



XXVII SIPaV
CONGRESS 2022
PALERMO - SEPTEMBER 21-23



**Università
degli Studi
di Palermo**

SAAF
DIPARTIMENTO
SCienZE
AGRarie
ALIMENTari
FORESTali

XXVII Congress of the Italian Phytopathological Society

September 21st – 23rd, 2022

Third announcement

Dear Colleagues,

a few weeks separate us from the opening of the XXVII Congress of the Italian Society of Plant Pathology, scheduled for September 21st at 14.30 at the lecture hall “G.P. Ballatore” of the Agricultural, Food and Forestry Sciences Department (SAAF), University of Palermo.

We are pleased to inform you that we have received more than 180 registrations and therefore we thank all participants who, with their contributions, will make this annual event a stimulating opportunity for a comparison on the new research frontiers in Plant Pathology. We are also very grateful to four invited speakers, who will address topics of high scientific interest and who have agreed to chair some sessions of the Congress.

Waiting to see you in Palermo, we provide some useful information.

We look forward to seeing you in Palermo.

The Organising Committee

Scientific Committee	Organising Committee
Salvatore Walter Davino	Patrizia Bella
Livio Torta	Sofia Bertacca
Patrizia Bella	Nicasio Bova
Stefano Panno	Andrea Giovanni Caruso
Elodie Vandelle	Salvatore Walter Davino
Luisa Rubino	Roberta Marra
Fabio Quaglino	Giulia Mirabile
Salvatore Moricca	Stefano Panno
Chiaraluce Moretti	Livio Torta

Posters

The posters must be 70x100 cm (W x H). They will be exhibited for the entire duration of the Congress. A dedicated location will host all the posters and a number will be associated to each poster, as listed in the “Book of abstracts”, which will be provided to you at the reception desk.

Oral presentations

Speakers will be given a time slot of 10 minutes (8 minutes +2 minutes for questions).

The winners of “Young Researchers in training Award” will briefly show their results with 2-3 slides (3 minutes + 1 minute for 1 question).

To avoid delays during the Congress, we kindly invite all the speakers to respect the time set for the oral presentations.

Congress venue

Lecture hall “G.P. Ballatore” – Agricultural, Food and Forest Sciences Department, University of Palermo, Viale delle Scienze, Bd. 4, 90128 – Palermo (38°06'27.9"N 13°21'09.6"E)

How to reach the Congress venue

To reach the Congress venue by car from the motorway Catania-Palermo (A19-E90)/Messina-Palermo (A20)

Follow the E90 until Viale della Regione Siciliana southeast, exit at PA/ Sciacca E90, then take Via Ernesto Basile. After about 1.5 Km take the exit PA/Sciacca E90. The entrance of the University campus will be on the right.

<https://www.google.com/maps/place/Edificio+4/@38.1075104,13.3526068,15z/data=!4m5!3m4!1s0x60918e8fed3662ad!8m2!3d38.1075104!4d13.3526068>

From the “Falcone Borsellino” Airport (Palermo):

The airport is about 35 km from Palermo centre and connections are assured by buses, trains, taxis etc. To reach the location of the Congress you can take the subway that reaches the station “Palazzo Reale d’Orleans” which is located 50 m from the entrance of the University Campus (Viale delle Scienze - building 4). For more information visit the airport website:

<https://www.aeroportodipalermo.it/inaeroporto/raggiungiaeroporto/#collegamenti>

From Palermo Centrale Railway Station (Piazza Giulio Cesare)

From Railway station you can reach the Congress venue on foot (about 20 min), by bus, taxi, or subway that in less than 10 minutes arrives at the station “Palazzo Reale d’Orleans” which is located 50 m from the entrance of the University Campus (Viale delle Scienze - building 4). For more information:
https://prm.rfi.it/qo_prm/QO_Partenze_SiPMR.aspx?Id=1878&dalle=04.00&alle=08.00&ora=04.00&guid=9eab40ff-ae02-4ba0-90d3-19d7500eeb57

From Palermo Terminal Bus (Via Tommaso Fazello)

For those who reach Palermo by bus, the bus terminal is located next to the Palermo Centrale Railway Station and then to reach the Congress venue follow the suggestion above.

