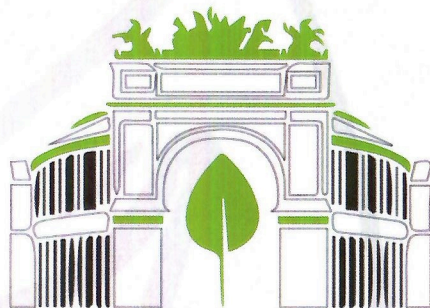




XXVII SIPaV National Congress Italian Phytopathological Society

September

21 – 23

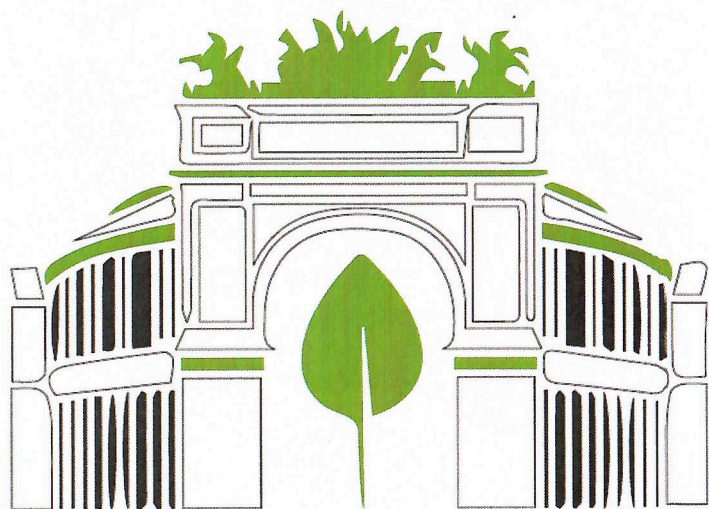
2022

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Department of Agricultural, Food and Forest Sciences

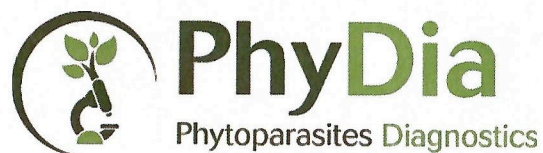
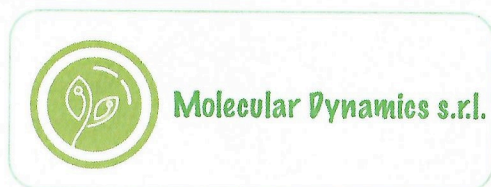
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XXVII SIPaV
CONGRESS 2022
PALERMO - SEPTEMBER 21-23

This event has been realized also thanks to the contributions of



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Conference Program

WEDNESDAY, SEPTEMBER 21st

- 12:00 - **Participants registration and Poster setup**
14:00
- 14:00 - **XXVII SIPaV Congress opening**
14:30 **Welcome address**
Tiziano Caruso – Dean of SAAF Department – University of Palermo
Massimo Midiri – Rector of University of Palermo
Salvatore Walter Davino – SAAF Department – University of Palermo
- 14:30 - **Invited talk** “The Journal of Plant Pathology Lecture”
15:00 Matteo Garbelotto – Department of Environmental Science, Policy, and Management, University of California, Berkeley, USA; Editor in Chief Journal of Plant Pathology
Exotic Heterobasidion Root Disease in Italy as an unexpected legacy of war
- 15:00 - **First session – Forest Pathology**
15:50 Chairs: S. Moricca – L. Torta
Tree endotherapy with *Trichoderma* spp. against the agent of chestnut nut rot *Gnomoniopsis castaneae*
C. Aglietti, A. Benigno, S. Moricca
***Pinus radiata* – *Fusarium circinatum* – *Phytophthora* spp. a model system of a complex host plant - pathogens interaction**
F. Aloï, C. Zamora-Ballesteros, J. Martín-García, J. J. Díez-Caseiro, R. Parlascino, F. La Spada, A. Pane, S. O. Cacciola
Thousand cankers disease of walnut threatens the walnut groves of the Italian peninsula
A. Benigno, C. Aglietti, E. Falciani, M. Bracalini, D. Rizzo, T. Panzavolta, S. Moricca

