

**Third FAO/IAEA International Conference on Area-wide Management of Insect Pests:
Integrating the Sterile Insect and Related Nuclear and Other Techniques**

22-26 May 2017, Vienna, Austria

Sunday 21 May 2017

16:00-19:00 Registration Gate 1
17:00-19:00 Welcome Reception C Building–4th floor

Monday 22 May 2017

08:00-09:00 Registration C Building–4th floor
09:00-09:20 Opening
Yukiya Amano/Director General IAEA
Welcome address and opening remarks for IAEA
Ren Wang/Assistant Director General FAO
Welcome address and opening remarks for FAO

Session 1: Operational AW Programmes

Chair: **Gregory Simmons**/USA

Co-Chair: **Rui Cardoso Pereira**/FAO/IAEA

09:30-10:15 *Past, Present and Future: A Road Map to Integrated Area-wide Systems and Enterprise Risk Management Approaches to Pest Control*
Kenneth Bloem/USA

10:15-10:45 Poster Viewing and Coffee/Tea Break

Break

10:45-11:15 *Technological Innovations in Global Desert Locust Early Warning*
Keith Cressman/FAO

11:15-11:45 *Area Wide Management of Rice Pests in Asia through Integrating Ecological Engineering Techniques*
Kong Luen Heong/CABI

11:45-12:15 *Exclusion, Suppression, and Eradication of Pink Bollworm (Pectinophora gossypiella (Saunders)) from the Southwestern USA and Northern Mexico*
Eion Davis/USA

12:15-12:45 *Use of Pheromones to Disrupt Mating of Moth Pests in Area-Wide Management Programmes*
Ring Cardé/USA

12:45-14:00 Lunch

Chair: **Zeng-rong Zhu**/China

Co-Chair: **Marc Vreysen**/FAO/IAEA

14:00-14:30 *Holistic Area-wide Approach for Successfully Managing Citrus Greening (Huanglongbing) in Mexico*
Javier Trujillo/Mexico

- 14:30-15:00 *Area-wide Biological Control Using the Parasitic Natural Enemy Aphidius gifuensis (Hymenoptera: Braconidae) to Control Myzus persicae (Homoptera: Aphididae) in China*
Hailin Yang/China
- 15:00-15:30 *Putting Sterile Insect Technique into the Modern IPM Toolbox: Over 20 Years of Successful Area-wide Integrated Pest Management in Canadian Pome Fruit*
Cara Nelson/Canada
- 15:30-16:00 *Poster Viewing and Coffee/Tea Break*
- Chair: Preaduth Sookar/Mauritius**
Co-Chair: Jorge Hendrichs/FAO/IAEA
- 16:00-16:30 *The Suppression of the False Codling Moth, Thaumatotibia leucotreta in South Africa using an AW-IPM approach with a SIT component*
Nevill Boersma/South Africa
- 16:30-17:00 *Advances in Integrated Tick Management for Area-wide Mitigation of Tick-borne Disease Burden*
Adalberto Pérez de León/USA
- 17:00-17:30 *AW-Fruit Fly Programmes in Latin America*
Pedro Rendón/Guatemala
- 17:30-18:00 *Area-wide Management of Fruit Flies in a Tropical Mango Growing Area Using the Sterile Insect Technique: From a Research Project to an Operational Programme*
Pablo Liedo/Mexico
- 18:00-18:30 *Group Photo*

Tuesday 23 May 2017

Session 2: Mosquitoes and Human Health

- Chair: Romeo Bellini/Italy**
Co-Chair: Kostas Bourtzis/FAO/IAEA
- 08:45-09:30 *WHO Vector Control Advisory Group Activities and WHO Vector Control Global Response 2017-2030*
Raman Velayudhan/WHO
- 09:30-10:00 *Area-Wide Mosquito Management in the Americas*
Graham White/USA
- 10:00-10:30 *Malaria Elimination in Sri Lanka*
Rajitha Wickremasinghe/Sri Lanka
- 10:30-11:00 *Poster Viewing and Coffee/Tea Break*
- Chair: Ildfonso Fernández-Salas/Mexico**
Co-Chair: Jeremy Bouyer/FAO/IAEA
- 11:00-11:30 *City-wide Control of Aedes aegypti and Zika Virus Using Mass-trapping in Puerto Rico*
Roberto Barrera/Puerto Rico

- 11:30-12:00 *Developing the Combined IIT/SIT Approach to Control the Primary Dengue Vector Aedes albopictus in China*
Zhiyong Xi/China/USA
- 12:00-12:30 *Area-wide Management of Aedes aegypti Mosquito Vector: The First Pilot Suppression Trial in Thailand Integrating the Sterile Insect Technique with Wolbachia-induced Incompatibility Approach*
Pat Kittayapong/Thailand
- 12:30-13:00 *Wolbachia-Aedes - An Additional Tool to Control Aedes aegypti in Singapore*
Lee Ching Ng/Singapore

