



9th International IPM Symposium

Improving Health, Environment and Global Sustainability

March 19–22, 2018 | Baltimore, MD

Posters

The poster session is on Wednesday, March 21, 4:30-6:30 pm in the hotel. While all posters will be displayed throughout the symposium, authors are asked to stand by their posters according to their poster number: odd numbers from 4:30-5:30 pm and even numbers from 5:30-6:30 pm.

- P1 - Be part of the buzz! A live conversation about biocontrol at the 9th International IPM Symposium
- P2 - Hedgerow benefits align with food production and sustainability goals
- P3 - Soil solarization for integrated pest management in the Pacific Northwest (USA)
- P4 - Weather and climate driven models for IPM and invasive species management
- P5 - Grower valuation of the Network for Environment and Weather Applications
- P6 - The effects of mulching leaves in place on tick populations in lawns and parks
- P7 - Occurrence of egg parasitism in the exotic pest brown marmorated stink bug and the native beneficial spined soldier bug in three Maryland habitats
- P8 - Insights into winter survival strategies of North American hover flies (Syrphidae) and the implications for pollination and conservation biological control
- P9 - The impact of organic crop rotations and ecological weed management strategies on soil quality
- P10 - Evaluation of anaerobic soil disinfection for ecofriendly weed management
- P11 - Reaching out to the big sky
- P12 - Make a difference? Make an IPM impact graphic!
- P13 - Regional IPM and IR-4 collaboration: Assessing pesticide compatibility in an IPM program
- P14 - DPH: Optimizing IPM for maximal impact
- P15 - Success of interdisciplinary professional doctoral programs
- P16 - Organic and IPM working group
- P17 - Vermont's Extension IPM program addresses diverse stakeholder needs
- P18 - Nebraska Extension Team: Protect beneficial insect ecosystems including pollinators
- P19 - Nebraska extension resistant/invasive issue team #IRPESTS
- P20 - Lessons learned and best practices for developing IPM online trainings
- P21 - Arkansas mini-grants - A county based ipm program
- P22 - North Dakota State University Extension pest management app
- P23 - Virtual plant clinics cultivate new ideas and collaborations
- P24 - Maryland invasive training and outreach programs
- P25 – Not being presented
- P26 - Worker Protection Standard for organic and small farms
- P27 - Pesticide Risk Tool: Reducing and reporting pesticide risks in IPM and sustainability initiatives
- P28 - Green Shield Certified and IPM STAR pest management certification programs
- P29 - The Sustainable Food Group introduces the Sustainability Standard
- P30 - Adoption of proactive resistance management practices to control *Bemisia tabaci* in Arizona and California
- P31 - Minimum risk pesticide active ingredient profiles

P32 - Repeated temporal rotation from nontoxic bait to a cholecalciferol rodenticide enhances control of a wild house mouse population

P33 - Entomotoxicant potential of *Croton penduliflorous* extract in the control of subterranean termites *Macrotermes subhyalinus*

P34 - Protecting water resources with on-farm pesticide rinsate biobeds: A Canadian perspective

P35 - The Prairie Pest Monitoring Network: A coordinated monitoring of field crop pests of the Canadian Prairies

P36 - Illustrating the benefits of a strategic approach to reduced risk pest management: The case of foliar insect pests of prairie field crops in Canada

P37 - Cereal Aphid Manager: A dynamic action threshold smartphone application for scouting cereal aphids

P38 - Integrated management of wheat midge infestations in wheat crops of Western Canada

P39 - Baseline regulation of key genes in the phenylpropanoid pathway and their role in defense against biotic stresses in Maize

P40 - Antixenotic potential in pulses against the pea aphid *Acyrthosiphon pisum* (Harris)

P41 - Susceptibility of small-seeded legumes to infestation by pea aphid *Acyrthosiphon pisum* (Harris)

P42 - Integrated management of glyphosate-resistant horseweed [*Conyza canadensis* (L.) Cronq.] with tillage and herbicides in Nebraska soybean (*Glycine max* (L.) Merr.)

