

**IX<sup>th</sup> EMCA CONFERENCE**  
***Mosquito control without borders***  
**La Rochelle, 10-14 March 2019**

**Programme**

	<b>- Sunday 10<sup>th</sup> March -</b>
17:00-19:00	Registration
	<b>- Monday 11<sup>th</sup> March -</b>
08:00 – 09:30	Registration
09:30 - 10:30	<b>Opening of the Conference</b> <b>Welcome Address</b> Jan O. Lundström, President of EMCA Dominique Rabelle, President of EID ATLANTIQUE, board member of ADEGE
10:30 – 11:10	<b>Keynote lecture</b> <b>Manual on prevention of establishment and control of mosquitoes of public health importance in the WHO European Region (with special reference to invasive mosquitoes)</b> Elkhan Gasimov, World Health Organization Regional Office for Europe
11:10 – 11:40	<b>Coffee break</b>
	<b>Session 1 (11:40 – 13:00)</b> <b><i>Environmental prospects of mosquito control</i></b> Chaired by Sebastien Chouin & Jan Lundström
11:40 - 12:00	<i>Paper 1.1:</i> General overview on efficacy evaluation and environmental risk assessment of insecticides under European law using Bti as an example <b>A. Kehrer, C. Stang and C. Kuhn</b>
12:00 - 12:20	<i>Paper 1.2:</i> Developing mosquito control in highly protected natural wetland environments <b>J. O. Lundström and M. Schäfer</b>
12:20 - 12:40	<i>Paper 1.3:</i> Assessment of an ambitious environmental policy <b>B. Frances, A. Marie, R. Tounsi, D. Gindre, D. Moulis and C. Lagneau</b>
12:40 – 13:00	<i>Paper 1.4:</i> Lessons learned from 8 years of biological mosquito control with BTI in a borderline wetland in Austria <b>H. Jerrentrup</b>
13:00 - 14:30	<b>Lunch</b>
	<b>Session 2 (14:30 - 16:10)</b> <b><i>Well-known and novel challenges in mosquito surveillance and control</i></b> Chaired by Eleonora Flacio & Andrea Drago
14:30 - 14:50	<i>Paper 2.1:</i> EID Atlantique, up and down of 50 years of mosquito control in western France J. De Maupeou, <b>S. Chouin</b> and M. Marjolet

14:50 – 15:10	<i>Paper 2.2: Control of adult mosquitoes and effects on flower-visiting insects in urban green areas</i> D. Corcos, L. Mazzon, P. Cerretti, M. Mei, E. Giussani, <b>A. Drago</b> and L. Marini
15:10 – 15:30	<i>Paper 2.3: Is Aedes sticticus a new invasive species in western France?</i> <b>S. Chouin</b> , J. De Maupeou, B. Le Hunsec and C. Courtin
15:30 – 15:50	<i>Paper 2.4: Coexistence in urban breeding sites among Culex pipiens, Culiseta longiareolata and Aedes albopictus in the Castellón province (East of Spain)</i> <b>J. Herrezuelo-Antolín</b> , D. López-Peña, J.V. Falcó-Garí and R. Jiménez-Peydró
15:50 – 16:10	<i>Paper 2.5: Capacity building for the entomological surveillance in the Mediterranean area: MediLabSecure outcomes and follow-up</i> M. Picard and <b>V. Robert</b>
16:10 – 16:40	<b>Coffee break</b>
16:40 – 18:00	<b>Poster session</b>
18:00 – 19:30	<b>EMCA Board meeting</b>
19:30 – 21:30	<b>Welcome cocktail</b>
<b>- Tuesday 12<sup>th</sup> March -</b>	
<b>Session 3 (09:00 - 10:40)</b> <b><i>Achievements in mosquito surveillance and monitoring</i></b> Chaired by Mihaela Kavran & Francis Schaffner	
09:00 - 09:20	<i>Paper 3.1: A new integrated system for risk-based surveillance of invasive mosquito Aedes albopictus in Switzerland</i> D. Ravasi, M. P. Antonovic, L. Azzimonti, M. Cannata, A. Danani, G. Del Rio, L. Engeler, V. Guidi, D. Huber, F. Mangili, A. Spataro, D. Strigaro, M. Tonolla, N. Vermes and <b>E. Flacio</b>
09:20 – 09:40	<i>Paper 3.2: The continuing spread of Aedes japonicus in Germany – an update</i> <b>H. Kampen</b> and D. Werner
09:40 – 10:00	<i>Paper 3.3: Monitoring of Aedes albopictus (Diptera: Culicidae) in the Valencian Autonomous Region (East of Spain)</i> <b>D. López-Peña</b> , Á. Lis-Cantín, J. Herrezuelo-Antolín and R. Jiménez-Peydró
10:00 – 10:20	<i>Paper 3.4: Aedes albopictus in Jena, Central Germany</i> <b>H. Kampen</b> , C. Kuhlisch and D. Werner
10:20 – 10:40	<i>Paper 3.5: Outcomes of mosquito surveys in Ireland, Luxembourg, Russia and Abkhazia</i> <b>F. Schaffner</b> , C. Ries, I. V. Patraman and M.V. Fyodorova
10:40 – 11:10	<b>Coffee break</b>
<b>Session 4 (11:10 - 13:10)</b> <b><i>Invasive mosquitoes and their control</i></b> Chaired by Gaby Müller & Arjan Stroo	
11:10 – 11:30	<i>Paper 4.1: The experience of controlling invasive Aedes mosquito species in Belgium</i> <b>I. Deblauwe</b> , B. D'hondt, P. Gosselin, K. De Wolf and W. Van Bortel
11:30 – 11:50	<i>Paper 4.2: Invasive mosquito monitoring programmes in Switzerland in 2018</i> <b>L. Engeler</b> , E. Flacio, P. Müller and M. Tonolla
11:50 – 12:10	<i>Paper 4.3: Water associated areas as a key predictor for Aedes albopictus presence on a Mediterranean island</i> <b>C. Barceló</b> , A. Sanz-Aguilar, R. Rosselló, M. Bengoa, M. Ruiz-Pérez, M. González-Calleja, D. Borràs, C. Paredes-Esquivel, M.A. Miranda and G. Tavecchia

