



XXVIII SIPaV
CONGRESS 2023
NAPOLI - SEPTEMBER 18-20



**XXVIII CONGRESS OF THE ITALIAN
PHYTOPATHOLOGICAL SOCIETY (SIPaV)**

NAPLES, 18-20 SEPTEMBER 2023

CONFERENCE PROGRAM

CENTRO CONGRESSI PARTENOPE

UNIVERSITY OF NAPLES FEDERICO II

Via Partenope 36, Naples, Italy



SIPaV
Società Italiana di Patologia Vegetale
Italian Phytopathological Society



www.sipav2023napoli.it



SIPaV
Società Italiana di Patologia Vegetale
Italian Phytopathological Society



www.sipav2023napoli.it

Thank you to the following Congress Sponsors:



Event Horizon s.r.l.

Euroagro srl



Scientific Committee:

Francesco Vinale
Paola Battilani
Sheridan Lois Woo
Sabrina Sarrocco
Riccardo Baroncelli
Salvatore Walter Davino
Matteo Lorito

Organising Committee:

Francesco Vinale
Sheridan Lois Woo
Marco Camardo Leggieri
Giuliano Bonanomi
Roberta Marra
David Turrà
Nadia Lombardi
Gelsomina Manganiello
Stefania Lanzuise
Stefania Vitale
Alessia Staropoli
Laura Gioia

With the support of



Monday, 18th September

12:00-14:30 | REGISTRATION AND POSTER SETUP

14:30-15:00 | XXVIII SIPaV CONGRESS OPENING

WELCOME ADDRESS

MATTEO LORITO | Rector of the University of Naples

Federico II, Past-President SIPaV

DANILO ERCOLINI | Director of the Department of

Agriculture, University of Naples Federico II

15:00-15:30 | INVITED TALK

**Multitrophic interactions among metaorganisms
and bioinspired plant protection**

FRANCESCO PENNACCHIO | Department of

Agriculture, University of Naples Federico II, Naples, Italy

15:30-17:30 | FIRST SESSION - Advances in plant disease diagnosis

Chairs: S. DAVINO - R. MARRA

**Development of a new LAMP assay for the fast
diagnosis of *Elsinoë fawcettii***

C. Aglietti, A. Benigno, D. Rizzo, L. Bartolini, D. Da Lio, A.
D'Agostino, A. Aronadio, D. Del Nista, G. Gilli, C. Francia,
S. Moricca

**Transmission evidence by *Aculops lycopersici* (Acari:
Eriophyidae) of tomato fruit blotch virus (ToFBV)**

S. Bertacca, E. Sanahuja, A. Alfaro-Fernández, S.
Panno, S. Davino, M. I. Font-San-Ambrosio

**Identification of plant pathogenic bacteria using
Raman microspectroscopy coupled with a
dielectrophoretic device**

C. D'Errico, A. Sacco, G. Barzan, M. Ciuffo, C. Morone,
S. Matić, C. Sacco Botto, A.M. Giovannozzi, A.M. Rossi,
C. Portesi, E. Noris

**Fungi are an evolutionary hub of viroid-like RNAs
that may modulate fungal pathogenicity**

B. Navarro, M. Forgia, S. Daghino, A. Babaian,
M. de la Peña, M. Turina, F. Di Serio

**Non-destructive early detection of wild rocket
tracheofusariosis caused by *Fusarium oxysporum* f.
sp. *raphani* using infrared imaging**

C. Pane, A. Pasqualini, P. Mormile, M. Rippa

**Rapid detection of plant pathogenic fungi using
a smartphone-based fluorescent array sensor**

R. Parlascino, M. Riolo, R. Santonocito, A. Cavallaro,
R. Puglisi, A. Pappalardo, F. Aloï, A. Licciardello,
N. Tuccitto, G. Trusso Sfrassetto, S. O. Cacciola

**Hyperspectral detection of temporal
and spatial development of wheat blast disease**

G. Quaratiello, L. Pippi, I. Fiaccadori, L. Cotrozzi,
J.J. Couture, C.D. Cruz

**Characterization of *Fusarium* species
diversity causing crown and stalk rot
on maize in Northern Italy**

M. Sanna, I. Martino, V. Guarnaccia, D. Spadaro,
M. Mezzalama

**Narrowing down suspects: oomycete species are
the best candidate causal agents of Kiwifruit
Vine Decline Syndrome**

L. Schena, S. Mosca, G. Vizzari, G. E. Agosteo,
A. Malacrino

17:30-18:00 | SIPaV "GIOVANNI SCARAMUZZI" 2023 AWARD

Chair: SIPaV PRESIDENT

18:00-19:00 | "YOUNG RESEARCHERS IN TRAINING" SESSION

Chairs: V. GUARNACCIA - D. TURRÀ

19:00-21:00 | WELCOME APERITIF

Tuesday, 19th September

9:00-9:30 | INVITED TALK

Microbiome innovations to support the ecological transition in agriculture

GABRIELE BERG | Institute of Environmental Biotechnology, Graz University of Technology, Graz, Austria

