

**Programme 72nd International Symposium on Crop Protection –
18 May 2021 (virtual event)**

Schedule (CEST):

09:00 - 10:10 Plenary session

10:25 - 12:30 Oral sessions

13:00 - 14:30 Poster session

14:30 - 15:00 Plenary session

15:15 - 17:20 Oral sessions

17:25 - 17:35 Closing speech

ORAL SESSIONS

Plenary session

Morning session

09:00 Introduction by the chair

09:10 **Plant health, our common good**

- [Harry Arijs](#) (European Commission, DG Health and Food Safety, Belgium)

09:40 **Reducing mycotoxin risks in grain through introducing resistance and eliminating susceptibility**

- [Paul Nicholson](#), John Haidoulis Andrew Steed, Rachel Goddard, Benjamin Hales, Christopher Burt, Ian King, Julie King, Surbhi Grewal (John Innes Centre, UK)

Afternoon session

14:30 **Precision agriculture and smart farming – with an emphasis to The Netherlands**

- [Thomas Been](#) (Wageningen University & Research, The Netherlands)

Session Agricultural Entomology and Acarology

- 10:25 **Improving pest control by co-application of biological and chemical agents**
- [Eleanor L Spence](#), Dave Chandler, Claus Svendsen, Gareth Martin, Shaun Berry, Steve Edgington, Helen Hesketh (Warwick University, UK)
- 10:50 **Endophytic entomopathogenic fungi: promising biocontrol agents of aphids in vegetable crops**
- [L. Wilberts](#), H. Jacquemyn, and B. Lievens (KU Leuven, Belgium)
- 11:15 **Back to basics: The Impact Indicator, a decision support tool to facilitate IPM**
- [Dany Bylemans](#), Femke De Vis and Tim Beliën (pcfruit npo, Belgium)
- 11:40 **Mass trapping *Drosophila suzukii*: what would it take?**
- [Clymans R.](#), Van Kerckvoorde V., Beliën T., Bylemans D., De Clercq P. (Ghent University/pcfruit npo/KULeuven, Belgium)
- 15:15 **Aphid populations and BYDV in maize and small grain cereals in Flanders**
- [Renik Van den Eynde](#), Laura De Keukelaere, Jonas Claeys, Sander Smets, Thomas Van Leeuwen, Geert Haesaert (Ghent University, Belgium)
- 15:40 **Efficacy of insecticides on the allium leaf miner (*Phytomyza gymnostoma* Loew)**
- [Jonathan De Mey](#), Louis Lippens, Femke Temmerman, Nathalie Cap, Leen Verbruggen, Katrijn Spiessens, Sander Fleerackers, Jochem Bonte, Negin Ebrahimi (Inagro vzw, Belgium)
- 16:05 **Identifying cabbage stem flea beetle risk factors through machine learning**
- [Corkley I.](#), White S., Ellis S., Pickering F., Collins L. (ADAS, UK)
- 16:30 **Laboratory and greenhouse evaluation of *Melia volkensii* crude extracts as insect control products against agricultural insect pests of economic importance**
- [Victor Jaoko](#), C.N.T. Taning, S. Backx, P. Motti, J. Mulatya, J. Vandenabeele, T. Magomere, F. Olubayo, S. Mangelinckx, S. Werbrouck, G. Smagghe (Ghent University, Belgium)
- 16:55 **Bee-vectored *Aureobasidium pullulans* for biocontrol of grey mould in strawberry**
- [Mudassir Iqbal](#), Matilda Jützeler, Soraya C. França, Felix Wäckers, Erik Andreasson, Johan A. Stenberg (Swedish University of Agricultural Sciences, Sweden)