13:00-14:15 Lunch

Chair: Ignacio Pla-Mora/Spain

Co-Chair: Hanano Yamada/FAO/IAEA

14:15-14:45 *Developing AW-SIT as Part of an Integrated Control Strategy against Aedes sticticus in the River Dalälven Floodplains, Central Sweden*
Jan Lundström/Sweden

14:45-15:15 *Aedes aegypti control programmes in Brazil*
Margareth Capurro/Brazil

15:15-15:45 *Novel Genetic Methods for the Area-wide Control of Insects: Gene Drive and Sex Ratio Distortion*
Nikolai Windbichler/UK

15:45-16:15 Poster Viewing and Coffee/Tea Break

Chair: Rene Gato-Armas/Cuba

Co-Chair: Danilo Carvalho/FAO/IAEA

16:15-16:45 *The Eliminate Dengue Program - Use of Wolbachia to Control the Transmission of Aedes aegypti Associated Viruses*
Peter Ryan/Australia

16:45-17:15 *Fighting Malaria with Engineered Symbiotic Bacteria from Vector Mosquitoes*
Marcelo Jacobs-Lorena/USA

17:15-17:45 *Paratransgenic Strategies for Arthropod Pests of Humans and Plants*
Ravi Durvasula/USA

17:45-18:15 *Abstract title: RNAi Strategies in Support of Mosquito SIT Applications*
Steve Whyard/Canada

18:15-18:30 *Efficient Sex Separation in Aedes Mosquitoes Using Image Analysis and elimination of females by Laser Beams*
Carlos Tur/Spain

Wednesday 24 May 2017

Session 3: Animal Health

Chair: Giuliano Cecchi/FAO

Co-Chair: Andrew Parker/FAO/IAEA

08:45-09:30 *The Eradication of the Tsetse Fly Glossina palpalis gambiensis from the Niayes of Senegal Using an Area-wide Integrated Pest Management Approach that includes the Release of Sterile Males*

Baba Sall/Senegal

09:30-10:00 *Achievements and Challenges of Tsetse and Trypanosomosis Control Operations in the Southern Rift Valley of Ethiopia*

Zerihun Woldesenbet Geleta/Ethiopia

10:00-10:30 *Mapping Landscape Friction to Locate Isolated Tsetse Populations that are Candidates for Elimination*

Ahmadou Dicko/France

10:30-11:00 *Poster Viewing and Coffee/Tea Break*

Chair: Peter James/Australia

Co-Chair: Rafael Argilés/FAO/IAEA

11:00-11:30 *Titre and Tissue Dynamics of Tsetse Symbionts in Glossina Interspecies Hybrids: Biological and Applied Aspects*

Wolfgang Miller/Austria

11:30-12:00 *Paratransgenesis as a Tool to Block Trypanosome Transmission by Tsetse*

Jan van den Abbeele/Belgium

12:00-12:30 *Genetic Structure, Demographic and Phylogeographic History of the New World Screwworm Fly in South America and Caribbean regions*

Ana Maria Azeredo-Espin/Brazil

12:30-13:00 *Area-wide Management of Stable Flies*

David Taylor/USA

13:00-14:15 *Lunch*

Session 4: Regulatory Issues and Socio-Economic Impact

Chair: Sylvia Bluemel/Austria

Co-Chair: Guy Hallman/FAO/IAEA

14:15-15:00 *Will the "Nagoya Protocol on Access and Benefit Sharing" Put an End to Biological Control?*

Joop van Lenteren/The Netherlands

15:00-15:30 *The Relationship between the Phytosanitary Regulatory Framework and International Trade – Case Studies*

Stephanie Bloem/NAPPO

15:30-16:00 *Regulatory and Societal Considerations of New Genetic Techniques*

Kaare Magne Nielsen/Norway

16:00-16:30 *Poster Viewing and Coffee/Tea Break*

- Chair:** **Olivia Reynolds/Australia**
- Co-Chair:** **Walther Enkerlin/FAO/IAEA**
- 16:30-17:00 *Avoiding Trade Restrictions due to Questionable Assertions about Taxonomy, Hosts, and Geographic Distribution of Regulated Pests*
Guy Hallman/FAO/IAEA
- 17:00-17:30 *Methods to Quantify Invasive Pest Risk and Socioeconomic Impact to Promote Objective Regulatory Decision-making: Case Studies on Sterile Insect Techniques (SIT) Related Programmes*
Trang Vo/USA
- 17:30-18:00 *Public-private Partnerships: How Much Should Producers Pay and How Much Should Governments Subsidize Area-wide Programmes?*
John Mumford/UK
- 18:00-18:30 *Detecting and Excluding Invasive Fruit Flies and Other Pest Species in California*
Donald McInnis/USA

