

The EuroXanth COST Action 4th Annual Conference

28 - 30 June 2021



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CONFERENCE PROGRAM

MONDAY 28th JUNE 2021

Program schedule is based on the CET time zone.

13.00 – 13.15	OPENING CEREMONY	
	Aleksa Obradović (Serbia) / Vladan Bogdanović (Serbia) / Ralf Koebnik (France)	
13.15 – 14.00	Julian Smith (United Kingdom)	Opening Talk: How can Plant Health 'Get ahead of the disease curve'

14.00 – 18.10	SESSION 1	
	Diagnostics & Diversity – Population Structure	
	Chairs: Joana Costa (Portugal, WG1 Leader), Boris Vinatzer (USA)	
14.00 – 14.30	Boris Vinatzer (USA; Key note)	Towards fast, sensitive, and precise plant pathogen detection and identification using metagenomic sequencing and curated databases
14.30 – 14.50	Caroline Bellenot (France)	Distribution of type III secretion systems and effectors in " <i>Xanthomonadales</i> " and <i>Nevskiales</i> orders
14.50 – 15.10	Jamie Harrison (United Kingdom)	Genomics-informed exploration of <i>Xanthomonas</i> threats
15.10 – 15.25	Q&A	
15.25 – 15.40	BREAK	
15.40 – 16.00	Leonor Martins (Portugal)	<i>Xanthomonas arboricola</i> and <i>X. euroxanthea</i> strains isolated from pecan trees: comparative genomics and pathogenicity on walnut
16.00 – 16.20	Enora Dupas (France)	Probable dates and scenario of introduction of <i>Xylella fastidiosa</i> subsp. <i>multiplex</i> in France
16.20 – 16.40	Maria del Pilar Velasco Amo (Spain)	Distribution of pXFAS_5235 plasmid among <i>Xylella fastidiosa</i> infected plant samples in Spain
16.40 – 16.55	Q&A	
16.55 – 17.15	Nay Dia (Switzerland)	Genomics-based loop-mediated isothermal amplification assays for detection of <i>Xanthomonas hortorum</i> complex
17.15 – 17.35	Monika Kałużna (Poland)	Genomics-informed molecular detection systems of <i>Xanthomonas arboricola</i> pv. <i>corylina</i> the causal agent of bacterial blight of hazelnut
17.35 – 17.55	Mafalda Reis Pereira (Portugal)	Tracking changes on host physiological traits promoted by <i>Xanthomonas euvesicatoria</i> : proximal optical sensing as an innovative tool for plant disease detection
17.55 – 18.10	Q&A	

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18.10 – 18.30	BREAK	
18.30 – 19.15	ONLINE ORAL / E-POSTER SESSION 1 Chairs: Massimiliano Morelli (Italy, WG1 Vice Leader), Jamie Harrison (United Kingdom)	
18.30 – 18.32	Manuel Anguita-Maeso (Spain)	Bioinformatic pipelines are determinant in the analysis of microbial communities from different ecological niches in cultivated olive trees
18.32 – 18.34	Ninon Bellanger (France)	Space of spacers: what CRISPR loci can tell us about evolution of xanthomonads
18.34 – 18.36	Pavel Beran (Czech Republic)	Specific DNA markers for detection of <i>Xanthomonas gardneri</i> based on analysis of 2500 genomes within 30 minutes
18.36 – 18.38	Felipe Clavijo (Uruguay)	Genetic and phenotypic characterization of <i>Xanthomonas</i> species pathogenic of wheat in Uruguay
18.38 – 18.40	Mylene Corzo Lopez (Canada)	Assessment of <i>Xanthomonas</i> spp. pathogen variability in Cuban common beans
18.40 – 18.42	Nay Dia (Switzerland)	A new <i>Xanthomonas</i> species pathogenic on <i>Hydrangea</i> ?
18.42 – 18.44	Filip Gazdik (Czech Republic)	Persistence of <i>Xanthomonas campestris</i> pv. <i>campestris</i> in field soil in central Europe
18.44 – 18.46	Irina Ignatyeva (Russian Federation)	An experience of PCR methods implementation for a bacterial blight of bean <i>Xanthomonas axonopodis</i> pv. <i>phaseoli</i> detection in a seed and plant material of legumes
18.46 – 18.48	Monika Kałużna (Poland)	Complete genome sequences and characterization of <i>Xanthomonas arboricola</i> , the causal agent of bacterial leaf blight of blueberry
18.48 – 18.50	Roland Kölliker (Switzerland)	Comparative genomics to understand host range in <i>Xanthomonas translucens</i>
18.50 – 19.15	POSTER DISCUSSION	