Session Nematology

- 10:25 **Detection of potato tubers infested by root knot nematode *Meloidogyne luci***
- Gerič Stare B., Širca S., Matej Knapič M., Susič N., Žibrat U. (Kmetijski inštitut Slovenije / Agricultural Institute of Slovenija, Slovenia)
- 10:50 **Development and validation of a LAMP method to detect *Globodera pallida***
- Maria João Camacho, Maria L. Inácio, Manuel Mota and Eugénia de Andrade (Instituto Nacional de Investigação Agrária e Veterinária / Universidade de Évora, Portugal)
- 11:15 **Host-plant status of field grown vegetables for *Meloidogyne chitwoodi* and *Pratylenchus penetrans*.**
- Lirette M. Taning, Leakena Chann, Nathalie Cap, Sander Fleerackers, Ellen Formesyn, Wim M.L. Wesemael (Flanders Research Institute for Agriculture, Fisheries and Food (ILVO), Belgium)
- 11:40 **Best4Soil Nematode database tool to design clever crop rotations**
- Leendert P. G. Molendijk, Paulien van Asperen (Wageningen University and Research, Business unit Field crops, the Netherlands)
- 12:05 **C4H inhibitors: a novel class of broad-spectrum resistance inducers in crop plants**
- Willem Desmedt, Wim Jonckheere, Maarten Ameye, Thomas Van Leeuwen, Kris Audenaert, Nico Vergote, Bartel Vanholme, Tina Kyndt (Ghent University, Belgium)
- 15:15 **A new biocontrol agent against plant-parasitic nematodes based on the predatory nematode, *Allodiplogaster sudhausi***
- Orly Oren, Sigal Brown, Ralf-Udo Ehlers, Temesgen Addis, Ohad Zuckerman, Eyal Cohen, Amos Ovadia, Yitzhak Spiegel (Department of entomolgy, ARO, the volcani center, Israel)
- 15:40 **Synergistic control of pest slugs using cedarwood oil and slug parasitic nematodes**
- McDonald-Howard, K., McDonnell, R., Jones, H., Williams, C. and Rae, R. (Liverpool John Moores University, UK)
- 16:05 **Dehydroascorbate induced resistance in rice against root-knot nematode *Meloidogyne graminicola***
- Satish Namdeo Chavan, Jonas De Kesel, Tina Kyndt (Ghent University, Belgium)
- 16:30 **Inundation: an effective and officially recognized measure for the control of Potato Cyst Nematodes**
- Johnny Visser and Leendert Molendijk (Wageningen University and Research, the Netherlands)
- 16:55 **The discovery and characterization of diproline as novel IR stimulus against the root-knot nematode *Meloidogyne graminicola* in rice (*Oryza sativa*)**
- Jonas De Kesel, Ramsés Gómez-Rodríguez, Eli Bonneure, Sven Mangelinckx and Tina Kyndt (Ghent University, Belgium)

Session: Phytopathology: characterisation and plant-pathogen interactions

- 10:25 **Amplicon sequencing, a new approach to study Columnea latent viroid (CLVd) quasispecies populations**
- [Parichate Tangkanchanapas](#), Annelies Haegeman, Tom Ruttink, Monica Höfte and Kris De Jonghe (Ghent University, Belgium)
- 10:50 **Characterization of an emergent viral disease on vegetables in Belgium**
- [Coline Temple](#), Arnaud G. Blouin, Laurena Durant, Kris De Jonghe, Yoika Foucart, Stéphan Steyer, Laurent Minet and Sébastien Massart (University of Liege, Gembloux Agro-Biotech, Belgium)
- 11:15 **EUCLEG: Identifying sources of resistance to clover rot in red clover**
- [Vleugels T.](#), Saleem A., Frey L., Roldán-Ruiz I. (ILVO, Belgium)
- 11:40 **Basal resistance of strawberry against *B. cinerea* depends on the antioxidant profile**
- [Yijie Zhao](#), Liese Vlasselaer, Maarten Hertog, Konstantinos Terzoudis, Bart Nicolai, and Barbara De Coninck (KU Leuven, Belgium)
- 12:05 **Fungal ethylene biosynthesis in the *Verticillium dahliae*-sweet pepper interaction**
- [Marcou S.](#), Tyvaert L., Depaepe T., Goethals S., Deketelaere S., Van Der Straeten D., Höfte M. (Ghent University, Belgium)
- 15:15 **Phytosanitary risks of internet trade (e-commerce) and human mobility**
- [Kris De Jonghe](#), Nicole Viaene & Johan Van Vaerenbergh (Flanders Research Institute for Agriculture, Fisheries and Food (ILVO), Belgium)
- 15:40 **Study of the fungal species involved in grapevine trunk diseases in South Tyrol**
- Fabio Boni, [Selena Tomada](#), Alberto Storti, Florian Sinn, Sanja Baric (Free University of Bozen-Bolzano, Italy)
- 16:05 **Susceptibility of potato to *R. pseudosolanacearum* from rose, blueberry and mandevilla**
- P.R. Overeem, [M.J.C. Pel*](#), N.N.A. Tjou-Tam-Sin, J.L.J. van de Bilt, W. Wolters, P.P.M.A. Gorkink-Smits, N.M. Landman, A.M. Bocsanczy, D. J. Norman and M. Bergsma-Vlami (National Reference Center; Netherlands Food and Consumer Product Safety Authority (NVWA), the Netherlands)
- 16:30 **Quantification and characterization of *P. cryptogea* in hydroponic lettuce**
- [Liese Vlasselaer](#), Tim De Clercq, Isabel Vandevelde, Bart Lievens and Barbara De Coninck (KU Leuven, Belgium)
- 16:55 **Population structure of *Verticillium* isolates from Belgian hops**
- [Heungens K.](#), Debode J, Van Poucke K, Radišek S, Willaert L, Haegeman A (Flanders Research Institute for Agriculture, Fisheries and Food (ILVO), Belgium)

