 • Exploring the international flavors of benchmarking IPM	L2										■					
R18 • Impact of bioenergy crops on pests, natural enemies and pollinators in agricultural and non-crop landscapes	L3									■	■	■				
R19 • Rest in peace: USDA Section 406 IPM programs—research contributions of CAR, RAMP and IPM Centers	L4									■	■	■				
R20 • Pesticide resistance in arthropods, plant pathogens, and weeds: A growing threat to IPM and U.S. agriculture	L5									■	■	■				
R21 • Opportunities for public and private-sector IPM specialists to collaborate, strengthen and enhance USDA NRCS Farm Bill conservation programs for IPM	L6									■	■	■				
R22 • Success in integrated management of head blight of wheat in the United States	L8									■	■	■				
R23 • Killing two threats with one stone: The co-management of phytopathogens and food safety risks in greenhouse tomatoes	L9									■	■	■				
R24 • Advanced technologies in IPM programs	L10									■	■	■				
R25 • Development of IPM packages for vegetable crops in developing countries	L11									■	■	■				
R26 • Are ecologically-based IPM strategies relevant for sustainable management of virus diseases in the 21st century?	L12									■	■	■				
R27 • Plant health management in a thirsty world	L13									■	■	■				
R28 • Remote sensing and GIS applications to pest monitoring and management	L14									■	■	■				
R29 • Use of <i>Trichoderma</i> in agriculture in Asia	L2										■					
		7AM	8	9	10	11	12	1PM	2	3	4	5	6	7	8	9

Title	Room	7AM	8	9	10	11	12	1PM	2	3	4	5	6	7	8	9
M30 • IPM at the U.S. Environmental Protection Agency	L2															
R31 • The impact of invasive insect pests on IPM	L3															
B32 • Two Extension outreach projects: Adoption of proper mowing height and using educational posters on sustainable lawn care, low-input plants, and outdoor pests	L4															
Poster Sessions																
Poster Setup	Grand Lobby															
Poster Session—odd numbered posters	Grand Lobby															
Functions																
Continental Breakfast	Grand Lobby															
Luncheon and Integrated Pest Management Achievement Awards Presentation	Ballroom A															
Poster Session Reception	Grand Lobby															
Related Meetings																
IPM Voice	L2															
NCERA 184	L8															
WERA060	L5															
Registration	Grand Lobby															
		7AM	8	9	10	11	12	1PM	2	3	4	5	6	7	8	9