Thursday 25 May 2017

Session 5: Climate Change, Global Trade and Invasive Species

- Chair:** **Kris Wyckhuys/CIAT**
- Co-Chair:** **Rui Cardoso Pereira/FAO/IAEA**
- 08:45-09:30 *Global Trends in Arthropod Eradication Programmes*
Max Suckling/New Zealand
- 09:30-10:00 *Area-Wide Management of Invading Gypsy Moth (*Lymantria dispar*) Populations in the USA*
Andy Liebhold/USA
- 10:00-10:30 *Mediterranean Fruit Fly Eradication Programme in the Dominican Republic*
Gregory Marte/Dominican Republic
- 10:30-11:00 *Poster Viewing and Coffee/Tea Break*
- Chair:** **Chang-Ying Niu/China**
- Co-Chair:** **Ihsan Haq/FAO/IAEA**
- 11:00-11:30 *Drosophila suzukii Invasions and Options for its Management*
Hannah Burrack/USA
- 11:30-12:00 *Invasion of Europe with Vector-borne Disease Pathogen Transmitting Mosquitoes*
Eva Veronesi/Switzerland
- 12:00-12:30 *Climate and Mediterranean Fruit Fly Invasion Persistence: Insights from Agent-Based Simulations*
Nicholas Manoukis/USA
- 12:30-13:00 *GIS Based Modelling to Predict the Impact of Climate Change on Medfly Populations in Central America and Decision Making Support for Pest Management*
Estuardo Lira/Guatemala

13:00-14:15 *Lunch*

**Session 6: NEW DEVELOPMENTS AND TOOLS FOR AREA-WIDE INTEGRATED PEST
MANAGEMENT**

Chair: **Marc de Meyer**/Belgium

Co-Chair: **Carlos Cáceres**/FAO/IAEA

14:15-15:00 *Genome Manipulation and Issues Related to Bio-defence*
(final title pending)

Wolfgang Liebert/Austria

15:00-15:30 *Molecular Technologies for Improved Strains for Sterile Insect Technique
Programs*

Marc Schetelig/Germany

15:30-16:00 *Integration of Male Annihilation Technique and Sterile Insect Technique*
Phil Taylor/Australia

16:00-16:30 *Poster Viewing and Coffee/Tea Break*

Chair: **Rakesh Kumar Seth**/India

Co-Chair: **Adly Abdalla**/FAO/IAEA

16:30-17:00 *The Importance of Dormancy and Dormancy Management for Biological
Control*

Daniel Hahn/USA

17:00-17:30 *Characterization of Gut Microflora of Insects of Economic Importance –
Practical Application*

George Tsiamis/Greece

17:30-18:00 *“Boosted SIT”: Auto-dissemination as an Additional Tool in AW-IPM
Programmes*

Jérémy Bouyer/France

18:00-18:30 *The Role of Drones in AW IPM Programmes: a Drone for Sterile Tsetse
Releases in Ethiopia*

David Benavente/Spain

Friday 26 May 2017

Session 7: Discussion Panels

Chair: **Tim Capon**/Australia

Co-Chair: **Marc Vreysen**/FAO/IAEA

08:45-09:30 *Engagement of the Public in Support of Area-wide Integrated Pest Management*

Pamela Pennington/Guatemala

09:30-10:30 Open Discussion with Panel of Experts 1: ***Short Term Political Will / Vision and Stakeholder Support versus Long Term Sustainability of AW Programmes***

Chair: Cara Nelson/Canada

Neville Boersma/South Africa

Helen Kruger/Australia

Aditi Mankad/Australia

John Mumford/UK

Pamela Pennington/Guatemala

10:30-11:00 *Poster Viewing and Coffee/Tea Break*

11:00-12:00 Open Discussion with Panel of Experts 2: ***Opportunities and Risks for AW Control of Mosquito-borne Diseases***

Chair: Graham White/USA

Jesús González-Roldán/Mexico

Lizette Koekemoer/South Africa

Peter Ryan/Australia

Marc Schetelig/Germany

Rajitha Wickremasinghe/Sri Lanka

12:00-13:00 Open Discussion with Panel of Experts 3: ***How Will New Developments, Products and Technologies Affect the Way We Control Insect Pests***

Chair: Pablo Liedo/Mexico

Roberto Angulo/Mexico

John Conway/Canada

Pedro Rendón/Guatemala

Matej Štefančič/Slovenia

Roger Vargas/USA

13:00-13:15 **Closing**

Dazhu Yang/IAEA

Closing Remarks by Deputy Director General Department of Technical Cooperation

Aldo Malavasi/IAEA

Closing Remarks by Deputy Director General Department of Nuclear Sciences and Applications