Session Phytopathology: disease management

- 10:25 **The potential use of *Frateuria defendens* nov. as bio control agent against phytoplasma' s yellows disease in wine grapes**
- Vered Naor, Lilach Iasur-kruh, Tirtza Zahavi, Ofir Bahar, Yoram Kapulnik, Einat Zchori-Fein (Shamir Research Institute, Israel)
- 10:50 **Mycorrhizal fungi as biocontrol agents of septoria tritici blotch**
- Allario T., Kryzaniak Y., Fourquez A., Tisserant B., Magnin-Robert M., Randoux B., Joël Fontaine, Siah A., Courty P-E., Brisset M-N., Gaucher M. et Lounès-Hadj Sahraoui A. (Université Littoral Côte d' Opale, France)
- 11:15 **Biocontrol of crown gall disease: battle between two xylem occupying bacteria**
- Trong Nguyen-Huu, Nina Ogrinc, Cédric Jacquard, Marie-Noëlle Brisset, Matthieu Gaucher, Essaïd Aït Barka, Michel Salzet, Céline Lavire, Christophe Clément, Ludovic Vial, Lisa Sanchez (RIBP, university of Reims Champagne-Ardenne, France)
- 11:40 **Biological activities and structure activity relationship of new rhamnolipids on the wheat- *Zymoseptoria tritici* pathosystem**
- R.Platel , S. Le Guenic , R.Pipeleers, M.Magnin-Robert, B.Randoux, V.Lequart, L.Chaveriat, N.Joly, P.Martin, P.Halama, M.Höfte, P.Reignault, A.Siah (Joint Research Unit N° 1158 BioEcoAgro, Junia, Univ. Lille, Université Liège, UPJV, Univ. Artois, ULCO, INRAE, France)
- 12:05 **dsRNAs, a novel biofungicide for sustainable crop protection: mechanisms and activities**
- Ladera-Carmona M.J., Benkow F., Kannan S., Veer-Singh A., Šečić E., Imani J., Kogel K-H. (Justus Liebig University Giessen, Germany)
- 15:15 **Streptomyces isolates promote growth of maize plants and boost resistance against *Fusarium verticillioides* via transient regulation of archetypal defence pathways in the plant**
- Trang Minh Trana, Maarten Ameye, Frank Devlieghere, Sarah De Saeger, Mia Eeckhout,d, Kris Audenaert (Gent University, Belgium)
- 15:40 **Trichoderma atroviride SC1 controls major stone fruit pathogens**
- Andrea Nesler, Ann Vermaete, Maria Kaiafa, Jonas Goossens (Bi-PA nv (Biological Products for Agriculture), Belgium)
- 16:05 **Diversity and biocontrol potential of *Bacillus* spp. from the rice rhizosphere in acid sulfate soils**
- V. B. Lam, H. M. M. Ibrahim, F. E. Oni, E. Ferrarini, A. Arguelles, B. De Coninck, M. Ongena, M. Höfte (Ghent University, Belgium)
- 16:30 **Optimising integrated control strategies against *Zymoseptoria tritici* using new azole chemistry and cultivar resistance**
- Morgan C.L., Smith J.A., Paveley N.D., Bryson R.J. (ADAS Rosemaund, UK)
- 16:55 **Natural and synthetic rhamnolipids to protect wheat and rice from fungal leaf pathogens**
- R. Pipeleers; R. Platel; P. Trapet; P. Martin; A. Siah; M. Höfte (Ghent University, Belgium)

Session Pesticide Residues: Toxicology and Ecotoxicology

- 10:25 **Risk assessment of pesticide residues in pollen collected by mason bees in Belgian fruit tree crops**
- G. Claus, M. Eeraerts, V. Mommaerts, K. De Schamphelaere, P. Spanoghe (Ghent University, Belgium)
- 10:50 **Consumption Risk Assessment of Pesticides Residues in Yam**
- Abukari Wumbei, Issahaku Abdul-Rahaman, Abdulai Abubakar, Edelbis Lopez, and Pieter Spanoghe (University for Development Studies (UDS), Ghana)
- 11:15 **Monitoring of 20 Halogenated Pesticide Residues in 11 foods from Cameroon, and Health Risk of Adult Human Dietary Exposure**
- Galani YJH*; Houbraken M; Wumbei A; Djeugap FJ; Fotio D; Gong YY and Spanoghe P (University of Leeds, UK)
- 11:40 **Pesticide residues in vegetables and perception of risk for consumers**
- Toumi K.*, Joly L., Soudani N., Abbas A., Schiffers B., and Glida H. (Higher School of Agriculture of Kef (ESAK), University of Jendouba, Tunisia)
- 12:05 **Risk assessment of pesticide operators exposure under greenhouse in a dry region of Algeria**
- Boukhalfa H. H. and Belhamra Y. I. (Mohamed Khider University of Biskra, Algeria)