9:30-11:45 | SECOND SESSION - Innovative approaches to study plant-microbe interactions

Chairs: R. BARONCELLI - S. O. CACCIOLA

Microbiome experimental evolution for post-harvest disease management

M. M. Aci, N. Z. M. Mohamed, A. Malacrinò, L. Schena

Temperature plays a decisive role in the ability of *Pseudomonas syringae* to trigger ETI and drives in planta bacterial growth dynamics

E. Caullièreau, N. Ramirez, V.M. Tempo, D. Danzi, C.E. Morris, E. Vandelle

High polyphenolic wheat genotypes: a study on Fusarium Head Blight (FHB) resistance

L. Felici, C. Miccoli, S. Turco, F. Castellani, L. Narduzzi, S. Francesconi, A. M. Garcia-Campaña, S. Palombieri, F. Sestili, M. Vitali, G.M. Balestra

Pushing the limits: Land use intensity impacts soil microbiome and the emergence of plant pathogens

M. Idbella, G. Iacomino, G. Bonanomi

Plant-derived volatile organic compounds induce grapevine systemic resistance and direct defence against downy mildew by transcriptional changes

V. Lazazzara, S. Avesani, M. Buti, M. Perazzolli

The seed-associated microbiome: relationship with seedling development in two rainfed rice cultivars from Cameroon

A. D. Nanfack, S. Musonerimana, S. La China, D. Giovanardi, E. Stefani

Small things matter: the contribution of the microbiome to induced systemic resistance along the root-shoot axis

A. Pascale, B. van Beurden, I.A. Stringlis, C.M.J. Pieterse

Role of *Fusarium graminearum* killer proteins (FgKP4L) in the competitive interactions against other *Fusarium* species involved in FHB of wheat

A. Petrucci, S. Iacono, I. Vicente-Munoz, S. Sarrocco

Decipher the communication mediated by lipids entities within the *Xylella fastidiosa* subsp. *pauca* endocrine quorum sensing and paracrin communication with the plant

V. Scala, M. Beccaccioli, N. Pucci, A. Cacciotti, G. Tatulli, M. Scortichini, R. Fiorani, M. Reverberi, S. Loreti

Characterization of the olive endophytic community in genotypes displaying a contrasting response to *Xylella fastidiosa*

M. Vergine, L. De Bellis, A. Luvisi

11:45-12:15 | COFFEE BREAK

12:15-13:15 | POSTER SESSION

13:15-14:00 | LIGHT LUNCH

14:00-14:30 | INVITED TALK

Principle for the evaluation of the health risk of mycotoxins

ISABELLE P. OSWALD | Toxalim (Research Centre in Food Toxicology), University of Toulouse, Toulouse, France

14:30-16:30 | THIRD SESSION - Plant pathogens and food safety

Chairs: A. MORETTI - M. CAMARDO LEGGIERI

Antimicrobial and antimycotoxigenic proprieties of *Trametes versicolor* extract against *Fusarium* spp. and *Phytophthora infestans*

M. Beccaccioli, R. S. Fratini, A. Cacciotti, V. Cecchetti, L. Faino, M. Reverberi

Effects of waterlogging and drought stresses on pathogens infection in pomegranate

A. Bolzonello, F. Meggio, A. Pitacco, L. Sella, B. Linaldeddu, R. Musetti, V. Artico, F. Favaron, A. Solla, S. Tundo

Volatile organic compounds (VOCs) as potential biomarkers of *Cadophora luteo-olivacea* presence on kiwifruits

A. Di Francesco, R. Cignola, E. Moret

***Stemphylium vesicarium*, a new fungus associated with hazelnut kernel rot in Italy**

M.I. Drais, F. Brugneti, E. Iezzi, G. Ferracci, S. Turco, A. Mazzaglia

On understanding the arsenal of the EU quarantine plant pathogen *Curtobacterium flaccumfaciens* pv. *flaccumfaciens*: role of a hypothetical serine protease

D. Gaudio, C. Pastacaldi, C. Beltrami, D. Teper, S. Tegli

Surface adhesion is regulated by HAM-7 and required for full virulence in *Fusarium oxysporum*

