

International Council for the Study of Virus and other Graft Transmissible Diseases of Fruit Crops (ICVF)

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The 24th International Conference on Virus and Other Graft Transmissible Diseases of Fruit Crops

5-9 June, 2017, Thessaloniki Greece

Organizing Committee

Nikolaos Katis (Aristotle University of Thessaloniki, Greece)

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Welcome to the 24th International Conference on Virus and Other Transmissible Diseases of Fruit Crops (ICVF)

Dear Colleagues,

It's been almost 30 years since the 14th ICVF Conference was held in Thessaloniki. The organizing committee is excited and honored to welcome you to the 24th ICVF Conference from June 5th-9th. In this meeting participants from 28 countries will gather to our beautiful city to present their intriguing research on viruses and virus diseases of fruit crops.

In addition to the technical presentations we have included in the program a workshop on clean plant movement "Transport of plant propagation material through borders and the production of high quality (virus-tested) propagative material of fruit trees and small fruits". During the workshop individuals from seven countries will share their experiences and discuss their ideas along with the other participants about the future. We will continue with a round table on the status quo and the role of NGS in certification and quarantine.

The organizing committee would like to thank all of you for attending the 24th ICVF Conference. Special thanks go to the invited speakers for accepting our invitation to present state-of-the-art talks on a pressing subject matter.

We hope you will enjoy the meeting, the beauty and the culture of Thessaloniki, the capital of Greek Macedonia. Keep in mind that we are here to help you enjoy both the Conference and Greek life.

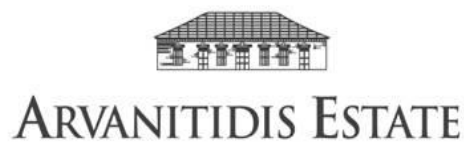
Nikolaos Katis

Convener of the 24th ICVF and

Members of the Organizing Committee

We sincerely thank the sponsors of the 24th International Conference on Virus and other Graft Transmissible Diseases of Fruit Crops.

Sponsorship



Scientific Program of ICVF 2017

Thessaloniki 5-9 June

Sunday, 4 June

17:30-19:30 *Registration and poster hanging*

19:30-20:00 Invited lecture: *A. Molassiotis* (Aristotle University of Thessaloniki, School of Agriculture, Pomology Laboratory, Greece) "Fruit tree cultivation and production in Greece: present status and future prospects"

20:00 *Welcome drink-Greek wine presentation and tasting*

Monday, 5 June

08:00-09:00 *Registration and poster hanging*

09:00-09:20 *Meeting opening/ Welcome by the Convener N.I. Katis and the Dean of Faculty of Agriculture, Forestry and Natural Environment D. Koveos)*

09:20-09:50 Invited lecture: *V.I. Maliogka* (Aristotle University of Thessaloniki, School of Agriculture, Plant Pathology Laboratory, Greece) "Virus and other graft-transmissible diseases of fruit trees in Greece-An Overview"

9:50-11:10 Oral Session 1: New and Emerging graft-transmissible pathogens and related diseases-Etiology I

Chairs: W. Jelkmann, V. Pallas

09:50-10:10 O-1: Genomic and biological characterization of *Apple necrotic mosaic virus* infecting apple trees in China. *F. Xing, H.Q. Wang, S.F. Li*

10:10-10:30 O-2: The complete sequence of a new Trichovirus isolated from peach trees in Mexico. *R. De la Torre, V. Pallas, J.A. Sánchez-Navarro*

10:30-10:50 O-3: Discovery of a novel plant virus with unique genome features from black currant. *T. Thekke-Veetil, T. Ho, J.D. Postman, I.E. Tzanetakis*

10:50-11:10 O-4: Molecular characterization of a phytoplasma associated to phyllody and witches' broom in strawberry (*Fragaria x ananassa* Duch.). *N. Quiroga, A. Zamorano, W. Cui, N. Fiore*

11:10-11:40 *Coffee break*

11:40-13:00 Oral Session 2- New and Emerging graft-transmissible pathogens and related diseases-Etiology II

Chairs: A. Zamorano, N. Hong

11:40-12:00 O-5: A new potexvirus infecting babaco (*Carica pentagona*) and papaya (*C. papaya*) in Ecuador. *R.A. Alvarez-Quinto, J.F. Cornejo, D.F. Quito-Avila*