Session Formulation and Application Technology

- 15:15 **OPTIMA project: Development of a smart sprayer for carrots**
- [I. Zwertvaegher](#), S. Fountas, N Mylonas, J-P Douzals, A Lamare, P Balsari, P Marucco, M Grella, A Caffini, D. Nuyttens (Flanders Research Institute for Agriculture, Fisheries and Food (ILVO), Belgium)
- 15:40 **Closed Transfer Systems - requirements as stated in ISO 21191**
- [Nancy Westcott](#), Roger Pocock, Laura De Paepe, Jan Langenakens (Goatthroat, USA)
- 16:05 **Nanofibers for slow release of pear psyllid repellent: control of pear decline disease**
- [Bruna Czarnobai De Jorge](#), Hans E. Hummel, Jürgen Gross (Julius Kühn-Institut, Germany)
- 16:30 **Granulated formulation approach based on *Rhodotorula mucilaginosa* to control *Botrytis cinerea***
- [Erika Paola Grijalba Bernal](#), Yimmy Alexander Zapata, Camilo Beltrán, Jaime Andrés Rocha, Mauricio Cruz Barrera, Martha Isabel Gómez Álvarez (Corporación Colombiana de Investigación Agropecuaria AGROSAVIA, Colombia)
- 16:55 **Toxicity determination of fungicides on combinations with rhizobia inoculants as biological control agents in seed encrusting formulations**
- [Jasmine De Rop](#), Pieter Spanoghe (Ghent University, Belgium)

Session herbology

15:15 **Haulm killing of potatoes without diquat more challenging**

- V. De Blauwer, K. Demeulemeester, M. Peumans, P. Vande Moortele & P. Vermeulen (Inagro, Belgium)

15:40 **Weed control in pome and small fruit: recent evolutions and future perspectives**

- Wim Verjans*, Joke Vandermaesen, Dany Bylemans, Serge Remy (Research Center for Fruit npo, Belgium)

16:05 **Optimisation of chemical control of clonal populations of *Cyperus esculentus***

- S. DE RYCK, D. REHEUL & B. DE CAUWER (Ghent University, Belgium)

16:30 **ISAC, an unbiased indicator based on active substances for evaluating PPP use.**

- Durenne B, Weickmans B, Malice E, Huyghebaert B and Henriët F. (CRA-W, Belgium)

16:55 **No amino acid changes in ACCase-resistant barnyardgrass from Arkansas, USA**

- Fidel González-Torralva, Jason K. Norsworthy, Leonard B. Piveta (University of Arkansas, USA)

Special session: Biopesticides and biocontrol agents: recent advances and regulatory pathways

- 10:25 **Innovative tools for rational control of the most difficult-to-manage pests (“super pests”) and the diseases they transmit**
- John Vontas (Agricultural University of Athens, Greece)
- 10:50 **Eupeodes corollae: a case study on regulatory risk assessment from the perspective of the biocontrol industry**
- Yves Arijs, Felipe Villarroel, Lieve Wouters, Felix Wäckers, Karel Bolckmans (Biobest, Belgium)
- 11:15 **Biopesticides: Their definition and regulatory pathway**
- Maria Kaiafa, Ann Vermaete, Andrea Nesler, Jonas Goossens (Bi-PA nv, Belgium)
- 11:40 **Environmental RNA interference in two spotted spider mite, Tetranychus urticae, reveals dsRNA processing requirements for efficient RNAi response**
- Nicolas Bensoussan, Sameer Dixit, Midori Tabara, David Letwin, Maja Milojevic, Michele Antonacci, Pengyu Jin, Yuka Arai, Kristie Bruinsma, Takeshi Suzuki, Toshiyuki Fukuhara, Vladimir Zhurov, Sven Geibel, Ralf Nauen, Miodrag Grbic & Vojislava Grbic (The University of Western Ontario, Canada)
- 12:05 **Bioproducts market and the role of stakeholders: the case of the tomato sector in France**
- Florent SAUCEDE and Zouhair BOUHSINA (MOISA, University Montpellier, CIRAD, CIHEAM-IAMM, INRAE, Institut Agro, France)

POSTER SESSION

Herbology

H01 Strategic use of herbicides and cultivation techniques against Black-grass (*Alopecurus myosuroides*) in winter grains

- Jonas Claeys, Bram Vervisch & Kürt Demeulemeester (Inagro, Belgium)

Formulation and Application Technology

F01 Efficacy of rhizobacteria on biostimulation of GTA wheat growth in fields

- Ounas F. N., Mezaache-Aichour S., Aissat K. and Zerroug M. M. (University of Batna, Algeria)

F02 Compound selection for thermotolerant conidia production

- Sánchez-Rey L. E., Grijalba E. P., Moreno-Sarmiento N., Quiroga-Cubides G.M. (Universidad Nacional de Colombia, Colombia)

F03 Pesticide use in vegetable production and risk for human health and the environment

- SOUDANI N. and TOUMI K. (Mohamed Khider University, Algeria)

Pesticide Residues: Toxicology and Ecotoxicology

R01 Effect of insecticides on the pigments content in peach leaves

- Slavica Vuković, Antonije Žunić, Dragana Šunjka, Sanja Lazić, Aleksandra Alavanja (University of Novi Sad, Serbia)