PROGRAMME

WEDNESDAY, SEPTEMBER 21st

12:00 - 14:00	Participants registration and Poster setup
14:00 - 14:30	XXVII SIPaV Congress opening 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 - 15:00	Invited talk “The Journal of Plant Pathology Lecture” <u>Matteo Garbelotto</u> – 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 - 15:50	First session – Forest Pathology Chairs: S. Moricca – L. Torta Tree endotherapy with <i>Trichoderma</i> spp. against the agent of chestnut nut rot <i>Gnomoniopsis castaneae</i> <u>C. Aglietti</u> , A. Benigno, S. Moricca <i>Pinus radiata</i> – <i>Fusarium circinatum</i> – <i>Phytophthora</i> spp. a model system of a complex host plant - pathogens interaction <u>F. Aloi</u> , C. Zamora-Ballesteros, J. Martín-García, J. J. Diez-Caseiro, R. Parlascino, F. La Spada, A. Pane, S. O. Cacciola Thousand cankers disease of walnut threatens the walnut groves of the Italian peninsula <u>A. Benigno</u> , 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, <u>B. Scana</u> , D. Cooke, T. Jung Hormonal and antioxidant orchestrated responses of canker-resistant and susceptible <i>Cupressus sempervirens</i> clones inoculated with <i>Seiridium cardinale</i> G. Scimone, C. Pisuttu, L. Cotrozzi, E. Pellegrini, S. Secci A. Frascella, R. Danti, <u>G. Della Rocca</u>
16:00 - 17:40	Second session – New approaches for detection, identification and characterization of plant pathogens Chairs: L. Rubino – S. Panno Validation of high-throughput sequencing (HTS) for routine plant virus diagnostics <u>R. Bester</u> , G. Cook, J.H.J. Breytenbach, C. Steyn, R. De Bruyn, H.J. Maree <i>Aspergillus</i> contaminating food and feed: biocontrol assays and new diagnostic method (LAMP) <u>G. Mirabile</u> , P. Bella, M. Alberto Vazquez, A.G. Caruso, S. Panno, S. Davino, L. Torta Viroid classification: Reassessment of the species demarcation criteria M. Chiumenti, B. Navarro, <u>F. Di Serio</u> Is the combination of DNA metabarcoding and conventional leaf-baiting isolation techniques the best strategy to unravel the <i>Phytophthora</i> variability in natural, semi natural and horticultural ecosystems? <u>F. La Spada</u> , F. Aloi, 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, <u>V. Guarnaccia</u> Molecular characterization of an Apulian isolate of tomato leaf curl New Delhi virus <u>M. Mastrochirico</u> , 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. Micheli

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 - 18:30 **“Giovanni Scaramuzzi 2022” SIPaV Award**

Chair: M. Reverberi

19:00 - 21:00 **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 - 09:00 **Invited talk**

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 - 11:00 **Third session – Molecular plant-pathogen interaction**

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. Buonauro, 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. Marzachì

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 - 11:30 **Coffee break**

11:30 - 13:00 **“Young Researcher in training” session**

Chairs: V. Guarnaccia – A.G. Caruso

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

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

Invited talk

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 - 17:00 **Four session (Part I) – Epidemiology and plant disease management**

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. Angilè, 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 - 17:30	Coffee break
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 - 9:30	<i>Invited talk</i> <u>Hano Maree</u> – Citrus Research International, Matieland, South Africa Huanglongbing: the South African experience
9:30 - 10:40	Four session (Part II) – Epidemiology and plant disease management Chairs: H. Maree – M. Garbelotto Detection and management of “huanglongbing” in some Caribbean countries <u>A. Bertaccini</u> , F. Pacini, N. Contaldo, M. Nicolaisen, R. Morillon, Y. Uneau, M. Luis Pantoja, W. Myrie Complete genomes of several ‘<i>Candidatus Phytoplasma solani</i>’ strains causing different symptoms in experimental host <i>Solanum lycopersicum</i> <u>G. Carminati</u> , G. Firrao, P. Ermacora, F. Pavan, M. Kube, M. Martini Raman spectroscopy detection of virus infection in asymptomatic tomato and grapevine plants <u>S. Matić</u> , 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 <i>Xylella fastidiosa</i> subsp. <i>pauca</i> <i>in vitro</i> and on naturally infected olive plants <u>C. Del Grosso</u> , M. Saponari, R. Abou Kubaa and G. Lima Yet another valuable trait of the biological control agent, <i>Aurebasidium subglacieale</i> <u>A. Di Francesco</u> , J. Zajc, G. Firrao, R. Cignola, H. Brötz-Oesterhelt, C. Hughes Characterization of fungi associated with olive fruit rot in central Italy <u>M. I. Drais</u> , F. Brugneti, S. Turco, S. Spagnuolo, A. Mazzaglia Effects of mulch biofilms and biostimulants based on <i>Trichoderma</i> and <i>Ascophyllum nodosum</i> on industrial tomato plants <u>R. Marra</u> , R. Bottiglieri, I. Di Mola, A. Staropoli, R. Loffredo, E. Cozzolino, A. Pironi, N. Lombardi, M. Mori, S. Woo, M. Lorito
10:40 - 11:00	Coffee break
11:00 - 11:40	Use of tomatine extracts from tomato industry wastes against <i>Botrytis cinerea</i> highlights potential for production of biopesticides from circular economy workflow <u>A. Passera</u> , P. Abbasi, A. Follador, D. Marcianò, B. Scaglia, P. Casati Extracellular acidification is not necessary for <i>Beauveria bassiana</i> biocontrol activity <u>M. Ranesi</u> , S. Vitale, A. Staropoli, S. L. Woo, D. Turrà Volatile-mediated inhibitory activity of the biocontrol agent <i>Lysobacter capsici</i> AZ78: a result of multiple factors interaction A. Vlassi, A. Nesler, A. Parich, R. Schuhmacher, <u>G. Puopolo</u> Protein hydrolysates of different origins to improve resistance to stresses <u>S.M. Sanzani</u> , A. Ippolito
11:40 - 13:00	Best Poster Award and Closing Chairs: SIPaV President

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