V.M. Guastaferrò, S. Vitale, M. Lorito, D. Turrà

***Alternaria* species: a "From Farm to Fork" phytopathological and toxicological global concern**

M. Masiello, S. Somma, A. Moretti

An epiphytic strain of *Stenotrophomonas rhizophila* inhibits growth of *Botrytis cinerea* through the emission of volatile compounds and restricts leaf infection by priming defense genes

A. Raio, F. Brilli, L. Neri, R. Baraldi, F. Orlando, C. Pugliesi, X. Chen, I. Baccelli

***Cadophora luteo-olivacea*: pathogenicity and control strategies on apple and kiwifruit**

S. Tomada, E. Staffler, S. Baric, A. Di Francesco

16:30-17:00 | COFFEE BREAK

17:00-18:30 | GENERAL ASSEMBLY OF SIPaV MEMBERS

20:30 | SOCIAL DINNER AT "LA TERRA DEGLI ARANCI"
PIAZZETTA S. STEFANO, 7, VOMERO - NAPLES
(Bus transfer for participants)

Wednesday, 20th September

9:00-10:00 | WELCOME COFFEE

10:00-10:30 | INVITED TALK

sh
**Trichoderma induction of plant defence,
a concept beyond the ISR and SAR dichotomy**
ENRIQUE MONTE | Agrobiotechnology research institute
(CIALE), University of Salamanca, Salamanca (Spain)

**10:30-12:45 | FOURTH SESSION - Epidemiology and sustainable
plant disease management**

Chairs: S. SARROCCO - S. L. WOO

Nare
**Ecological studies on *Diaporthe eres* and predictive
modelling for hazelnut defects: insights to
support effective crop protection**
M. Camardo Leggieri, R. Arciuolo, P. Battilani

de
**Split to multiply: essential oil emulsions against
Pseudomonas syringae pv. *actinidiae***
**D. Danzi, S. Cremonesi, M. Thomas, M. Bovi, A.
Polverari, L. Tosi, M. Bonaconsa, S. Lampis, F. Spinelli,
E. Vandelle**

x
**Characterization of the causal agents,
epidemiology and biological control of white haze
on apple**
**V. Guarnaccia, G. M. E. Remolif, M. Garelo, L. Nari,
M. Mezzalama, D. Spadaro**

**Antifungal activity of *Trichoderma*-bioactive extracts
for the *in vitro* and *in vivo* inhibition of mycotoxigenic
fungi**
**F. La Spada, M. Riolo, R. Parlascino, F. Aloï,
S. El boumlasy, E.I. Rovetto, C. Bua, C. Stracquadanio,
C. Luz, G. Meca, A. Pane, S.O. Cacciola**

Cecilia
**Novel organic methods for preventing Fusarium
Head Blight (FHB)**

**C. Miccoli, S. Palombieri, F. Camerlengo, L. Narduzzi,
A.L. Ricci, F. Sestili, G. M. Balestra, S. Francesconi**

Ana
**Peptides derived from a *Trichoderma* peptaibol as
an alternative method to control fungal diseases
of wheat**

**A. Panichi, F. Sanna, M. De Zotti, S. Tundo, R. Musetti,
I. Baccelli, F. Favaron, L. Sella**

**Effects of biological and chemical treatments
against *Heterobasidion* species present in Europe on
stump microbial communities**

M. Pellicciaro, G. Lione, P. Gonthier

Sawato
**Diversity of *Phytophthora* species in Mediterranean
nurseries and best biosecurity management
strategies**

**S. Seddaiu, L. Sarais, A. Mulas, P.A. Ruiu, G. Piras, A.
Casula, M. Mallocci, M. Frongia, A. Masci, A. Brandano,
A. Deidda, B. Scanu**

***Trichoderma arundinaceum* ITB 40837 is a prolific
source of nitrogen-containing secondary
metabolites**

**I. Vicente, A. Staropoli, R. Baroncelli, R. Hermosa, S.
Sarrocco, E. Monte, F. Vinale**

**Desensitization of α -Ste2 signalling in *Fusarium
oxysporum* is partially Bar1-independent**

**S. Vitale, I. Sanchez Tarragona, A. Staropoli,
A. Falanga, M. Lorito, D. Turrà, F. Vinale**

12:45-13:15 | BEST POSTER AWARDS

PAOLA BATTILANI | SIPaV President

13:15-13:30 | CLOSING OF SIPAV CONGRESS 2023

PAOLA BATTILANI - FRANCESCO VINALE