- Phytophthora: an ancient, historic, biologically and structurally cohesive and evolutionarily successful generic concept in need of preservation**
C. Brasier, B. Scanu, D. Cooke, T. Jung
Hormonal and antioxidant orchestrated responses of canker-resistant and susceptible *Cupressus sempervirens* clones inoculated with *Seiridium cardinale*
G. Scimone, C. Pisuttu, L. Cotrozzi, E. Pellegrini, S. Secci A. Frascella, R. Danti, G. Della Rocca
- 16:00 - **Second session – New approaches for detection, identification and characterization of plant pathogens**
17:40 Chairs: L. Rubino – S. Panno
Validation of high-throughput sequencing (HTS) for routine plant virus diagnostics
R. Bester, G. Cook, J.H.J. Breytenbach, C. Steyn, R. De Bruyn, H.J. Maree
***Aspergillus* contaminating food and feed: biocontrol assays and new diagnostic method (LAMP)**
G. Mirabile, P. Bella, G. Conigliaro, M. Alberto Vazquez, A.G. Caruso, S. Panno, S. Davino, L. Torta
Viroid classification: Reassessment of the species demarcation criteria
M. Chiumenti, B. Navarro, F. Di Serio
Is the combination of DNA metabarcoding and conventional leaf-baiting isolation techniques the best strategy to unravel the *Phytophthora* variability in natural, semi natural and horticultural ecosystems?
F. La Spada, F. Aloï, M. Riolo, A. Pane, P.J.A. Cock, E. Randall, D.E.L. Cooke, S.O. Cacciola
Characterization of fungal pathogens associated with canker and dieback of apple trees in Northern Italy
I. Martino, C. Agustí-Brisach, M.L. Gullino, V. Guarnaccia
Molecular characterization of an Apulian isolate of tomato leaf curl New Delhi virus
M. Mastrochirico, R. Spanò, T. Mascia
Hyperspectral imaging coupled with microclimatic-based alert help targeted management of downy mildew

(*Hyaloperonospora parasitica* (Pers.:Fr) Fr.) of wild rocket (*Diplotaxis tenuifolia* L. [D.C.])

C. Pane, N. Nicastro, A. Pentangelo, G. Manganiello, G. Ragosta, B. Rapi, M. Romani, F. Sabatini, M. Chiesi, M. Pieri, F. Maselli, P. Battista

Advances in plant disease detection: pulse thermography as new tool to predict *Botrytis cinerea* infection in pepper and tomato

C. Del Regno, A. De Rosa, R. Curcio, A. Russo, F. Mele, E. Cappetta, P. Mormile, M. Rippa, M. Ruocco, A. Ambrosone, A. Leone

PLANTHEAD – A Remote PLANT HEALth Diagnostic network to foster sustainable agricultural intensification in Eastern and Western Africa

S. Oufensou, L. Altea, V. Balmas, G. Enne, S. Merafina, S.A. Okoth, M. Rizzu, P.P. Saporito, G. Seddaiu, Q. Migheli

Viroid-like RNAs with hammerhead ribozymes in both polarity strands identified in a metagenomic study on citrus

B. Navarro, S. Li A. Gisel, M. Chiumenti, M. Minutolo, D. Alioto and F. Di Serio

18:00 - **“Giovanni Scaramuzzi 2022” SIPaV Award**

18:30 Chair: M. Reverberi

19:00 - **Welcome dinner at the Botanical Garden of University of Palermo**

(The buses to reach Botanical Garden of Palermo will wait all participants at the entrance of the SAAF Department)

THURSDAY, SEPTEMBER 22nd

08:30 - **Invited talk**

09:00 Joana Vicente – Fera Science Ltd. York Biotech Campus, Sand Hutton, York, UK

The diversity of *Xanthomonas* spp. from *Brassicaceae*, diagnostics and disease control

09:00 - **Third session – Molecular plant-pathogen interaction**

11:00 Chairs: J. Vicente – C. Moretti

The stress related – calcium dependent – transcription factor CRZ1 is a pivotal factor in synchronising host perception and fumonisins biosynthesis in the *Fusarium verticillioides* - *Zea mays* interaction