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TUESDAY 29th JUNE 2021

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ONLINE ORAL / E-POSTER SESSION 2		
Chairs: Massimiliano Morelli (Italy, WG1 Vice Leader), Monika Kałużna (Poland)		
13.00 – 13.02	Amandine Cuntz (France)	An update of the situation of <i>Xylella fastidiosa</i> in plants and vectors in France
13.02 – 13.04	Carla Luís (Portugal)	Dispersion of the bacterium <i>Xylella fastidiosa</i> in Portugal
13.04 – 13.06	Jelena Menković (Serbia)	Etiology of bacterial leaf spot of arugula in Serbia
13.06 – 13.08	Hatice Özaktan (Turkey)	Characterization of <i>Xanthomonas arboricola</i> pv. <i>juglandis</i> strains isolated from brown apical necrosis (BAN) and bacterial blight of walnut by rep PCR
13.08 – 13.10	Jakub Pecenka (Czech Republic)	Integration of virulence factor hpaP in detection of bacterial blight of <i>Apiaceae</i> plants
13.10 – 13.12	Tamara Popović (Montenegro)	<i>Xanthomonas arboricola</i> pv. <i>pruni</i> associated with leaf and fruit spot and twig necrosis of peach, apricot and sweet cherry in Montenegro
13.12 – 13.14	Coline Sciallano (France)	Genetic diversity of <i>Xanthomonas oryzae</i> pv. <i>oryzae</i> strains in Africa
13.14 – 13.16	Dagmar Stehlíková (Czech Republic)	Genome based loop mediated isothermal amplification assays for detection of <i>Xanthomonas arboricola</i> pv. <i>juglandis</i> and <i>X. euroxanthea</i>
13.16 – 13.18	Jan Wohlmuth (Czech Republic)	Symptoms manifestation of the <i>Xanthomonas hortorum</i> pv. <i>carotae</i> on selected representatives of the genus <i>Apiaceae</i>
13.18 – 13.20	Bekri Xhemali (Kosovo)	Phytosanitary quality along the tomato and pepper production chain through an integrated management of bacterial diseases caused by xanthomonads and other bacteria
13.20 – 13.45	POSTER DISCUSSION	

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SESSION 2	
Pathogen Biology	
Chairs: Joël F. Pothier (Switzerland, WG2 Leader), Neha Potnis (USA)	
13.45 – 17.55	
13.45 – 14.15	Neha Potnis (USA; Key note) Understanding the basis of host adaptation in a stealthy plant pathogenic bacterium, <i>Xanthomonas</i>
14.15 – 14.35	Alice Boulanger (France) The making of a pathogen: How <i>Xanthomonas</i> adapts to plant environments
14.35 – 14.55	Lucas Morinière (France) Assessment of the essential genes in vitro and critical metabolic pathways in planta of <i>Xanthomonas hortorum</i> pv. <i>vitiens</i> using genome-wide Tn-seq screens and computational genomics
14.55 – 15.10	Q&A
15.10 – 15.30	Miguel Román-Écija (Spain) Genome comparison of two Spanish strains of <i>Xylella fastidiosa</i> subsp. <i>multiplex</i> ST6 and their potential relationship with phenotypic traits associated to pathogenicity
15.30 – 15.50	Ofir Bahar (Israel) Distribution dynamics of <i>Xylella fastidiosa</i> within almond tree organs through different physiological stages
15.50 – 16.10	Ralf Koebnik (France) Complete genome sequences of clade-1 xanthomonads reveal novel genetic traits in the genus <i>Xanthomonas</i>
16.10 – 16.25	Q&A
16.25 – 16.40	BREAK
16.40 – 17.00	Mathilde Hutin (France) Genetic structure of <i>Xanthomonas oryzae</i> pv. <i>oryzae</i> populations and diversity of their TAL effector repertoires in Burkina Faso
17.00 – 17.20	Nicolas W. G. Chen (France) First description of a TALE target gene in common bean
17.20 – 17.40	Doron Teper (Israel) Consequences of adaptation of TAL effectors on host susceptibility to <i>Xanthomonas</i>
17.40 – 17.55	Q&A
18.00 – 18.30	CELEBRATING SUCCESS: What did our COST Action achieve?