12:00-12:20 O-6: A novel emaravirus associated with pear chlorotic leaf spot disease. *H.Z. Liu, G.P. Wang, Z.K. Yang, N. Hong*

12:20-12:40 O-7: New cherry-adapted strain of *Plum pox virus*. *S. Chirkov, P. Ivanov, A. Sheveleva, G. Osipov*

12:40-13:00 O-8: Identification and partial characterization of a new ilarvirus infecting *Prunus* sp. *K. Efthimiou, P.G. Pappi, A. Olmos, T. Candresse, E. Xylogianni, N.I. Katis, V.I. Maliogka*

13:00-14.30 *Lunch break*

14:30-15:00 Invited lecture: *F. Di Serio* (Istituto per la protezione sostenibile delle Piante, CNR, Italy) "Viroids infecting fruit trees: From Bioassays to Next Generation Sequencing"

15:00- 16:20 Oral Session 3- New and Emerging graft-transmissible pathogens and related diseases-Etiology III

Chairs: R.R. Martin, A. Marais

15:00-15:20 O-9: Characterization of a new and distinct population of hammerhead viroid-like RNA detected by next-generation sequencing using total RNA from apple (*Malus domestica*) cv. Pacific Gala. *A. Messmer, D. Sanderson, G. Braun, P. Serra, R. Flores, D. James*

15:20-15:40 O-10: Occurrence and genetic variability of elderberry carlaviruses infecting *Sambucus nigra* in the Czech Republic. *D. Šafářová, K. Vavroušková, T. Zemánek, T. Candresse, M. Navrátil*

15:40-16:00 O-11: An un-designed Closterovirus infecting kiwifruit plants grown in China. *S.H. Wen, C.X. Zhu, G.P. Wang, Z.K. Yang, N. Hong*

16:00-16:20 O-12: A novel member of the Luteoviridae associated with Raspberry leaf curl disease. *P.L. Di Bello, A. Diaz-Lara, R.R. Martin*

16:20-16:50 *Coffee break*

16:50-17:50 Oral Session 4-New and Emerging graft-transmissible pathogens and related diseases-Etiology IV

Chair: I. Koloniuk, M. Glasa

16:50-17:10 O-13: *Mume virus A*: A new capillovirus from Japanese apricot (*Prunus mume*). A. Marais, C. Faure, S. Theil, T. Candresse

17:10-17:30 O-14: The Geneva Complex – an interesting disease perspective based on the results of NGS analysis. D. James, J. Phelan, G. Jespersion

17:30-17:50 O-15: Detection and characterization of fig viruses in Greece. C.L. Salsalou, L. Lotos, C. Valachas, A. Olmos, A. Chetas, E.K. Chatzivassiliou, N.I. Katis, V.I. Maliogka

17:50-18:10 O-16: Discovery and molecular characterization of a new luteovirus associated with rapid apple decline in USA. H.W. Liu, L.-P. Wu, Peter, K., D., Liu, Z., Cao, M.-J., R. Li

18:10-19:40 Poster session I (P1-P19)

Tuesday, 6 June

09:00-09:30 Invited lecture: T. Candresse (INRA, University of Bordeaux, France) “A perspective on NGS use in plant virology and on implications for the safe movement of plant materials”

09:30-10:50 Oral Session 5-Detection and Characterization I

Chairs: D. James, H. Maree

09:30-09:50 O-17: Evaluation of total RNA high-throughput sequencing for virus detection. R. Bester, M. Visser, J.T. Burger, H.J. Maree

09:50-10:10 O-18: A high intra-host *Cherry virus A* (CVA) population heterogeneity detected in cherry trees in Slovakia. M. Glasa, L. Predajňa, N. Sihelská, Z. Vozárová, K. Šoltys

10:10-10:30 O-19: NGS studies on fruit tree screenhouses and stock collections in Hungary. *N. Czotter, T. Varga, D. Baráth, J. Molnár, J. Balássy, T. Deák, G.E. Tusnády, L. Kocsis, É. Preininger, J. Burgyán, É. Várallyay*

10:30-10:50 O-20: Luteoviruses in *Prunus* species: how many are there? *T. Candresse, A. Marais, D. Šafářová, M. Navratil, R. Sorrentino, D. Alioto, C. Faure, L. Svanella-Dumas, S. Theil*