A. Cacciotti, M. Beccaccioli, S. Vitale, A. Di Pietro, D. Turrà, V. Scala, M. Reverberi

The fungal and bacterial bunch microbiome associated with sour rot in vineyards

C. Brischetto, V. Rossi, G. Fedele

Psa3 virulence reduction by natural molecules: insights on subtle regulation mechanisms

D. Danzi, M.R. Puttilli, J. Brandi, D. Cecconi, M. Manfredi, E. Marengo, A. Polverari, E. Vandelle

Virulence and host-specificity in *Fusarium oxysporum* ff.spp. interactions

A. Doddi, G. Lancia, W. Groot, M. Amadei, M.C. Bonaccorsi, M. Rep, M. Reverberi, L. Faino

Mobile DNA elements within the genome define *Pseudomonas syringae* pv. tomato race-specific genotypes

B. Orfei, J. F. Pothier, L. Fenske, J. Blom, C. Moretti, R. Buonaurio, T. H. M. Smits

Identification of the genes involved in early response to Flavescence dorée infection in the model plant

Arabidopsis thaliana

M. Rossi, L. Galetto, N. Bodino, S. Abbà, S. Palmano, C. Marzachi

Transcriptome profiling of sanitized artichoke ecotypes and characterization of genes involved in the biosynthesis of secondary metabolites

R. Spanò, S. Fortunato, V. Linsalata, A. Cardinali, I. D'Antuono, M. C. De Pinto, T. Mascia

BNYVV genomic formula changes during host infection and vector transmission

Y. Guo, M. Dall'Ara, D. Gilmer, C. Ratti

Genome-wide analysis of G-type lectin family in *Fragaria vesca* and functional characterization of FaMBL1 gene in defense to fungal pathogens

L. Ma, Z.M. Haile, S. Sabbatini, B. Mezzetti, F. Negrini, E. Baraldi

Insights on KP4 killer toxin-like proteins of *Fusarium* species in interspecific interactions

I. Vicente, G. Quaratiello, R. Baroncelli, G. Vannacci, S. Sarrocco

Cellulose Nanocrystals as innovative and sustainable tool to control bacterial plant pathogens

D. Schiavi, G.M. Balestra

11:00 - **Coffee break**
11:30

11:30 - **“Young Researcher in training” session**
13:00 Chairs: V. Guarnaccia – A.G. Caruso

13:00 - **Poster session**
14:00

14:00 - **Light lunch**
15:00

15:00 - **Invited talk**
15:30 Vicente Pallas – Instituto de Biología Molecular y Celular de Plantas, Universitat Politècnica de València, Valencia, Spain
Intracellular, intercellular and vascular trafficking of plant viral and subviral RNAs

15:30 - **Four session (Part I) – Epidemiology and plant disease management**
17:00 Chairs: V. Pallas – F. Di Serio
Biocontrol of *Botrytis cinerea* as influenced by grapevine growth stages and environmental conditions
V. Altieri, G. Fedele, V. Rossi

Evaluation of the effects of *Epicoccum nigrum* on the olive fungal pathogens *Colletotrichum acutatum* and *Verticillium dahliae* by 1H NMR based metabolic profiling

F. Angile, M. Rizzo, M. Riolo, L. Riccioni, S. O. Cacciola, F.P. Fanizzi, E. Santilli

Strawberry angular leafspot: efficacy of biocontrol agents and acibenzolar-S-methyl towards *Xanthomonas fragariae*

E. Biondi, N. Biondo, P. Lucchi, M. Vibio, L. Tazzari, M. Cardoni, P. Minardi

Solid-State fermentation of organic wastes: a source of bioactive molecules

D. Bulgari, C. Alias, G. Peron, G. Ribaudo, A. Gianoncelli, E. Gobbi

Scientific community actions and reactions to the predicted impact of climate change on aflatoxin

M. Camardo Leggieri, P. Toscano, P. Battilani

Insight of tomato brown rugose fruit virus (ToBRFV) dispersion applying remote RT-qPCR procedures in tomato production environment