R02 Caffeic Acid protects HCT116 cells from Fipronil-induced toxicity

- SAIDI N.E., ACHOUR M., Salwa ABID-ESSEFI, BEN SALEM I. (University of Monastir, Tunisia)

- R03 **Autophagy protects against TEB-induced apoptosis in HEK 293 cells**
- BEN OTHMENE, Y., BEN SALEM, I., ABID-ESSEFI, S., LEMAIRE, C (University of Monastir, Tunisia)
- R04 **Genotoxicity evaluation of Fenpyroximate to rats by micronucleus test and comet assay**
- Imen Ayed-Boussema, Hiba Hamdi, Asma M' nassri, Karima Rjiba and Salwa Abid (University of Monastir, Tunisia)
- R05 **Bromuconazole induced oxidative stress in rat liver and kidney tissues**
- Karima Rjiba-Touati, Hiba Hamdi, Imen Ayed Boussema and Salwa Abid (University of Monastir, Tunisia)
- R06 **Comparative effect of chemical pesticide and biopesticide on the haematological parameters in the male Wistar rat**
- TEKTAK M., MALLEM L, RENAULT D, BOUABDALLAH N, ABDENNOUR C (Badji Mokhtar University, Algeria)
- R07 **Biology and control of seasonal fly (Diptera) invasions in buildings**
- A. Baele, K. De Maeyer, P. De Clercq, P. Spanoghe (Ghent University, Belgium)

Agricultural Entomology and Acarology

- E01 **Dynamics of entomocomplexes in biocenoses of different origin**
- S. Mostoviak, V. Poprotska, V. Sedyk, O. Gurievskaya (Uman National University of Horticulture, Ukraine)
- E02 **The Efficacy of *Combretum trifoliatum* Vent. (Combretaceae) Extract against *Spodoptera frugiperda* (J.E. Smith) (Lepidoptera: Noctuidae)**
- Veeravat Changkeb, Saksit Nobsathian and Vasakorn Bullangpoti* (Kasetsart University, Thailand)
- E03 **Analysis of genetic structure of *Sitobion miscanthi* (Takahashi) from six geographic populations in China based on mitochondrial and primary symbiotic genes**
- Jingxuan Sun, Qian Li, Frédéric Francis and Julian Chen (University of Liège, Belgium)
- E04 **Functional and numerical responses of *Cryptolaemus montrouzieri* (Coleoptera: Coccinellidae) to the Prickly Pear Cacti Pest *Dactylopius opuntiae* (Hemiptera: Dactylopiidae)**
- Mohamed El Aalaoui, and Mohamed Sbaghi (National Institute of Agronomic Research, Morocco)

- E05 **Seasonal phenology of the major insect pests of quinoa (*Chenopodium quinoa* Willd.) and their natural enemies in a traditional zone and two new production zones of Peru**
- Luis Cruces; Eduardo de la Peña; Patrick De Clercq (Universidad Nacional Agraria La Molina, Peru; Ghent University, Belgium)
- E06 **Rapid identification of the allium leaf miner by loop-mediated isothermal amplification (LAMP)**
- Ebrahimi, N., Tangkanchanapas, P., Verstraeten, J., Casteels, H., Cap, N., Lippens, L., Spiessens, K., De Mey, J., Barbry, J., Temmerman, F., Verbruggen, L., Fleerackers, S. and Bonte, J. (Flanders Research Institute for Agriculture, Fisheries and Food (ILVO), Belgium)
- E07 **Host susceptibility of various *Buxus* spp. to larvae of box tree moth (*Cydalima perspectalis*)**
- Bonte J, Denaeghel H, Hermans D (Flanders Research Institute for Agriculture, Fisheries and Food (ILVO), Belgium)
- E08 **When does non-crop habitat manipulation fails to enhance natural control of *Cacopsylla pyri* in organic pear orchards?**
- Ammar Alhmedi, Dany Bylemans, Tim Beliën (Research Centre for Fruit Cultivation (pcfruit npo), Belgium)
- E09 **Unraveling the role of egg-surface bacteria as hidden players in plant defenses against insect eggs**
- Margot Geerinck, Hans Jacquemyn and Bart Lievens (KU Leuven, Belgium)
- E10 **Inoculation of tomato with endophytic entomopathogenic fungi alters the olfactory behavior and feeding damage by *Nesidiocoris tenuis***
- Caroline Meesters, Hans Jacquemyn, and Bart Lievens (KU Leuven, Belgium)
- E11 **TEPHRISURV - Developing effective methods for the surveillance of non-European fruit flies (Diptera: Tephritidae) on the Belgian territory**
- Witters J., Dermauw W., Verstraeten J., Bonte J. and De Meyer, M. (Flanders Research Institute for Agriculture, Fisheries and Food (ILVO), Belgium)
- E12 **The decade in review: interceptions of plant quarantine pest insects in Belgium**
- Witters J., De Bondt G, Huyshauer V and Bonte J (Flanders Research Institute for Agriculture, Fisheries and Food (ILVO), Belgium)
- E13 **Beware&Note: a web platform for awareness, early detection and notification of organisms harmful to plants in Belgium**
- Bonte J, Denaeghel H, Vanreusel W, Ledegen H, Ebrahimi N, Delcour I, Gobin B, Witters J (Flanders Research Institute for Agriculture, Fisheries and Food (ILVO), Belgium)
- E14 **Assessing effects of bergamot essential oil on three storage insect pests**
- Dragana BOŠKOVIĆ, Sanja LAZIĆ, Slavica VUKOVIĆ, Aleksandra ALAVANJA, Miloš PETROVIĆ, Antonije ŽUNIĆ, Dragana ŠUNJKA (University of Novi Sad, Serbia)