Wednesday March 28

Title	Room	7AM	8	9	10	11	12	1PM	2	3	4	5	6	7	8	9
Plenary Sessions																
Plenary Session—Best Practices	Ballroom B								■							
Plenary Session—Outreach	Ballroom B										■					
Concurrent Sessions																
B33 • Integrating biological and conventional pest and disease management strategies in greenhouse and outdoor horticulture	L2						■									
BI2 • Adventures in community IPM: Systems that work the bed bugs out	L3					■										
B34 • Herbicide-resistant weeds and the need for sustainable systems: The benchmark study—a field-scale multi-year, multi-state project	L4					■										
B35 • IPM and transgenic Bt maize: Current issues, future needs	L5					■	■									
B36 • Going green: The role of IPM in green building	L6					■	■									
B37 • Semiochemicals in IPM and semiochemical technology in IPM systems in developing countries: IPM CRSP in South Asia, West Africa and East Africa	L8					■	■				■					
B38 • Golf course IPM: Pushing the envelope	L9					■	■									
B39 • Biological control of ruderal species: the search for champions	L10					■	■									
B40 • Challenges and solutions for IPM in the mid-southern U.S.	L11					■	■									
B41 • Natural products for weed management	L12					■	■									
B42 • Getting results with best management practices	L13					■										
B43 • IPM challenges in the landscape: Implementation, establishment and evaluation	L14					■	■									
B44 • Evolving pest complexes and IPM strategies in transgenic cotton	L2							■								
B45 • Integrated vegetation management	L3							■								
B46 • Implications for “insurance is the new IPM” in field crops	L4							■			■	■				
B47 • Educating the next generation: Strategies to promote IPM literacy	L13							■								
O48 • Creating and improving stakeholder-driven IPM programs using conventional, digital and social media delivery systems	L2										■	■				
O49 • Bed bugs and book bags: Using classroom curriculum to reach the community	L3										■	■				
O50 • IPM challenges and opportunities in fruit and vegetable crops for processing: New invaders, drift, new options and novel approaches	L5										■	■				
O51 • Networking approaches for IPM research and extension	L6										■	■				
O52 • Developing and disseminating hermetic cowpea storage technology in West and Central Africa	L9										■	■				
O53 • eOrganic, the eXtension CoP for organic agriculture	L10										■	■				
O54 • Using self-assessment, surveys, and certification to document, incentivise and implement IPM in specialty crops	L11										■	■				
O55 • The role of education in IPM	L12										■					
O56 • Feeding 9 billion people sustainably: The case for biopesticides	L13										■	■				
O57 • Changing the product selection in retail stores—How agencies in California are working together to make green products more mainstream	L14										■	■				
O58 • Productivity increase by using IPM modules with indigenous practices for managing pests in different cropping systems	L8												■			
O59 • Building IPM programs for Native Americans	L12												■			
O60 • IPM education: Required knowledge, educational options and applications	L3													■	■	
M61 • NIFA IPM programs: Legacy and impacts	L5													■	■	
		7AM	8	9	10	11	12	1PM	2	3	4	5	6	7	8	9

Title	Room	7AM	8	9	10	11	12	1PM	2	3	4	5	6	7	8	9
Poster Sessions																
Poster Session—even numbered posters	Grand Lobby											5	6			
Functions																
Continental Breakfast	Grand Lobby		7	8												
Poster Session Reception	Grand Lobby											5	6			
Related Meetings																
School IPM Round Table Discussion	L2		7	8												
Registration	Grand Lobby		7	8	9	10	11	12	1PM	2	3	4	5	6	7	8

Thursday, March 29

Title	Room	7AM	8	9	10	11	12	1PM	2	3	4	5	6	7	8	9
Plenary Session																
Closing Plenary Session	Ballroom B		7	8	9	10	11	12	1PM	2	3	4	5	6	7	8
Functions																
Continental Breakfast	Grand Lobby		7	8												
Related Meetings																
EPA Tribal Pesticide Program Council	L3							12	1PM	2	3	4	5	6	7	8
Urban Community of Practice	L4							3	4	5	6					
Registration	Grand Lobby		7	8	9	10	11	12	1PM	2	3	4	5	6	7	8

Friday, March 30

Title	Room	7AM	8	9	10	11	12	1PM	2	3	4	5	6	7	8	9
EPA Tribal Pesticide Program Council	L3			7	8	9	10	11	12	1PM	2	3	4	5	6	7



poster titles

P001 Tolfenpyrad: A new broad spectrum insecticide from Nichino America, Inc.

P002 Some priority pest problems in small scale fruit and vegetable production in North Florida

P003 A successful participatory IPM approach against *Hypsosidra talaca* Wilk., a devastating pest on tea

P004 Communicating IPM—A potato industry collaboration with McDonald's

P005 Development of IPM technology for cumin and its evaluation in farmer participatory mode

P006 A sentinel plot network across the southern United States: IPM to protect the U.S. soybean industry

P007 Integrated pest management of *Ralstonia solanacearum* on tomato in Uganda

P008 Measuring adoption of sustainable viticultural practices in the Ozark Mountain Region

P009 Monitoring and on-farm management of rice hispa (*Didladispa armigera*) in Karnataka, India

P010 Mulching methods impact on herb production and weed control in a certified organic production system

P011 Soil health and integrated pest management program for vegetables—A prescriptive approach

P012 Suppression of Cuban slug (*Veronicella cubensis*) (Pfiefer) using select practices in the CNMI

P013 Evaluation, validation and economic analysis of biointensive IPM in okra in India

P014 Rangeland grasshopper IPM program makes a significant economic impact on Wyoming agriculture

P015 Pest threat of the invasive brown marmorated stink bug to vegetable crops in the U.S.