P43 - Tools are available for integrated management of glyphosate-resistant common ragweed (*Ambrosia artemisiifolia* L.) in Nebraska soybean

P44 - Diagnosis of diseases caused by *Diaporthe (Phomopsis)* species on soybean in the United States

P45 - Comparison of a putative novel species of *Phytopythium* to other *Phytopythium* spp. for pathogenicity on soybean seed.

P46 - Validation of chemical and non- chemical based IPM module against major sucking pest of rice (*Oryza sativa* L.)

P47 - Cropping intensity driven microclimate is influencing abundance of ground foraging predators in coffee farmlands

P48 - Biology-based strategies for integrated management of *Rhizoctonia solani* in soybean fields

P49 - The effect of fungicide application methods on foliar diseases, seed quality, and yield protection in soybean

P50 - A meta-analysis and economic evaluation of soil and seed applied insecticide use in Indiana maize

P51 - Soil insecticide and insecticidal seed treatment impacts on timing of northern corn rootworm beetle emergence from *Bt* corn

P52 - Co-inoculation of *Burkholderia ambifara* C628 and *Bacillus simplex* R180 reduced Fusarium root rot disease in corn

P53 - Developing a sequential sampling protocol for scouting sugarcane aphid, *Melanaphis sacchari* Zehntner in sorghum

P54 - Development of a prediction model to improve disease management in sunflower (*Helianthus annuus*)

P55 - Dispersal of wheat curl mite from virus infected winter wheat

P56 - Overwintering potential of *Puccina striiformis* f.sp. *tritici* in North Dakota, USA

P57 - Detecting sugarcane aphid (*Melanaphis sacchari*) infestation in grain sorghum (*Sorghum bicolor*) using leaf spectral response

P58 - Risk assessment of pea seed-borne mosaic virus (PSbMV) infecting field pea

P59 - Fungicide treatments and wheat cultivar resistance: Two key strategies to effectively manage Fusarium Head Blight and Deoxynivalenol in southeastern Nebraska

P60 - Rolled rye for weed suppression in black bean and soybean

P61 - Adapting established IPM strategies to emerging pests: A tale of two stem borers in sugarcane

P62 - Predators associated with sugarcane aphids and their impact on aphid suppression in sorghum in High Plains

P63 - Comparing patterns of injury associated with potato leafhopper (Family: Cicadellidae) feeding across different alfalfa (*Medicago sativa*) cropping systems

P64 - The status of western bean cutworm, *Striacosta Albicosta* (Smith), in New York State

P65 - *Trichogramma ostriniae* takes on a new challenge: Western bean cutworm, an invasive pest in New York

P66 - Automated monitoring traps for detection of western bean cutworm (*Striacosta albicosta*)

P67 - Improving degree-day models for the flight phenology of western bean cutworm (Lepidoptera: Noctuidae)

P68 - What is going on with the western bean cutworm on corn in Mexico?

P69 - Integrated pest management and the role of spiders within Nebraska agroecosystems

P70 - Screening of entomopathogenic fungi from West Central Nebraska against key pests of corn

P71 - Nebraska growers' and crop consultants' knowledge and implementation of IPM of western bean cutworm

P72 - Dispersal and avoidance behavior of western bean cutworm when exposed to *Bt* maize

P73 - Characterizing larval movement of western bean cutworm in field maize

P74 - Western bean cutworm feeding damage on *Bt* hybrids and implications for economic injury levels

P75 - Flight of the western bean cutworm: population patterns of a noctuid pest over the past 30 years

P76 - Differences in midgut gene expression between *Bt* exposed and unexposed Western bean cutworm

P77 - Landscape-level effects among western bean cutworm developing on Cry1Fa & Vip3A corn in block and blended refuge plants

P78 - Survey of bees and syrphid flies associated with flowering soybean in the midwestern United States

P79 - Economics of *Lygus hesperus* management in Texas High Plains cotton

P80 - Evaluation of efficacy of PB ropes in different ecological zones of Punjab, Pakistan

P81 - Multi-crop analysis to study the impact of weather parameters on population of beneficial insects in district Sahiwal in Pakistan

