



## GiESCO Conference

# Program

**Conference theme: Diverse germplasm and precision technologies for varied and changing climates**

also:

[Poster Schedule](#)

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## Monday, July 17

- ▲ 8:30-8:44 Opening remarks
- ▲ 8:45-9:10 The viticultural legacy of Nelson Shaulis  
Terry BATES

Navigation



## Session 1: Adaptation to climate change

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Moderator: Pilar Baeza

- ▲ 9:15-9:40 **Recent advances in our understanding of the impact of climate change on wine grape production**  
**Nathalie OLLAT\***, Elisa MARGUERIT, Chloé DELMAS, Fatma OUAKED-LECOURIEUX, Ghislaine HILBERT-MASSON, Eric GOMES, Inaki GARCIA de CORTAZAR-ATAURI, Agnès DESTAC, Laure de RESSEGUIER, Philippe PIERI, Benjamin BOIS, Sébastien ZITO, Gregory GAMBETTA, Cornelis VAN LEEUWEN
  
- ▲ 9:41-9:56 **Projected impacts of climate change on viticulture over France wine regions using downscaled cmip multi-model data**  
**Sébastien ZITO**, Julien PERGAUD, Yves RICHARD, Thierry CASTEL, Renan LEROUX, Iñaki GARCIA DE CORTAZAR-ATAURI, Hervé QUENOL, Benjamin BOIS
  
- ▲ 9:57-10:04 **Fine-scale projections of future climate in the vineyards of southern Uruguay**  
 Renan LE ROUX, **Mercedes FOURMENT\***, Ramiro TACHINI, Mathias ROUAN, Cyril TISSOT and Hervé QUENOL\*
  
- ▲ 10:05-10:18 **Vineyard altitude as a climate change adaptation strategy and its effect on Riesling during grapes and wine composition during ripening**  
**J.M. GAMBETTA\***, B. Holzapfel, L.M. Schmidtke, A. Hall, J. Blackman
  
- 10:19-10:32 **Applications of a novel molecular phenology scale to align the stages of grape berry development**  
**Giovanni Battista TORNIELLI \***, Sara ZENONI, Marco SANDRI, Paola ZUCCOLOTTO, Marianna FASOLI

## 10:33-10:55 Break

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## Session 2: Adaptation to climate change

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Moderator: Sebastian Vargas

- ▲ 10:56-11:21 **Heatwaves impacts on grapevine physiology, berry chemistry & wine quality**  
**Elisabeth FORRESTEL**, Martina GALEANO, James CAMPBELL, Sophia BAGSHAW, Morgan FURZE, Luis Sanchez, Nick DOKOOZLIAN, Annegret CANTU, Andrew GAL, Mallika NOCCO, Andrew McELRONE
  
- ▲ 11:22-11:35 **Understanding the impact of climate change on anthocyanin concentrations in Napa Valley cabernet sauvignon**  
**James CAMPBELL\***, Paige BREEN, Kayla ELMENDORF, Thibaut SCHOLASCH, James KENNEDY, Elisabeth FORRESTEL
  
- ▲ 11:36-11:51 **An operational model for capturing grape ripening dynamics to support harvest decisions**  
**C. VAN LEEUWEN\***, A. Destrac Irvine, M. Gowdy, L. Farris, P. Pieri, L. Marolleau and G. Gambetta