P016 Brown marmorated stink bug in specialty crops: Biology, ecology, and management

P017 Extension integrated pest management coordination and support competitive grants program successes

P018 A new paradigm in IPM education: Professional practitioners for managing a more sustainable future

P019 Distribution of herbicide resistance in Palmer amaranth populations across North Carolina

P020 Doesn't the EPA regulate pesticide use? Why do we need the pesticide risk mitigation engine?

P021 Effective habitat protection: A consultative and cooperative process

P022 Use of *Solanum torvum* as a rootstock in brinjal (*Solanum melongena* L.) to manage root-knot nematode, *Meloidogyne incognita*

P023 Biological control of white mold of snap bean with low rate Contans application

P024 Site-specific technology to better manage nematodes in cotton

P025 Propagating azalea stem cuttings free of binucleate *Rhizoctonia* spp.

P026 Seasonal dynamics of viruliferous *Thrips tabaci*, Vector of iris yellow spot virus in onion in the Pacific Northwestern USA

P027 Effective management of *Phytophthora* blight (*Phytophthora capsici*) of peppers in Illinois

P028 Border crop for the management of chilli pests

P029 Habitat management to conserve wolf spiders, natural enemies of insect pests, in rice paddies

P030 Incidence of sapota bud borer, *Anarsia achrasella* Bradley and its management

P031 Initial response to European grapevine moth, *Lobesia botrana*, in North America

P032 Integrated and biorational approaches to the management of major key pests of tomato and cabbage

P033 Integration of pre-shipment hot water shower as a quarantine treatment for ornamental plants

P034 Introduction of gall wasp (*Quadrastichus erythrinae*) tolerant plants for tribals lively hood

P035 IPM options for *Lygus* bug management in Texas High Plains cotton

P036 Management of pod borer, *Helicoverpa armigera* infesting chickpea with new insecticide molecules

P037 Mediterranean fruit fly in Iran and proposal for its eradication

P038 Responding to spotted wing drosophila—The Michigan experience

P039 Online survey of California pest control advisers serving the almond industry

P040 Opportunities for public and private-sector IPM specialists to enhance NRCS programs for IPM

P041 Outcomes of Germany's national action plan on sustainable use of pesticides

P042 Papaya mealybug on mulberry and its management through classical biocontrol

P043 Pest management scenario under IPM in Northeastern part of India

P044 Precision area-wide management of *Eurygaster integriceps* Put. (Hemiptera: Scutelleridae) in Iran

P045 Pymetrozine—A novel insecticide for planthopper management

P046 Reducing pesticide risk by integrating biopesticide tools in sustainable production systems

P047 Agriculture and Agri-Food Canada programs in support of sustainable pest management

P048 Seed and seed applied technologies: Integrated approaches for managing global insect and disease pests

P049 Site specific applications via integration of existing weather networks and proven predictive models

P050 The University of Maine Cooperative Extension strawberry IPM program

P051 Measuring up! Involving stakeholders in assessment of an industry's IPM revolution

P052 FAO desert locust early warning system

P053 New Zealand and Australian regulations of generalist predators in the glasshouse industry

P054 The red palm weevil, *Rhynchophorus ferrugineus*, and IPM

P055 Toxicity and safety of spiromesifen 240 SC and imidacloprid 70 WG

P056 20 years of agricultural pesticide use data reveal dramatic reduction in broad-spectrum insecticides

P057 Pesticide use and risks in horticultural farm enterprises in Uganda

P058 State Phytosanitary Administration state body for implementation of IPM in the Czech Republic

P059 Endophytic fungi from *Schinus molle* L. as new biological control agents of black bean aphid in Algeria

P060 The continental dialogue on non-native forest insects and diseases: A new IPM venue?