- E15 **Monitoring endophytic fungi: keystone to improve sustainable management of the southern green stink bug**
- S. Van Hee, H. Jacquemyn, and B. Lievens (KU Leuven, Belgium)
- E16 **Letal and subletal effect of essential oils of *Peumus boldus* and *Laurelia sempervirens* against tomato pests *Trialeurodes vaporariorum* and *Tuta absoluta***
- A. Salazar, B. Cedeño, D. Silva, M. Vagas, N. Arismendi, G. Smagghe, N. Zapata (Ghent University, Belgium)
- E17 **Antiviral effect of essential oil of *Peumus boldus* and *Eucalyptus globulus* against Deformed Wing Virus-A**
- D. Silva, M. Vargas, N. Arismendi, A. Salazar, B. Cedeño, G. Smagghe, N. Zapata (Ghent University, Belgium)
- E18 **Stage specificity and efficacy of tetraniliprole on lepidoptera key pests in pome fruit**
- Bangels E, Belien T, Clymans R, Bylemans D (Proefcentrum Fruitteelt vzw (pcfruit vzw, Belgium)
- E19 **SmartPP: Smart diagnostic tools and database to support precision plant protection in horticultural crops in Crete**
- Anastasia Tsagkarakou, Emmanuel Markakis, Kyriaki Varikou, Aris Ilias, Nektarios Kavroulakis, Anastasios Malandrakis, Anastasia Kampouraki, Emmanuel Roditakis and John Vontas (IMBB/FORTH; Agricultural University of Athens, Greece)

Nematology

- N01 **Nematicidal activity of essential oils and biological product against *Meloidogyne javania***
- A.EL AIMANI, A. HOUARI, SE. LAASLI, and F. MOKIRNI (Mohammed V University, Morocco)
- N02 **Identification of nematodes associated with grapevine in South Tyrol (northern Italy)**
- La Russa I, Innerebner G, Mayad EH, Baric S (Free University of Bozen-Bolzano, Italy)
- N03 **Entomopathogenic nematodes from organic honeybush orchards in South Africa**
- Fisayo Y. Daramola, Francis B. Lewu and Antoinette P. Malan (Cape Peninsula University of Technology, South Africa)

- N04 **Interaction between Entomopathogenic nematodes and *Metarhizium anisopliae* in host and non-host insects**
- Beth Waweru, Minshad Ansari and Abid Hussain (Ghent University, Belgium and Moi University, Kenya)
- N05 **Determination of crop yield and damage threshold levels of field grown vegetables for *Pratylenchus penetrans* and the impact of cover crops on their population density**
- Ellen Formesyn (Inagro, Belgium)
- N06 **Infectious process of *Meloidogyne chitwoodi* and *Pratylenchus penetrans* on five fodder radish (*Raphanus sativus*) cultivars**
- Lirette M. Taning, Alexis B. Kadiata, Nathalie Cap, Sander Fleerackers, Ellen Formesyn, Wim M.L. Wesemael (Flanders Research Institute for Agriculture, Fisheries and Food (ILVO), Belgium)
- N07 **Epigenetic regulatory mechanisms during the new organogenesis processes leading nematode feeding-site formation.**
- Patrícia Abril-Urías, Almudena Gómez-Rojas, Virginia Ruíz-Ferrer, Carmen Fenoll and Carolina Escobar (Universidad de Castilla-La Mancha, Spain)
- N08 **First Detection of *Meloidogyne luci* Parasitizing Potato in the Azores, Portugal**
- Leidy Rusingue, Filomena Nóbrega, Laura Cordeiro, Clara Serra and Maria L. Inácio (Instituto Nacional de Investigação Agrária e Veterinária (INIAV, I.P.), Portugal)
- N09 **Remote sensing of multimodal effects of *Bacillus firmus* inoculation on tomato plants**
- Nik Susič, Uroš Žibrat, Lovro Sinkovič, Andrej Vončina, Jaka Razinger, Matej Knapič, Aleš Sedlar, Saša Širca, Barbara Gerič Stare (Agricultural Institute of Slovenia, Slovenia)
- N10 **The role of *Pratylenchus penetrans* transthyretin-like protein in parasitism**
- Espada, M., Vicente, C., Branco, J., Mota, M., Vieira, P. (Universidade de Évora, Portugal)
- N11 **Optimisation of the in vitro liquid culture process of *Steinernema yirgalamense* and *Steinernema jeffreyense* using local resources for cost-effective production.**
- Murray D. Dunn, Prasana D. Belur, Antoinette P. Malan (Stellenbosch University, South Africa)
- N12 **Profiling mycobiota communities associated with the Pine Wilt Disease**
- C. Vicente; F Nóbrega; H Bragança; L Bonifácio, P Naves; E Sousa; M Espada; M Mota; ML Inácio (Universidade de Évora, Portugal)
- N13 **Biochar from grape waste as an alternative for the control of plant endoparasitic nematodes**
- Ángela Martínez-Gómez, Fernando E. Díaz-Manzano, Ángel Barón-Sola, Luis E. Hernández, Ismael F. Mena, Elena Díaz, María Fe Andrés, Carmen Fenoll and Carolina Escobar (Universidad de Castilla-La Mancha, Spain)