P82 - The efficacy of field-collected fungal pathogen against green stinkbug in the Maryland

P83 - The use of native entomopathogens in integrated management of granary weevil *Sitophilus granarius* (L.) (Coleoptera: Curculionidae)

P84 - Adding risk associated with weed management to a decision support system for peanut

P85 - Extension of information to farmers from research in Ghana designed to mitigate aflatoxin contamination in peanut

P86 - Parasitism of the invasive brown marmorated stink bug by a native tachinid fly

P87 - Estimating the trapping area of the brown marmorated stink bug pheromone

P88 - An IPM answer to grape rootworm, a reemerging vineyard pest

P89 - The tale of two nepoviruses in Washington state vineyards

P90 - Field-level fungicide exposure to honey bees (*Apis mellifera*) during orchard bloom in Michigan

P91 - Straw mulching enhances productivity of virus-infected passion fruit in Uganda

P92 - Right to the core: How Eco Apple® successfully reduced pesticide risk in northeast apple production

P93 - Improving integrated pest management of leaffooted bug on almond and pistachio in the San Joaquin Valley

P94 - Susceptibility of peaches, plums and cherries to spotted wing Drosophila in western New York

P95 - Effect of plant extract *Ruta graveolens* against the date scale, *Parlatoria blanchardi* Targ., (Homoptera, Diaspididae) at Biskra oasis, Algeria

P96 - Horizontal transfer of reduced-risk pesticides between oriental fruit fly *Bactrocera dorsalis* (Hendal)

P97 - Management of *Tetranychus urticae* on strawberries using UV-C irradiation

P98 - Invasive honeysuckle increases populations of the invasive vinegar fly, spotted wing Drosophila

P99 - Seasonal activity of *Drosophila suzukii* Matsumura (Diptera: Drosophilidae), in North Dakota fruits

P100 - Pest management on new cranberry plantings: Horticultural, regulatory, and economic drivers

P101 - Monitoring spotted wing Drosophila through a statewide network in Ohio

P102 - Testing novel attractants for *Drosophila suzukii*

P103 - Integrated Pest and Pollinator Management: Investigating impacts of different pesticide programs on pollinator communities in commercial orchards

P104 - Current distribution of the samurai wasp, *Trissolcus japonicus*, in North America

P105 - Integrating cultural, behavioral, and chemical strategies to improve organic management of spotted wing drosophila

P106 - Evaluation of baits for integrated pest management (IPM) of ants in tropical fruit crops in Espírito Santo, Brazil

P107 - Integrated pest management of longan in Vietnam

P108 - Ukiah High School Cockroach Project: IPM is a community effort

P109 - Site specific management of nuisance geese on school properties: A case study from New York State

P110 - Recognizing excellence in school integrated pest management

P111 - Stop School Pests online integrated pest management training courses for school employees

P112 - The effect of IPM outreach to schools via webinars

P113 - Engaging School Nurses to Promote IPM

P114 - City-wide invasive formosan termite monitoring project in Jacksonville, Florida

P115 - Evaluation and modeling of TickBot: A tick-killing robot

P116 - The Public Tick IPM Working Group enhances tick-borne disease stakeholder collaboration

P117 - New tools in the vector management IPM toolbox

P118 - Integrated pest management of mosquitoes: A case study of West Nile virus in California

P119 - Cost-benefit analysis of total release foggers (TRFs)

P120 - Impacts of promoting Integrated Pest Management (IPM) in home gardens and landscapes through the Vermont Extension Master Gardener Helpline

P121 - Integrated pest management programming for community gardeners

P122 - IPM education and outreach to urban and community audiences in California

P123 - Urban gardens as a platform for experiential learning: Pollinator conservation, citizen science, and sustainability

P124 - An IPM approach for the control of the common bed bug, *Cimex lectularius* L.