P061 Theoretical basis of pest management

P062 School IPM program impact assessment

P063 2011 survey results: Tennessee's school IPM race to the top

P064 Green Shield Certified—Authenticating real IPM service providers, programs and facilities

P065 Larvicidal activity of selected plant extracts against *Aedes albopictus* Skuse (Diptera: Culicidae)

P066 Bugwood Center (www.bugwood.org) web resources to support IPM implementation

P067 Preparing for the brown marmorated stink bug in Iowa

P068 Protect U.S. offers new invasive species educational material for educators, clientele, and K-12

P069 A collaborative approach to managing the threat of a new invasive pest to the BC blueberry industry

P070 A comprehensive interdisciplinary VT Extension IPM program addressing stakeholder priorities and needs

P071 A regional sampling network for insect pests of potato in the Columbia Basin of Washington

P072 Influence of socioeconomic factors in usage of IPM among hot pepper producers in Uganda

P073 Using farmer perceptions to establish an IPM research agenda for arabica coffee production in Uganda

P074 Adoption of production and pest management practices for peanut in Ejura, Ghana

P075 Development of a comprehensive IPM website for Virginia market type peanuts

P076 Dairy cattle IPM outreach: NYS Integrated Pest Management in barns, on pastures, on the web

P077 Development of an IPM curriculum and crop scouting competition for Iowa youth

P078 Distance delivery for continuing education and characterizing Florida's licensed applicators

P079 Ecologically-based integrated pest management packages for food security crops in Central Asia

P080 Giving IPM a VOICE

P081 Increasing IPM uptake among growers in southern BC—Three case studies of industry-lead outreach

P082 Integrated pest management survey for insect and disease pests of oilseed crops in North Dakota

P083 IPM internships—Training IPM professionals for the future

P084 IPM of the white stem borer and root mealybugs on arabica coffee in the Mt Elgon region in Uganda

P085 Five peas in a pod: Progress towards addressing the program emphasis areas for IPM Oklahoma!

P086 The new IPM program at Lincoln University of Missouri, an 1890 land-grant university

P087 Gender issues in integrated pest management (IPM) in Tajikistan

P088 Natural enemies of vegetable crop pests workshop

P089 NEWA resources for implementation of IPM in Lake Erie vineyards

P090 On the road again: Taking hands-on greenhouse IPM workshops to the growers

P091 Online educational modules for disseminating IPM information

P092 Online phenology and infection risk modeling system—2012 update

P093 Partnering with ScoutPro for developing field scouting applications

P094 Popularization of integrated pest and disease management module for onion in India

P095 Success of University of Kentucky wheat IPM team

P096 Research and extension: Different approach—Same objective, monitoring corn lepidopteran pests

P097 Bird cherry-oat aphid bionomics in the PNW

P098 The NYS IPM Field Crop Weekly Pest Report: Timely news local pest managers can use

P099 Encouraging adoption of IPM by small-scale farmers: The western small farm-IPM working group

P100 Thirty years of IPM in Maine

P101 Development and delivery of ecologically-based IPM packages for wheat in Central Asia

P102 Transitioning apple growers to non-OP spray programs in Kentucky: Four case studies

P103 Utah IPM program: Outreach and applied research serve thousands in agriculture

P104 WSU-DAS—The online pest management support system for tree fruits in Washington

P105 Global herbicide resistance challenge conference

P106 Integrated pest management in public housing works!