10:50-11:20 *Coffee break*

11:20-12:20 Oral Session 6-Detection and Characterization II

Chair: D. Šafářová, N. Fiore

11:20-11:40 O-21: Study on the occurrence and phylogenetic relationships of pome and stone-fruit tree phytoplasmas in Greece. *M.C. Holeva, E.M. Koutsoumari, P.E. Glynos, C.D. Karafla, E. Siderea, A. Togiás, J. Kagias, S. Ioannidou, Ch. Arampatzis*

11:40-12:00 O-22: New developments in the epidemiology of *Little cherry virus 1* and its occurrence in European Plum (*Prunus domestica* L.) in Belgium. *R. Tahzima, S. Massart, G. Peusens, T. Beliën, K. De Jonghe*

12:00-12:20 O-23: Variability of *Strawberry crinkle virus*. *E.T.M. Meekes, M. Hooftman, H. Konings, M.J.M. Ebskamp*

12:20-12:40 O-24: Virus and viroids infecting pear trees (*Pyrus communis* L.) in Chile. *G. Medina, N. Quiroga, P. Méndez, A. Zamorano, N. Fiore*

12:40-14:00 *Lunch break*

14:00-14:30 Invited lecture: *A. Bertaccini* (University of Bologna, Department of Agricultural Sciences, Italy) "Fruit trees and Phytoplasmas: A well settled association"

14:30-15:50 Oral Session 7- Detection and Characterization III

Chairs: D. Skoric, A. Olmos

14:30-14:50 O-25: Germplasm as invaluable source of ribes infecting viruses. *J. Přibyllová, J. Špak, I. Koloniuk, K. Petrzik*

14:50-15:10 O-26: Pear decline: The fate of Phytoplasmas in an Italian orchard. *S. Paltrinieri, K. Troni, P.P. Bortolotti, R. Nannini, A. Bertaccini*

15:10-15:30 O-27: Viruses infecting cherry and sour cherry in the Czech Republic. *J. Špak, J. Přibyllová, O. Lenz, J. Fránová, I. Koloniuk*

15:30-15:50 O-28: Multilocus sequence typing of Croatian ‘*Candidatus* Phytoplasma mali’ strains. *I. Križanac, J. Plavec, Z. Budinščak, D. Škorić, M. Šeruga Musić*

15:50-16:10 *Coffee break*

16:10-17:30 Oral Session 8-Detection and Characterization IV

Chair: J. Špak, C. Varveri

16:10-16:30 O-29: Phytoplasma detection in hazelnut in Chile. *S. Perez Fuentealba, S. Paltrinieri, J. Guerrero, N. Fiore, A. Bertaccini*

16:30-16:50 O-30: Detection and characterization of cherry viruses in Chile. *A. Zamorano, N. Quiroga, C. Fernández, L. Rivera, D. Soto, A.M. Pino, N. Fiore*

16:50-17:10 O-31: Simultaneous detection of pome fruit tree viruses by triplex quantitative RT-PCR. *I. Malandraki, D. Beri, I. Isaioglou, A. Olmos, C. Varveri, N. Vassilakos*

17:10-17:30 O-32: European stone fruit yellows phytoplasmas infecting apricot in Serbia and in Italy cluster mainly in two main MLT groups. *N. Contaldo, J. Stepanović, F. Pallara, A. Bertaccini, B. Duduk*

17:45-20:00 *City Tour*

21:00 *Scientific committee dinner*

Wednesday, 7 June

09:00-18:00 *Scientific excursion*

Visit to Commercial Pome and Stone Fruit orchards in Veroia and Naoussa (District of Imathia)

- Vergina Archaeological site (Capital of Ancient Macedonia)
- Lunch in Naoussa
- Return to Thessaloniki

Thursday, 8 June

09:00-12:10 Workshop on 'Transport of plant propagation material through borders and the production of high quality (virus-tested) propagative material of Fruit trees and small fruits'. **Chair: I.E. Tzanetakis**

1. **09:00-09:20** *Pascal Gentit, France*
2. **09:20-09:40** *Nicola Fiore, Chile*
3. **09:40-10:00** *Bob Martin, USA*
4. **10:00-10:20** *Fiona Constable, Australia*

10:20-10:50 *Coffee break*

5. **10:50-11:10** *Hans Maree, South Africa*
6. **11:10-11:30** *Delano James, Canada*
7. **11:30-11:50** *Christina Varveri, Greece*

11:50-12:10 O-33: The importance and challenges of reference collections. *W. Menzel*

12:10 -13:40 *Lunch break*

13:40-15:40 Round table. *USDA-NCPN leadership via Skype or zoom*. Status quo and role of NGS in certification and quarantine. How are we approaching sequences vs viruses?