Phytopathology

- P01 **How to guarantee successful application of a Trichoderma-based biopesticide?**
- [Soraya C. França](#), Hanne Poelmans, Marvin Koot (Biobest Group, Belgium)
- P02 **Quantifying the curative activity of mefentrifluconazole ("Revysol") against Zymoseptoria tritici**
- Smith JA, [Joynt, RL](#), Paveley ND, Bryson RJ (RSK ADAS Ltd, UK)
- P03 **Canon® controls late blight in processing tomato at the Valley of Springs in Israel**
- [Nitzan Nadav](#), Yiftach Giladi, Shimon Lahiani, Mahmud Zoabi, Tzion Decco (Valley of Springs Research & Extension Center, Israel)
- P04 **F-Box Nictaba protects Arabidopsis thaliana against Pst DC3000 infection**
- [Andrea ROMERO PÉREZ](#), Maarten AMEYE, Kris AUDENAERT, Els JM VAN DAMME (Ghent University, Belgium)
- P05 **Management of Verticillium wilt in strawberry cultivation**
- [Ceustermans, A.](#), Verdecchia, E., Baets, D., Melis, P., Rediers, H., Lievens, B., Van Hemelrijck, W. and Bylemans, D. (Research center for Fruit Growing, Belgium)
- P06 **Blueprint of a nationwide surveillance of viruses across an economically important plant family**
- [Arnaud G. Blouin](#), Maaïke Heyneman, Coline Temple, Kris De Jonghe and Sébastien Massart (University of Liège, Belgium)
- P07 **Impact of plant viruses on fruit texture of infected Cucumis sativus plants**
- [A-K. Kersten](#), M. Bandte, S. Scharf, P. Lentzsch, P. Meurer, C. Büttner (Leibniz-Zentrum für Agrarlandschaftsforschung (ZALF), Germany)
- P08 **High-density pear orchard shows reduced tree sensitivity to fire blight damage**
- [Mery Dafny Yelin](#), Judith Clara Moy, Raphael A. Stern, Israel Doron, Miriam Silberstein (Northern Agriculture Research & Development MIGAL - Galilee Research Institute, Israel)
- P09 **Population, Virulence and Mycotoxin profile of Fusarium spp. Associated with Basal Rot of Allium spp. in Vietnam**
- [Dung Le](#), Maarten Ameye, Marthe De Boevre, Sarah De Saeger, Kris Audenaert, and Geert Haesaert (Ghent University, Belgium)
- P10 **Fusarium in vitro inhibition by Trichoderma strains from Ecuadorian soils**
- [María Fernanda Gonzalez](#), Luis Galarza, Christian Romero (Escuela Superior Politécnica del Litoral, ESPOL, Biotechnology Research Center (CIBE), Ecuador)