P107 Role of pesticide safety educators in school IPM programs: South Dakota demonstration

P108 A growing national effort: progress towards implementing IPM in all US K-12 public schools by 2015

P109 The Texas school IPM model: How an EPA seed grant helped build a program

P110 Using IPM to improve our children's learning environment: The northeast school IPM working group

P111 The Rocky Mountain consortium—Expanding verifiable integrated pest management in public schools

P112 Responsible chemical use: Manufacturers taking the lead through stewardship and product development

P113 Sustainable places information network (SPIN)

P114 The French Quarter Formosan subterranean termite program in New Orleans, Louisiana: 1998-2011

P115 The University of California IPM Program's extension program for retail nurseries and garden centers

P116 The IPM Star process: What it takes to achieve IPM Star status

P117 Extension entomology and horticulture: A combined approach to teaching IPM

P118 Using audience response systems to capture IPM program needs and impacts

P119 Anomalous armyworm infestations in eastern Washington and Oregon wheat implicate *Dargida* spp.

P120 Evaluation of mustard plants and other products to control sweet potato whitefly, *Bemisia tabaci*

P121 Understanding and managing a key pest in cotton using community based maps of crop assemblages

P122 IPM for CLB, *O. melanopus* using new egg parasitoid, *Anaphes nipponicus* from *O. oryzae* on rice plants

P123 Developing new weather-based models to improve management of cereal leaf beetle, *Oulema melanopus*

P124 Development and testing new ways to reduce pesticides on raspberries using IPM tools

P125 An early-warning system for viruliferous aphid infestations of pulse crops in the Palouse region

PI26 An integrated bird (*Psittacula krameri* Scopoli.) management strategy in sunflower

PI27 Isothermal amplification of insect DNA

PI28 Biology and infestation of *Nesidiocoris tenuis* Reuter (Hemiptera: Miridae) on tomato in Indonesia

PI29 Correlation of resistance to maize weevil and starch arrangement in sectioned kernels of sorghum

PI30 Defining interactions of agrochemicals to improve integrated pest management in peanut

PI31 Distribution of *Metarhizium anisopliae* in agroecological soils of Pakistan

PI32 Drought tolerant *T. harzianum* isolates promote growth and delay drought responses in *T. aestivum* L.

PI33 Ecological engineering of rice ecosystem to reduce planthopper outbreak in Thailand

PI34 Effects of microclimate changes in different vegetation types on cattle fever tick larval survival

PI35 Establishment of banker plant of *Amblyseius swirskii* for managing multiple pests in vegetable crops

PI36 Evaluation of promising rice varieties against panicle mite, *Steneotarsonemus spinki*

PI37 Exploration, identification and pathogenicity tests of entomophatogenic fungi

PI38 Field screening of chilli (*Capsicum annuum* L.) entries against thrips (*Scirtothrips dorsalis*)

PI39 Integrated control of spider mites on greenhouse roses in Thailand

PI40 Grandeo biopesticide for managing insects and mites

PI41 Managing the weed, parthenium (*Parthenium hysterophorus* L.) in eastern and southern Africa

PI42 Integrated rice-weed management in iron-prone soil of Minna, Nigeria

PI43 Herbicide banding in corn—An improved pest management practice?

PI44 Improving biological control on equestrian farms

PI45 Implications of gender relations for the introduction of IPM among tomato farmers in Ghana

PI46 Not presented

PI47 A decision support system for the integrated management of potato and tomato late blight

PI48 Elucidating disease epidemiology for management of a complex virus pathosystem in wine grapes

PI49 “DNA barcoding” of plant viruses using FTA classic card technology

PI50 Host-specific differences in pathogenicity of *Erwinia tracheiphila* from different cucurbit crops

PI51 Preliminary assessment of differences in Christmas tree species to root rot

PI52 Biocontrol potential of salinity tolerant isolates of *Trichoderma harzianum* against fusarium wilt

PI53 Control of soil-borne potato diseases using *Brassica* spp. mediated biofumigation

PI54 Identification of resistant donors for tomato leaf curl virus in Coimbatore, India

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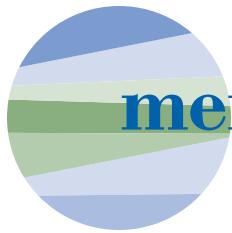
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