- ▲ 11:52-12:07 **The impact of delayed grapevine budbreak on wine sensory compounds under variable weather conditions**  
Meredith PERSICO†, Donald SMITH, Maria SMITH, Helene HOPFER, Michela CENTINARI\*
- ▲ 12:08-12:15 **Management of water status in vineyards: meta-analysis of its effects on yield and grape composition.**  
D. URIARTE, J.M. MIRÁS-AVALOS, I. BUESA, J.J. CANCELA, J.L. CHACÓN, J.M. ESCALONA, D.S. INTRIGLIOLO, M. LAMPREAVE, A. MONTORO, L. RIVACOBA, F. VISCONTI, J. YUSTEO, L.G. SANTESTEBAN, C. MIRANDA\*
- ▲ 12:16-12:29 **Physiological responses of crimson seedless (*vitis vinifera*) grapevines to altered micro climatic conditions and different water treatments in the Breede River Valley of South Africa**  
J. STRYDOM\*, C.G. VOLSCHENK, M. VAN DER RIJST, L. DE PALMA, V. NOVELLO, R. Di LORENZO, A. PISCIOTTA, J.J. HUNTER
- ▲ 12:30-12:44 **Re-examination and meta-analysis of previous research as a tool to evaluate the suitability of rootstocks in adaptation to global change. a study case from Spanish viticulture**  
Luis Gonzaga SANTESTEBAN\*, Isabel REKALDE, Nazareth TORRES , Mónica GALAR, Ana VILLA-LLOP , Fernando VISCONTI, Carlos MIRANDA

## 12:45-1:45 Lunch

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### Session 3: Adaptation to climate change

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Coordinator: Jean-Jaques Lambert

- ▲ 1:45-1:59 **Epigenetics: an innovative lever for grapevine breeding in times of climate change**  
Margot Berger , Bernadette Rubio , Linda Stammitti , Erna Blancquaert , Natalia Carrillo Emeline Teyssier , **Philippe GALLUSCI \***
- ▲ 2:00-2:06 **Comparison of genotype x environment interaction of clonal and polyclonal grapevine selected materials**  
**Elsa GONÇALVES\***, Antero MARTINS
- ▲ 2:07-2:14 **Drought tolerance of varieties in semi-arid areas: could genetically related varieties behave better than Tempranillo itself?**  
**A. Sergio SERRANO\***, J. Luis CHACÓN, Jesús MARTÍNEZ, M. Dolores CARMONA, Adela MENA, P. Miguel IZQUIERDO, Cristina CEBRIÁN and Gonzalo L. ALONSO
- ▲ 2:15-2:28 **Intravarietal diversity: an opportunity to climate change adaptation**  
Victoria SICHEL, Gautier SARAH, Loic LE CUNFF, Patrice THIS, Thierry LACOMBE, **Charles ROMIEU**
- ▲ 2:29-2:43 **Identifying best parameters to characterize genotypes capability of retaining adequate malic acid at harvest and in final wines**  
**Tommaso FRIONI\***, Riccardo COLLIVASONE, Silvia PAGANI, Ginevra CANAVERA, Matteo GATTI, Mario GABRIELLI,

Stefano PONI

- ▲ 2:44-2:51 **Viticultural parameters and enological performance were impacted by genetic factor of six clones of Merlot in two contrasting vintages**  
Giuliano E. PEREIRA, Juliane B. de OLIVEIRAI, Leo D. H. C. S. CONCEIÇÃO, Mauro C. ZANUS, Adelio CARGNIN, Gabriela SPEROTTO, and **Jorge R. DUCATI**
  
- ▲ 2:52-2:59 **First insights on the intra-species diversity in *V. berlandieri*: environmental adaptation and agronomic performances when used as rootstock**  
**Louis BLOIS**\*, Marina de Miguel, Pierre-François Bert, Nabil Girollet, Nathalie Ollat, Bernadette Rubio, Vincent Segura, Kai P. Voss-Fels, Joachim Schmid, Elisa Marguerit
  
- ▲ 3:00-3:13 **Dissecting the regulators of grapevine fruit ripening**  
**Stefania SAVOI**\*, Laurent. TORREGROSA, Charles ROMIEU
  
- ▲ 3:14-3:27 **Clustering wine aromatic composition of *Vitis vinifera* grapevine varieties**  
**Marc PLANTEVIN**\*, Cécile THIBON, Philippe DARRIET, Georgia LYTRA, Jean-Christophe BARBE, Justine GARBAY, Julien LECOURT, Cornelis van LEEUWEN
  