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ONLINE ORAL / E-POSTER SESSION 3		
Chairs: Eran Bosis (Israel, WG2 Vice Leader), Roland Kölliker (Switzerland, WG3 Vice Leader)		
18.30 – 19.15		
18.30 – 18.32	Noemi Casarin (Belgium)	Focus on <i>Salicaceae</i> to investigate potential <i>Xylella fastidiosa</i> -based pathosystems in temperate regions
18.32 – 18.34	Giovane Böerner Hypolito (Brazil)	Characterization of ZapA and ZapB from <i>Xanthomonas citri</i> subsp. <i>citri</i> in cell division
18.34 – 18.36	Aleksandr Ignatov (Russian Federation)	A possible role of EPS structure in climate adaptation of <i>Xanthomonas campestris</i>
18.36 – 18.38	Kristi E. Ledman (USA)	<i>Xanthomonas translucens</i> pv. <i>undulosa</i> identified on non-wheat crops and weedy grasses in Minnesota, United States: describing an expanded host range
18.38 – 18.40	Mateus Terceti (Brazil)	Alterations in essential regulatory two-component system of phoPQ is associated with cell division, cell morphology and Virulence of <i>Xanthomonas citri</i> subsp. <i>citri</i>
18.40 – 18.42	Carlos Andrés Zárate-Chaves (France)	CRISPR interference (CRISPRi), a powerful tool to study the function of gene families in <i>Xanthomonas</i>
18.42 – 18.44	José Gadea (Spain)	PthA4 ^{AT} , a small TAL effector from <i>Xanthomonas citri</i> subsp. <i>citri</i> induces immunity in <i>Nicotiana benthamiana</i>
18.44 – 18.46	Marlène Lachaux (France)	Functional characterization of the IR64 rice variety resistance towards African <i>Xanthomonas oryzae</i> pv. <i>oryzae</i>
18.46 – 18.48	Lucia Ragasová (Czech Republic)	Visualization and tracking <i>Xanthomonas campestris</i> pv. <i>campestris</i> in cabbage plants by fluorescence in situ hybridization
18.48 – 19.15		POSTER DISCUSSION

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WEDNESDAY 30th JUNE 2021

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SESSION 3	
Genetic Resistance – Host Defense	
Chairs: Jens Boch (Germany, WG3 Leader), Bing Yang (USA)	
13.00 – 15.15	
13.00 – 13.30	Bing Yang (USA; Key note) Exploiting natural and engineered rice resistance to bacterial blight
13.30 – 13.50	Suayib Üstün (Germany) Self-ubiquitination of a pathogen type-III effector traps and blocks the autophagy machinery to promote disease
13.50 – 14.00	Q&A
14.00 – 14.20	Shannon Greer (United Kingdom) Identification, characterisation and mapping of resistance to black rot (<i>Xanthomonas campestris</i> pv. <i>campestris</i>) in <i>Brassica</i> spp.
14.20 – 14.40	Florian Goettelmann (Switzerland) Pooled sequencing identifies candidate genes for resistance to <i>Xanthomonas translucens</i> pv. <i>graminis</i> in <i>Lolium multiflorum</i>
14.40 – 15.00	Joana Vicente (United Kingdom) Distribution, colonisation and volatile organic compound detection in plants inoculated with <i>Xylella fastidiosa</i>
15.00 – 15.15	Q&A