- P11 **Comparative study of fungicides efficiency in durum wheat seeds protection against cereal Fusarium agents in Algeria.**
- BELABED Imene,*, GHARZOULI Asma, DAËCHI Meriem Barkahoum, BENCHEIKH Omar, ROUAG Noureddine (University Ferhat Abbas Sétif-1 and University Bachir Ibrahimi Bordj Bou Arréridj, Algeria)
- P12 **Effect of calcium on Paenibacillus biocontrol activity of hairy root disease in tomato**
- Nuri Kim, Ilse Goyens, Pablo Vargas Ribera, Hans Rediers (KU Leuven, Belgium)
- P13 **Virulence of rhizogenic Agrobacterium biovar1 strains causing hairy root disease in hydroponic crops**
- Kim N., Vargas P., and Rediers H. (KU Leuven, Belgium)
- P14 **Seed sanitation of Phaseolus vulgaris from the main seed transmitted viruses and bacteria**
- Battaglia V., Cermola M., Lahoz E., Raimo F., Fanigliulo A. and Crescenzi A. (Bioagritest Srl Centro Interregionale di Diagnosi Vegetale, (Italy)
- P15 **Sustainable Botrytis disease management in Rubus**
- Mata, Clara I.; Van Campenhout, Jelle; Baens, Eveline; Smets, Tom; Van Hemelrijck, Wendy and Bylemans, Danny (Proefcentrum Fruitteelt (pcfruit npo), Belgium)
- P16 **Detection and quantification of Phytophthora cactorum in strawberry cultivation by quantitative real-time PCR**
- Verdecchia, E., Ferreira, J.*, Ceustermans, A., Baets, D., Bonants, P., Melis, P., Van Hemelrijck, W., Rediers, H. and Lievens, B. (KU Leuven, Belgium)
- P17 **SMARTPROTECT: Horizon 2020 Thematic Network for innovative vegetable crop protection**
- Pollet S., De Mey J. and Van der Craats I. (Inagro, Belgium)
- P18 **Evaluation of Paenibacillus BCOs to tackle hairy root disease in hydroponic tomato**
- Vargas P., Bosmans L., Van Kerckhove S., Van Calenberge B., Lievens B., and Rediers H. (KU Leuven, Belgium)
- P19 **Which fungi are associated with fungal infections in strawberry plants?**
- Ceustermans, A., Verdecchia, E., Baets, D., Melis, P., Rediers, H., Lievens, B., Van Hemelrijck, W. and Bylemans, D. (Research center for Fruit Growing, Belgium)
- P20 **Specific and sensitive qPCR assays for Fusarium oxysporum f.sp. lactucae races 1 and 4**
- H. Mestdagh, K. Poucke, T. Dockx, I. Vandeveld, S. Venneman, J. Neukermans, S. Buysens, A. Decombel, P. Bleyaert, M. Höfte, K. Heungens (Ghent University, Belgium)
- P21 **A new Xanthomonas hortorum clade of strains pathogenic on Hydrangea**
- Nay C. Dia, Cinzia Van Malderghem, Brigitte De Paepe, Johan Van Vaerenbergh, Bart Cottyn, Joël F. Pothier (Environmental Genomics and Systems Biology, IUNR, ZHAW, Switzerland)

- P22 **Bio-sourced antifungal compounds for crop protection with minimized impact on the environment and human health**
- DAMIENS A., SIAH A., FAYEULLE A., LEONARD E., BILLAMBOZ M. (Université de Technologie de Compiègne, France)
- P23 **Variability of banana Fusarium wilt intensity among banana cultivars in Eastern DR Cong**
- Mugisho Z.J.*, Bisimwa B.E., Mugumaarhahama Y., Bragard C., And Legrève A. (Université Catholique de Louvain, Belgium and Université Evangélique en Afrique, D. R. Congo)
- P24 **Verticillium wilt of flax: in vitro infection, biocontrol, and screening**
- Julie Moyse, Shirley Marcou, Hervé Demailly, Stéphanie Guénin, Anthony Quéro, Sylvain Lecomte, Gaëlle Mongelard, Laurent Gutierrez, Monica Höfte (Ghent University, Belgium)
- P25 **Combining an arbuscular mycorrhizal fungus and a bacteria, to protect wheat against powdery mildew?**
- Krzyzaniak Yuko*, Mazoyon Candice, Magnin-Robert Maryline, Randoux Béatrice, Fontaine Joël, Tisserant Benoît, Sarazin Vivien, Dubois Frédéric, Duclercq Jérôme, Lounès-Hadj Sahraoui Anissa (Université du Littoral Côte d'Opale, France)
- P26 **Phenotypic characterization of the interaction between Plasmopara viticola and grapevine cultivars in terms of quantitative disease resistance**
- L. Heyman, R. Höfle, A. Kicherer, O. Trapp, E. Ait Barka, R. Töpfer, M. Höfte (Ghent University, Belgium)
- P27 **Development of a Bioassay for the study of Hairy Root Disease of Tomato plants**
- Savio D Rodrigues; Barbara De Coninck (KU Leuven, Belgium)
- P28 **From lab to field, effective potato late blight control with FytoSol®**
- G. van Aubel, R. Buonatesta, N. de Menten, P. Van Cutsem (Fytofend, Belgium)
- P29 **Towards a reliable and reproducible Pseudomonas syringae greenhouse bioassay in pear**
- Hilde Schoofs*, Dany Bylemans, Serge Remy (Research Center for Fruit npo, Belgium)
- P30 **Antagonistic activities of Bacillus spp. and Paenibacillus spp. against wheat pathogens**
- Louis Morandini, Mathieu Delitte, Simon Caulier, Cyril Robert, Chloé Peduzzi, Anne Legrève, Claude Bragard, Jacques Mahillon (Université Catholique de Louvain, Belgium)
- P31 **Antagonistic activities of Pseudomonas spp. against wheat pathogens**
- Mathieu Delitte, Louis Morandini, Chloé Peduzzi, Alain Bultreys, Frédéric Debode, Anne Legrève, Jacques Mahillon and Claude Bragard (Université Catholique de Louvain, Belgium)