- 3:28-3:35 **Uncovering the effectiveness of vineyard techniques used to delay ripening through meta-analysis**  
**Pietro PREVITALI**, Filippo GIORGINI, Randal MULLEN, Nick DOKOOZLIAN, Kerry WILKINSON, Christopher FORD

## VW session: The Giesco EcoMetaEthical Charter

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Moderator: Laurent Torregrosa

- ▲ 3:36-3:50 **Try the Giesco EcoMetaEthical Charter!**  
Alain CARBONNEAU, **Giovanni CARGNELLO**

## 3:50-4:05 Break and poster session

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## Session 4: New disease-tolerant varieties

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Moderator: Peter Cousins

- ▲ 4:10-4:35 **Breeding grapevines for disease and low temperature tolerance: The U.S. perspective**  
**Bruce REISCH**\*, Tim MARTINSON, Lance CADLE-DAVIDSON, Matthew CLARK, M. Andrew WALKER
  
- ▲ 4:36-5:01 **How to deal with the Green Deal - Resistant grapevine varieties to reduce the use of pesticides in the EU**  
**Oliver TRAPP**\*, Komlan Avia, Rudolf Eibach, Reinhard Töpfer

- ▲ 5:02-5:09 **Stable or dynamic? How phenotypic plasticity could be key to select for grapevine adaptation?**  
**Elisa MARGUERIT**, Louis BLOIS, Marine MOREL, Mathieu LARREY, Jean-Pascal TANDONNET, Philippe VIVIN, Gregory GAMBETTA, Nathalie OLLAT, Sarah Jane COOKSON, Jean-Marc GION
- ▲ 5:10-5:17 **The Real Sour Grapes: Genetic Loci, Genes, and Metabolic Changes Associated with Grape Malate Levels**  
**Noam RESHEF\***, Avinash Karn, Noga Sikron, Al Shoffe Y, David C. Manns, Anna Katharine Mansfield, Bill Miller, Chris Watkins, Lance Cadle-Davidson, Bruce Reisch, Aaron Fait, Jason Londo, and Gavin L. Sacks
- ▲ 5:18-5:31 **Setting up new tools to reduce the duration of the grapevine breeding process: Mercier experience**  
**Camille MIETTON\***, Olivier ZEKRI, Faustine MARTINEZ, Pierre VIDEAU, G. MERCIER
- ▲ 5:32-5:44 **The French grapevine breeding program RESDUR: State of the art and perspectives**  
**Komlan AVIA\***, Christophe SCHNEIDER, Christine ONIMUS, Guillaume ARNOLD, Vincent DUMAS, Aurélie UMAR-FARUK, Gisèle BUTTERLIN, Marie-Annick DORNE, Anne ALAIS, Nathalie JAEGLI, Marie-Céline LACOMBE, Marie-Christine PIRON, Emilce PRADO, Sabine WIEDEMANN-MERDINOGLU, Pere MESTRE, Éric DUCHÊNE, Didier MERDINOGLU
- ▲ 5:45-6:00 **New disease-resistant grapevine varieties response to drought under a semi-arid climate**  
**Luciana WILHELM DE ALMEIDA\***, Anne PELLEGRINO, Bénédicte FONTEZ, Laurent TORREGROSA, , Hernán OJEDA

## 00-7:30 Sparkling wine reception, Klarman Atrium

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## Tuesday, July 18

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### Session 5: Vine response to abiotic and biotic stress

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Moderator: Anne Pellegrino

- ▲ 8:30-8:54 **The FEM grapevine breeding program: New registered varieties (mid-)resistant to the main ampelopathies**  
**Silvia VEZZULLI**
- ▲ 8:55-9:02 **Stem growth disorder and xylem anatomy modifications during esca pathogenesis in grapevines**  
**Ninon DELLACQUA**, Gregory A. GAMBETTA, Nathalie FERRER, Pauline THEODORE, Chloé E. L. DELMAS
- ▲ 9:03-9:10 **Grapevine responses to Red Blotch disease – a structural-functional perspective of symptomatology development and fruit quality**  
**Bhaskar BONDADA**, Bailey HALLWACHS, Marc FUCHS, Sadanand DHEKNEY, Benham KHATABI, Alexander LEVIN,