15:40-16:10 *Coffee break*

16:10-17:40 *Poster session II (P20-P38)*

20:30 *Gala Dinner*

Friday, 9 June

09:00-09:30 Invited lecture: *K. Kalantidis* (University of Crete, Department of Biology, Greece) "Disarming plant defense by suppressing DICER expression"

9:30-10:30 Oral Session 9- Pathogen-Host Interactions

Chair: S.A. MacFarlane

09:30-09:50 O-34: Viral superinfection in woody and herbaceous hosts. *J. Koloniuk, J. Fránová, J. Přibylková, K. Petrzik, O. Lenz, P. Svoboda, H. Jakešová, J. Špak*

09:50-10:10 O-35: UK survey and grafting studies of *Raspberry leaf blotch emaravirus*.
W.J. McGavin, S. Newman, J. Allen, S.A. MacFarlane

10:10-10:30 O-36: Interaction of the pathogen '*Candidatus Phytoplasma Mali*' with the
plant host. *A. Konnerth, G. Krczal, K. Boonrod*

10:30-11:00 *Closing ceremony*

11:00-11:30 *Coffee break*

11:30 Official Meeting of ICFV

1. Next meeting location with brief introduction of potential hosts
2. Replacement of Scientific Committee members
3. Other Issues

LIST OF POSTERS

P-1. NGS STUDIES OF THE VIROME OF FIG TREES IN GREECE. *M. Kaponi, E. Vellios, K. Filippou, T. Sano*

P-2. DIVERSITY OF CHERRY VIRUS A GENOMES. *P. Kesanakurti, M. Rott*

P-3. SURVEY OF POTENTIAL CICADELLID VECTORS OF PHYTOPLASMAS IN SWEET CHERRY TREES IN KAHRAMANMARAS-TURKEY: A PRELIMINARY REPORT. *M. Gazel, K. Çağlayan, K. Kaya, H. Başpınar*

P-4. IDENTIFICATION OF DIFFERENT PHYTOPLASMAS INFECTING SWEET CHERRY TREES IN TURKEY. *M. Gazel, K. Çağlayan*

P-5. FIRST DETECTION OF EUROPEAN STONE FRUIT YELLOWS PHYTOPLASMA IN PEACH TREES ON THE TERRITORY OF CANTON OF GENEVA, SWITZERLAND. *A. Etropolska, F. Lefort*

P-6. DETECTION AND CHARACTERIZATION OF RASPBERRY BUSHY DWARF VIRUS IN DIFFERENT HOSTS IN TURKEY. *K. Caglayan, M. Gazel, E. Elçi, M. Viršček Marn, I. Mavric Pleško*

P-7. MOLECULAR CHARACTERIZATION AND GENETIC DIVERSITY OF PLUM POX VIRUS STRAINS IN THRACE REGION OF TURKEY. *K. Gürçan, S. Teber, O. Canbulat, K. Çağlayan*

P-8. THE PEAR PSYLLID CACOPSYLLA BIDENS: A PUTATIVE VECTOR OF '*CANDIDATUS PHYTOPLASMA PYRI*' IN BULGARIA. *A. Etropolska, B. Jarausch, W. Jarausch, D. Burckhardt, G. Trenchev*

P-9. DETECTION AND CHARACTERIZATION OF THE COMPLETE GENOME OF THE FIRST CHERRY (C) STRAIN ISOLATE OF PLUM POX VIRUS DETECTED IN GERMANY IN SOUR CHERRY (*PRUNUS CERASUS*). *W. Jelkmann, D. Sanderson, C. Berwarth, D. James*