ONLINE ORAL / E-POSTER SESSION 4	
Chairs: Tamás Kovács (Hungary, WG4 Vice Leader), Mária Kocanová (Czech Republic)	
15.15 – 15.55	
15.15 – 15.17	Irem Altin (Italy) Synthesis, characterisation and efficacy of chitosan-stabilised silver nanoparticles against <i>Xanthomonas vesicatoria</i> , the causal agent of tomato bacterial spot
15.17 – 15.19	Alice Anzalone (Italy) Biological control of tomato bacterial diseases by <i>Bacillus</i> sp. and <i>Pseudomonas</i> sp. isolated from tomato endorhizosphere
15.19 – 15.21	Daiva Burokienė (Lithuania) Influence of natural antimicrobials on <i>Xanthomonas</i> strains growth
15.21 – 15.23	José Juan Cortés Plana (Spain) Computational model to approach the spread of plant pests and particularly to the propagation of <i>Xylella fastidiosa</i> in the almond trees in Spain
15.23 – 15.25	Guilherme Dilarri (Brazil) Evaluating alternatives to sodium hypochlorite for the post-harvest sanitization of citrus fruit in packinghouses
15.25 – 15.27	Songul Erken (Turkey) Sensitivity to copper in <i>Xanthomonas campestris</i> pv. <i>campestris</i> in vitro in Turkey
15.27 – 15.29	Juliano Henrique Ferrarezi (Brazil) Control of citrus canker symptoms by crude extract from <i>Pseudogymnoascus</i> sp.: a greenhouse assay
15.29 – 15.31	Katarina Gašić (Serbia) Antagonistic potential of <i>Pseudomonas graminis</i> strains against some economically important xanthomonads
15.31 – 15.55	POSTER DISCUSSION
15.55 – 16.15	BREAK

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SESSION 4	
Disease Management – Vector Control	
Chairs: Emilio Stefani (Italy, WG4 Leader), Maria Saponari (Italy)	
16.15 – 18.30	
16.15 – 16.45	Maria Saponari (Italy; Key note) Control of <i>Xylella fastidiosa</i> in Europe: from eradication to containment measures
16.45 – 17.05	Conor Horgan (Ireland) Design and synthesis of potential quorum sensing inhibitors of <i>Xylella fastidiosa</i>
17.05 – 17.15	Q&A
17.15 – 17.35	Saul Burdman (Israel) Potential use of antimicrobial random peptide and lipopeptide mixtures for control of <i>Xanthomonas</i> diseases
17.35 – 17.55	Mária Kocanová (Czech Republic) Identification of novel bacteriophages of <i>Xanthomonas campestris</i> pv. <i>campestris</i> isolated from cabbage
17.55 – 18.15	Irem Altin (Italy) Encapsulation of phages in liposomes: enhancing their efficacy to control bacterial walnut blight in field
18.15 – 18.30	Q&A

ONLINE ORAL / E-POSTER SESSION 5	
Chairs: Tamás Kovács (Hungary, WG4 Vice Leader), Saul Burdman (Israel)	
18.30 – 19.10	
18.30 – 18.32	Eliška Hakalová (Czech Republic) Antibacterial effect of thyme essential oil compounds to pathogenic xanthomonads
18.32 – 18.34	Judit Kolozsváriné Nagy (Hungary) Antibacterial effect of essential oils on the causal agent of bacterial spot of stone fruits and almond
18.34 – 18.36	Julio Retamales (Chile) <i>Xanthomonas arboricola</i> pv. <i>corylina</i> causing bacterial blight of hazelnut in Chile: genetic analysis of resistance to agrochemicals
18.36 – 18.38	Giulio Flavio Rizzo (Italy) Efficacy of microbial consortia and natural compounds as seed dressing for the control of tomato bacterial spot
18.38 – 18.40	Vítor Rodrigues Marin (Brazil) <i>Origanum vulgare</i> essential oil in the control of the citrus canker
18.40 – 18.42	Joanna Świątczak (Poland) Antibacterial and antibiofilm activity of phenolic compounds against <i>Xanthomonas campestris</i> pv. <i>campestris</i>
18.42 – 18.44	Dorota Tekielska (Czech Republic) Antibacterial activity of novicidin derived synthetic peptides against <i>Xanthomonas campestris</i> pv. <i>campestris</i>
18.44 – 18.46	Gabrielle Vieira (Brazil) Penicillic acid isolated from <i>Penicillium</i> sp. from Antarctica effect on citrus canker in greenhouse conditions
18.46 – 19.10	POSTER DISCUSSION

19.15 – 19.30	CLOSING CEREMONY
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