12:10 – 12:30	<i>Paper 4.4:</i> TIGREPAT: surveillance and control program of invasive <i>Aedes</i> species and related arboviruses in Northern Italy <b>M. Manica</b> , D. Arnoldi, R. Rosà and A. Rizzoli
12:30 – 12:50	<i>Paper 4.5:</i> 'The INTERREG TIGER project: main outcomes of the tri-national surveillance network in 2018 <b>B. Mathieu</b> , X. Augsten, N. Becker, C. Bender, P. Bindler, L. Da-Silva, A. Graffmann, M. Gschwind, N. Hénon, K. Hoffmann, A.C. Honnen, A. Jöst, T. Krebs, E. Krupa, P. Müller, W.P. Pfitzner, B. Pluskota, O. Pompier, O. Renoux, F. Schaffner, L. Vavassori, G. Vogel and A. Kopf
12:50 – 13:10	<i>Paper 4.6:</i> 'The <i>Aedes</i> Invasive Mosquito COST Action: promoting innovation and synergies in the field of surveillance and control of invasive <i>Aedes</i> arbovirus vectors in Europe <b>F. Schaffner</b> , F. Gunay, A. Michaelakis, A. D. Mihalca, D. Petrić, J. Pinto, W. Wint and A. della Torre
13:10 – 14:30	<b>Lunch</b>
	<b>Session 5 (14:30 - 16:10)</b> <b><i>Surveillance and control of potential vector species</i></b> Chaired by Luis Hernández-Triana & Peter Luthy
14:30 – 14:50	<i>Pape 5.1:</i> Data on entomological surveillance activities and detection of West Nile virus in mosquito pools in Greece (2017-2018) <b>E. Patsoula</b> , S. Beleri, N. Tegos, D. Pervanidou, A. Vakali, V. Diamantopoulos, G. Balatsos, V. Karras, A. Michaelakis and C. Hadjichristodoulou
14:50 – 15:10	<i>Paper 5.2:</i> 1999-2018, 20 years of <i>Aedes albopictus</i> surveillance and control in western France – successes and limits <b>S. Chouin</b> , J. De Maupeou, C. Smeraldi, C. Courtin and M. Marjolet
15:10 – 15:30	<i>Paper 5.3:</i> Surveillance and control of mosquitoes in the French Points of Entry under the International Health Regulation <b>C. Jeannin</b> , Y. Perrin, S. Cornélie, O. Ferreira, Y. Firmin, F. Garcia, J.D. Gauchet, R. Tounsi and C. Lagneau
15:30 – 15:50	<i>Paper 5.4:</i> The utility of mitochondrial and nuclear genetic markers in support of mosquito's biodiversity studies (Diptera, <i>Culicidae</i> ) in La Rioja, northern central region of Spain I. Ruiz-Arrondo, <b>L. M. Hernández-Triana</b> , N. Nikolova and J. A. Oteo
15:50 – 16:10	<i>Paper 5.5:</i> Hematophagic blackfly species (Diptera: Simuliidae) from eastern Spain. A potential risk for humans and livestock <b>D. López-Peña</b> and R. Jiménez-Peydró
16:10 – 16:30	<b>Coffee break</b>
16:30 – 18:00	<b>Round table</b> <b>Mosquito control in response to pathogen transmission risk in Europe</b> Chaired by S. Mourelatos & F. Schaffner with the participation of E. Gasimov, R. Bueno, A. Drago, and G. L'Ambert
18:00 – 19:00	EMCA Annual General Meeting
<b>- Wednesday 13<sup>th</sup> March -</b>	
09:00 – 09:40	<b>Keynote lecture</b> <b>Mosquito control in France and its overseas territories: practices and evolution</b> <b>Rémi Foussadier</b> , EID Rhône-Alpes, France
	<b>Session 6 (09:40 - 11:20)</b>