- P-10.** RUBUS YELLOW NET VIRUS AND BLACK RASBERRY NECROSIS VIRUS, NEWLY DETECTED VIRUSES IN RASPBERRY PLANTATIONS IN REPUBLIC OF SERBIA. *A.S. Paunovic, D. Jevremović*
- P-11.** EX-POST ANALYSES OF PUBLIC DATABASES ALLOWED IDENTIFICATION OF A NOVEL VIRUS INFECTING PEACH. *B. Navarro, S. Zicca, F. Palmisano, F. Di Serio*
- P-12.** COLLECTION OF PATHOGENS OF HOPS. *P. Svoboda, I. Malirova*
- P-13.** HIGH THROUGHPUT SEQUENCING OF siRNAs AND VIRUS DIAGNOSTIC: DO SEQUENCE ANALYSIS STRATEGIES REALLY MATTER? RESULTS OF AN INTERNATIONAL PROFICIENCY TESTING. *S. Massart, H.J. Maree, I. Adams, M. Chiumenti, K. De Jonghe, I. Koloniuk, P. Kominek, J. Kreuze, D. Kutnjak, L. Lotos, T. Olivier, M. Pooggin, A.B. Ruiz-García, D. Šafářová, P.H.H. Schneeberger, N. Sela, É. Várallyay, E. Vainio, E. Verdin, M. Westenberg, Y. Brostaux, T. Candresse*
- P-14.** MONITORING OF VECTORS PHENACOCCLUS ACERIS AND PSEUDOCOCCLUS MARITIMUS OF LITTLE CHERRY VIRUS 2 IN SWEET CHERRY ORCHARDS IN BELGIUM. *G. Peusens, R. Tahzima, K. De Jonghe, D. Bylemans, T. Beliën*
- P-15.** INDICATION THAT THE PLUM POX VIRUS P1 PROTEIN IS PREFERENTIALLY EXPRESSED IN THE ROOTS OF NICOTIANA BENTHAMIANA DURING EARLY STAGE OF INFECTION. *Z. Vozárová, Z. Šubr*
- P-16.** LONG-TERM FOLLOW-UP OF PPV-REC AND PPV-D IN AN EXPERIMENTAL PLUM ORCHARD. *D. Jevremović, A.S. Paunović, S. Dallot*
- P-17.** OCCURRENCE AND DISTRIBUTION OF CITRUS VIRUS AND VIROID DISEASES IN JORDAN. *M.N. Salem, A. Mansour, S. Abu-Romman, A. Abo-Sherbi, A. Abdeen*
- P-18.** IDENTIFICATION OF A NEW VITIVIRUS FROM BLUEBERRY. *T. Thekke-Veetil, T. Ho, J. Polashock, I.E. Tzanetakis*
- P-19.** PARTIAL SEQUENCE OF GOOSEBERRY VEIN BANDING ASSOCIATED VIRUS IN REDCURRANT IN SLOVENIA. *J. Lamovšek, I. Mavrič Pleško, D. Koron, A.B. Ruiz-García, M. Viršček Marn, A. Olmos*
- P-20.** APRICOT (PRUNUS ARMENIACA L.)—NEW HOST OF LITTLE CHERRY VIRUS 1. *D. Šafářová, C. Faure, T. Candresse, M. Navrátil, T. Nečas, A. Marais*
- P-21.** NOVEL RNA VIRUSES ASSOCIATED WITH APPLE RUBBERY WOOD AND APPLE FLAT LIMB DISEASES. *M. Rott, P. Kesanakurti, I. Boyes, C. Berwarth, H. Rast, W. Jelkmann*
- P-22.** RESULTS OF SURVEILLANCE OF OCCURRENCE OF 'CANDIDATUS PHYTOPLASMA MALI' AND 'CANDIDATUS PHYTOPLASMA PYRI' IN NURSERIES OF REPUBLIC OF SRPSKA (BOSNIA AND HERZEGOVINA). *D. Delić, M. Radulović, B. Lolić, G. Durić*
- P-23.** IDENTIFICATION OF AN RNA SILENCING SUPPRESSOR ENCODED BY THE GENOME OF LITTLE CHERRY VIRUS 1. *A. Katsiani, K. Katsarou, K. Kalantidis, N.I. Katis, V.I. Maliogka*
- P-24.** SEASONAL FLUCTUATION OF LITTLE CHERRY VIRUS 1 (LChV-1) TITER IN SWEET CHERRY CULTIVARS. *A. Katsiani, P. Pappi, A. Olmos, K.E. Efthimiou, V.I. Maliogka, N.I. Katis*