A.G. Caruso, S. Davino, S. Bertacca, A. Ragona, S. Panno
Microbiome-informed selection of biocontrol bacteria from the tomato endophytome

V. Catara, D. Nicotra, A. Mosca, A. Anzalone, G. Dimaria, G. F. Privitera, A. Pulvirenti

Population genetics and fitness of *Plasmopara viticola* in the winegrowing region of South Tyrol

S. Tomada, A. Moffa, G. Tonini, H. S. Shevkar, S. Baric
***Phytophthora* spp. associated with kiwifruit vine decline syndrome in north-eastern Italy**

A. Sadallah, C. Bregant, A. Di Francesco, G. Firrao, M. Martini, L. Sella, P. Ermacora, B. T. Linaldeddu

17:00 - **Coffee break**
17:30

17:30 **General Assembly of SIPaV Members**

- 20:00 **Social Dinner at the “Palazzo Villarosa Ricevimenti” – Bagheria (PA)**
(The buses to reach Palazzo Villarosa Ricevimenti will wait all participants at the entrance of the SAAF Department)

FRIDAY, SEPTEMBER 23rd

- 9:00 - **Invited talk**
9:30 Hano Maree – Citrus Research International, Matieland, South Africa
Huanglongbing: the South African experience
- 9:30 - **Four session (Part II) – Epidemiology and plant disease management**
10:40 Chairs: H. Maree – M. Garbelotto
Detection and management of “huanglongbing” in some Caribbean countries
A. Bertaccini, F. Pacini, N. Contaldo, M. Nicolaisen, R. Morillon, Y. Uneau, M. Luis Pantoja, W. Myrie
Complete genomes of several ‘*Candidatus* Phytoplasma solani’ strains causing different symptoms in experimental host *Solanum lycopersicum*
G. Carminati, G. Firrao, P. Ermacora, F. Pavan, M. Kube, M. Martini
Raman spectroscopy detection of virus infection in asymptomatic tomato and grapevine plants
S. Matić, C. D’Errico, L. Mandrile, G. Barzan, A.M. Giovannozzi, L. Miozzi, A.M. Vaira, F. Nuzzo, G. Gambino, A.M. Rossi, E. Noris
Evaluation of copper, zinc and organic fertilizers for their side-effect against *Xylella fastidiosa* subsp. pauca in vitro and on naturally infected olive plants
C. Del Grosso, M. Saponari, R. Abou Kubaa and G. Lima
Yet another valuable trait of the biological control agent, *Aurebasidium subglaciale*
A. Di Francesco, J. Zajc, G. Firrao, R. Cignola, H. Brötz-Oesterhelt, C. Hughes

- Characterization of fungi associated with olive fruit rot in central Italy**
M. I. Drais, F. Brugnietti, S. Turco, S. Spagnuolo, A. Mazzaglia
Effects of mulch biofilms and biostimulants based on *Trichoderma* and *Ascophyllum nodosum* on industrial tomato plants
R. Marra, R. Bottiglieri, I. Di Mola, A. Staropoli, R. Loffredo, E. Cozzolino, A. Pironti, N. Lombardi, M. Mori, S. Woo, M. Lorito
- 10:40 - **Coffee break**
11:00
- 11:00 - **Use of tomatine extracts from tomato industry wastes against *Botrytis cinerea* highlights potential for production of biopesticides from circular economy workflow**
11:40 A. Passera, P. Abbasi, A. Follador, D. Marcianò, B. Scaglia, P. Casati
Extracellular acidification is not necessary for *Beauveria bassiana* biocontrol activity
M. Ranesi, S. Vitale, A. Staropoli, S. L. Woo, D. Turrà
Volatile-mediated inhibitory activity of the biocontrol agent *Lysobacter capsici* AZ78: a result of multiple factors interaction
A. Vlassi, A. Nesler, A. Parich, R. Schuhmacher, G. Puopolo
Protein hydrolysates of different origins to improve resistance to stresses
S.M. Sanzani, A. Ippolito
- 11:40 - **Best Poster Award and Closing**
13:00 Chairs: SIPaV President