	<p><b><i>Biotechnologies to reinvent mosquito control</i></b></p> <p>Chaired by Amandine Collado &amp; Norbert Becker</p>
09:40 – 10:00	<p><i>Paper 6.1:</i> Oxitec self-limiting technology as a tool for urban mosquito control</p> <p><b>A. Collado</b></p>
10:00 – 10:20	<p><i>Paper 6.2:</i> Sterile Insect Technique (SIT) in an integrated control program against <i>Aedes albopictus</i> (Diptera: Culicidae) in South-West Germany</p> <p><b>N. Becker</b>, X. Augsten, I. Ferstl, W. Fischer, A. Jöst, A. Lehner, T. Oo, A. Tokatlian Rodriguez and B. Pluskota</p>
10:20 – 10:40	<p><i>Paper 6.3:</i> Combined Sterile Insect Technique and Incompatible Insect Technique: preparation for the proof-of-concept in disease reduction using randomized control trial</p> <p><b>P. Kittayapong</b>, S. Ninphanomchai, W. Limohpasmanee, C. Chansang, U. Chansang and P. Mongkalangoon</p>
10:40 – 11:00	<p><i>Paper 6.4:</i> Why not try the Sterile Insect Technique – a comment on the authorities struggle for alternative floodwater mosquito control in Sweden</p> <p><b>J. O. Lundström</b> and M. Schäfer</p>
11:00 – 11:20	<p><i>Paper 6.5:</i> Effect of Biosynthesized inorganic nanoparticles on Zika virus vector (<i>Aedes aegypti</i>): An Ecofriendly approach for Mosquito control</p> <p><b>R. Pandit</b></p>
11:20 – 11:40	<b>Coffee break</b>
	<p><b>Session 7 (11:40 - 13:20)</b></p> <p><b><i>Public health issues and recent outbreaks in Europe</i></b></p> <p>Chaired by Elina Patsoula &amp; Spiros Mourelatos</p>
11:40 – 12:00	<p><i>Paper 7.1:</i> Vector control strategy for malaria in Greece</p> <p><b>S. Gewehr</b>, S. Kalaitzopoulou, N. Perros, N. Garlis, G. Vlachos, P. Tsagkaris, K. Iordanidis and S. Mourelatos</p>
12:00 – 12:20	<p><i>Paper 7.2:</i> Implementation of urgent preventive and response public health measures for diseases transmitted by <i>Aedes albopictus</i> in Greece</p> <p>D. Pervanidou, <b>E. Patsoula</b>, A. Vakali, A. Baka, A. Michaelakis, G. Balatsos, S. Beleri, G. Koliopoulos, T. Stavrou, T. Georgakopoulou, S. Tsiodras, A. Pappa, N. Vakalis and C. Hadjichristodoulou</p>
12:20 – 12:40	<p><i>Paper 7.3:</i> Integrated Aedes management for the control of Aedes-borne diseases</p> <p><b>D. Roiz</b>, A. L. Wilson, T. W. Scott, D. M. Fonseca, F. Jourdain, P. Müller, R. Velayudhan and V. Corbel</p>
12:40 – 13:00	<p><i>Paper 7.4:</i> Control of mosquitoes transmitting WNV in Central Macedonia, Greece 2018</p> <p><b>S. Kalaitzopoulou</b>, S. Gewehr, P. Tsagaris and S. Mourelatos</p>
13:00 – 13:20	<p><i>Paper 7.5:</i> Evolution of the spread of the Asian tiger mosquito and arboviruses outbreaks in mainland France, 2018</p> <p><b>G. L'Ambert</b>, L. Chanaud, C. Jeannin, D. Moulis, J.-C. Mouret and C. Lagneau</p>
13:20 - 14:30	<b>Lunch</b>
Afternoon	<b>Visit of mosquito control project</b>
Evening	<b>Boat trip followed by conference dinner</b>
	<b>- Thursday 14<sup>th</sup> March -</b>
	<p><b>Session 8 (09:00 - 10:40)</b></p> <p><b><i>New technologies in mosquito control</i></b></p> <p>Chaired by Kamil Erguler &amp; Sandra Gewehr</p>