- P-25.** FULL GENOME SEQUENCING OF A DIVERGENT ISOLATE OF LChV-1 AND MONITORING OF THE VIRUS DERIVED siRNAs IN SWEET CHERRY OVER FOUR SEASONS. *A.T. Katsiani, A. Olmos, T. Candresse, A.B. Ruiz-Garcia, N.I. Katis, V.I. Maliogka*
- P-26.** IDENTIFICATION OF A PRUNUS VIRUS F-LIKE VIRUS IN SWEET CHERRY. *L. Lotos, T. Candresse, A. Olmos, N.I. Katis, V.I. Maliogka*
- P-27.** INCIDENCE AND MOLECULAR VARIABILITY OF APPLE CHLOROTIC LEAF SPOT VIRUS IN POME FRUITS IN SLOVENIA. *M. Viršček Marn, I. Mavrič Pleško*
- P-28.** MOLECULAR DETECTION AND CHARACTERIZATION OF PHYTOPLASMAS IN ORNAMENTAL POMEGRANATES. *K. Caglayan, M. Gazel, M. Acioğlu*
- P-29.** EVALUATION OF THE SUSCEPTIBILITY OF APRICOT CULTIVARS TO PPV IN HIGH-CONTAINMENT GREENHOUSE. *Y. Brans, J. Castaing, K. Bresson*
- P-30.** THE FIRST DETECTION OF PLUM POX VIRUS IN WESTERN SIBERIA. *Y. Shneyder, M. Tikhomirova, O. Morozova, T. Zhivaeva, Y. Prikhodko*
- P-31.** DIAGNOSIS, VIRUS CLEANING AND CRYOPRESERVATION OF RASPBERRY, BLACKBERRY AND SHALLOT (RUB&AL). *Z. Zhang, C. Spetz, E. Lysøe, D.R. Blystad*
- P-32.** DETECTION AND MOLECULAR CHARACTERIZATION OF AN UNUSUAL VIRUS IN CHERRY. *S. Milusheva, J. Phelan, N. Piperkova, V. Nikolova, D. James*
- P-33.** H2020-MCSA-RISE-2016-VIRUS FREE FRUIT NURSERIES (VirFree). *V.I. Maliogka, N.I. Katis, D. Altenbach, K. Caglayan, C. Chondroudis, F. Codoner, A.T. da Cunha, F. Di Serio, B. Dichio, L. Formica, H. Ilbagi, K. Kalantidis, S. Li, A. Olmos, G. Pietersen, C. Ritzenthaler, E. Tanriver*
- P-34.** VIRTOOL: A NEXT GENERATION DATA ANALYSIS TOOL FOR DETECTION OF PLANT VIRUSES. *I. Boyes, M. Rott*
- P-35.** PCR OPTIMISATION IN A PROGRAMME TO MONITOR THE PRESENCE OF 'CANDIDATUS PHYTOPLASMA MALI', 'CA. P. PYRI' AND 'CA. P. PRUNORUM'. *M. Pastore, E. Stingo, V. Orologiaio, G. Consalvo, V. Graziano, T. Rosco, A. Salsano, G. Stella, R. Griffo*
- P-36.** EVIDENCE OF CIRCULAR RNA ASSOCIATED WITH BLACKCURRANT LEAF CHLOROSIS ASSOCIATED VIRUS. *D. James, J. Phelan, D. Sanderson*
- P-37.** T-RECS: RAPID AND LARGE-SCALE DETECTION OF RECOMBINATION EVENTS AMONG DIFFERENT EVOLUTIONARY LINEAGES OF VIRAL GENOMES. *M. Tsimpidis, G. Bachoumis, K. Mimouli, Z. Kyriakopoulou, D.L. Robertson, P. Markoulatos, G.D. Amoutzias*
- P-38.** FIRST INSIGHT INTO STRAWBERRY VIROME USING NEXT GENERATION SEQUENCING IN THE CZECH REPUBLIC. *J. Fránová, I. Koloniuk, J. Přibyllová, O. Lenz, J. Kučerová, L. Valentová*