P125 - Making the connection: IPM, in-home childcare, and asthma in Chicago's most at risk neighborhoods

P126 - Entireleaf morningglory in paddy field's levee invades paddy field

P127 - An innovative IPM solution for management of the invasive aquatic weed hydrilla

P128 - Interactivity among fungi, select *Pinus*-associated insects and the Pinewood nematode in Louisiana

P129 - An integrated management approach to controlling invasive sea lamprey in the Great Lakes

P130 - Weeds as source of inoculum of *Diaporthe gulyae*, the causal agent of Phomopsis stem canker of sunflower

P131 - Understanding the population dynamics of arthropod pollinators and their host preferences at the UMES campus

P132 - Connecticut Integrated Pest Management Program

P133 - Ecological IPM: Master Gardeners learning sustainable ways to manage insects in landscapes and gardens

P134 - Recently established invasive pests on California ficus trees: identification, impact, and management

P135 - Novel SAR biopesticide LifeGard® bolsters resistance management toolbox

P136 - Feed 'em and weep? Fertilizer effects on aphid population growth and biocontrol in greenhouse crops

P137 - Control of *Phytophthora* root rot disease of hydrangea using biorational products and fungicides

P138 - Management of Cercospora leaf spot of hydrangea using biorational products and fungicides

P139 - Augmentative biological control of twospotted spider mite on hops in the midwest

P140 - Creating a buzz for IPM in turf care using innovative community engagement

P141 - Partnering with industry to deliver IPM continuing education to Florida's turfgrass professionals

P142 - Detection of *Pythium* spp. in golf course irrigation systems

P143 - Incorporating organic amendments to enhance control of dollar spot on bentgrass fairways

P144 - Fungal communities infecting creeping bentgrass continuously change during the first six months

P145 - Use of unmanned drones in Maryland nurseries as part of our IPM outreach

P146 - Field trials to evaluate low risk pesticides for Japanese Beetles, *Popillia Japonica*, in nurseries

P147 - New resources on thrips IPM in greenhouse production

P148 - Optimizing irrigation management can reduce pesticide loss in nursery production

P149 - Developing and implementing effective integrated pest management strategies for specialty crop growers in north Florida

P150 - Use of multiple natural enemies to manage whiteflies on poinsettias

P151 - Population dynamics and control of the crapemyrtle bark scale

P152 - Control effect based on yellow-sticky-board against *Bemisia tabaci*

P153 - Repetitive overseeding of athletic fields for organic weed management

P154 - Managing virus diseases in vegetable and legume crops in Bangladesh, Cambodia, and Nepal

P155 - Using multiple plant biostimulants in vegetable systems can increase yields and fruit quality, but not consistently

P156 - Antagonistic potential of *Bacillus amyloliquefaciens* against major tropical vegetable pathogens

P157 - Potato Sustainability Initiative: Continuous improvement in sustainable potato production

P158 - An IPM approach to reduce wireworm damage in potatoes

P159 - Buffering of soil microclimate through soil amendments and mulching has potential in management of insect-vectored virus diseases of tomato

P160 - Genome sequencing and development of SNP genotyping assay for identification of *Tuta absoluta*

P161 - Sweet corn pest population trends over 10 years in Maine

P162 - Sweet Corn Scout—A new mobile application to help growers identify and scout for sweet corn pests

P163 - Evaluation of alternative weed control methods for horticultural crops

P164 - Integrated management of cabbage maggot in brassica vegetables in Canada: 20 years searching for solutions

P165 - Successful adoption of action threshold-based insecticide programs for thrips management in onion

P166 - Making rational pest management decisions for organic production of *amaranthus* in North Carolina

P167 - Aphid tower trapping results in Maine

P168 - Promoting sustainable, biologically-based pest management systems for improved vegetable production in high tunnels

P169 - Developing an attract and kill approach for harlequin bug, *Murgantia histrionica* (Hemiptera: Pentatomidae)

P170 - Capacity building in small farm IPM at Alcorn State University

P171 - Living mulch as a tool for integrated weed management in organic vegetables

P172 - Evaluation of host preference of brown marmorated stink bug, *Halyomorpha halys*, on bell peppers

P173 - Effect of *trichoderma* species on emergence indices, infection incidence and growth performance of sweet pepper

P174 - Resistance of genetically-diverse soybean varieties to insect pests in the eastern shore of Maryland

P175 - Pests, an unwanted side effect of tropical storms