09:00 – 09:20	<p><i>Paper 8.1:</i> Evaluating the performance of MozzyJet, an aerial mosquito control vehicle to perform targeted, effective, and low-cost mosquito control</p> <p><b>K. Erguler</b>, A. Agapiou, P. Antoniou, P. Vouterakos, A. Leonidou, C. Keleshis, J. M. Fawcett, J. Sciare and A. F. Martinou</p>
09:20 – 09:40	<p><i>Paper 8.2:</i> A novel technology to effectively repel mosquitoes, using electric fields</p> <p><b>A. Rose</b>, F. Tanveer, E. Molins and K. Paaijmans</p>
09:40 – 10:00	<p><i>Paper 8.3:</i> Two Plus One: the combination of two passive and one active mosquito trap may well be an <i>Aedes (Stegomyia)</i> control tool worthy of attention</p> <p><b>A. Schuhbauer</b>, M. Geier, A. E. Eiras and S. A. Ritchie</p>
10:00 – 10:20	<p><i>Paper 8.4:</i> The use of drones to control mosquitoes: feedbacks from EID Méditerranée</p> <p><b>N. Sidos</b>, R. Tounsi and C. Lagneau</p>
10:20 – 10:40	<p><i>Paper 8.5:</i> Using artificial intelligence for guiding wide area mosquito control operations</p> <p>M. Iatrou, S. Kalaitzopoulou, <b>X. Tseni</b>, S. Gewehr and S. Mourelatos</p>
10:40 - 11:00	<b>Coffee break</b>
	<p><b>Session 9 (11:00 - 12:40)</b></p> <p><b><i>Citizen science, communication and personal protection</i></b></p> <p>Chaired by Marina Torres &amp; Ruben Bueno</p>
11:00 – 11:20	<p><i>Paper 9.1:</i> Citizen Science ease the detection of new <i>Aedes</i> invasive mosquitoes: the case of <i>Aedes (Hulecoetomyia) japonicus japonicus</i> (Theobald 1901) in Spain</p> <p>R. Eritja, I. Ruiz-Arrondo, <b>S. Delacour-Estrella</b>, F. Schaffner, J. Álvarez-Chachero, M. Bengoa, M.-Á. Puig, R. Melero-Alcíbar, A. Oltra and F. Bartumeus</p>
11:20 – 11:40	<p><i>Paper 9.2:</i> News from the ‘Mueckenatlas’ (2017–2018)</p> <p><b>H. Kampen</b> and D. Werner</p>
11:40 – 12:00	<p><i>Paper 9.3:</i> The citizen science project ‘Mueckenatlas’: contributions of opportunistic data collection to mosquito research and public engagement in science</p> <p><b>N. Pernat</b>, H. Kampen and D. Walther</p>
12:00 – 12:20	<p><i>Paper 9.4:</i> Spatial repellents, Insecticides and their role in human protection</p> <p><b>M. Moreno</b>, M.A. Miranda and R. Bueno</p>
12:20 – 12:40	<p><i>Paper 9.5:</i> How to communicate the problematic of vectors and associated diseases to the society</p> <p><b>M. Torres</b></p>
12:40 – 13:30	<b>Closing of the conference</b>
13:30 – 14:30	<b>Lunch</b>