Patricia SKINKIS

- ▲ 9:11-9:18 **Evaluation of the implication of secondary viral infections on grafting success rated in nurseries**  
Ana VILLA-LLOP\*, Luis Gonzaga SANTESTEBAN, Sara CRESPO-MARTÍNEZ
- ▲ 9:19-9:32 **Phloem anatomy traits predict maximum sugar accumulation rates**  
Megan BARTLETT\*, Ryan STANFIELD, Sophia BAGSHAW, Kayla ELMENDORF, Elisabeth FORRESTEL
- ▲ 9:33-9:46 **Techniques to study graft union formation in grapevine**  
M. CAMBOUE, G. Loupit, A. Janoueix, J.-P. Tandonnet, M. Morel, E. Marguerit, F. Cordelières, J. Teillon, C. Moisy, G. Mathieu, A.-S. Spilmont, S. J. Cookson\*
- ▲ 9:47-10:15 **Understanding the complexity of grapevine winter physiology in the face of changing climate**  
Jason LONDO\*, Hongrui WANG, Al KOVALESKI, Tim MARTINSON, Bruce REISCH

## 10:15-10:40 Break

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### Session 6: Vine response to abiotic and biotic stress

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Coordinator: Silvia Vezzulli

- 10:41-10:56 **Relationships between sensitivity to high temperature, stomatal conductance, and vegetative architecture in a set of grapevine varieties**  
Mathilde MILLAN, Aude COUPEL-LEDRU, Romain BOULORD, Stéphane BERTHÉZÈNE, Angélique CHRISTOPHE, Thierry SIMONNEAU, Benoît PALLAS
- ▲ 10:57-11:04 **A comparative study on physiological responses to drought in wild vitis species**  
Miriam KALTENBACH, Mina MOMAYYEZI, Andrew J. MCELDRONE, Elisabeth J FORRESTEL
- ▲ 11:05-11:12 **Cumulative effect (years) of deficit irrigation in two important cultivars of Douro region, Portugal**  
Inês L. CABRAL, António TEIXEIRA, Tiago NOGUEIRA, Susana M.P. CARVALHO, Hernâni GERÓS, Jorge QUEIROZ\*
- ▲ 11:13-11:20 **Response of Albariño to local environmental conditions in Uruguay**  
Mercedes FOURMENT\*, Ramiro TACHINI, Pablo GONZALEZ-BARROS, Paulina SIRI, Valérie BONNARDOT Hervé QUENOL, Milka FERRER
- ▲ 11:21 -11:34 **Iso-/anisohydric behavior in wine grapes may be a matter of soil moisture**  
Charles OBIERO\*, Markus KELLER
- ▲ 11:35 - 11:42 **Key genes in rotundone biosynthesis are affected by temperature, light, water supply, and nitrogen uptake**

**Thomas BAERENZUNG dit BARON**, Jean-Pierre PETIT, Alban JACQUES, Valerie SIMON, Olivier GEFFROY

- ▲ 11:43 - 11:50 **Methodological advances in relating deep root activity to whole vine physiology**  
**Suzanne FLEISHMAN**, David EISSENSTAT, Melanie MASSONNET, Dario Cantu, Michela Centinari

## **Session 7: Sustainable Viticulture**

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Moderator: Tim Martinson

- ▲ 11:51-12:15 **Double success of combining technical management with low pesticide inputs in the vineyard to obtain PDO wines in France**  
**Marie THILLOET-SCHOLTUS**
- ▲ 12:16-12:29 **Are farm-to-fork strategy goals reasonable and achievable? State of the art of Península de Setubal's winegrowers**  
**Miguel CACHAO**, Ana Chambel, Sérgio Pinto
- ▲ 12:30-12:36 **A meta-analysis of the ecological impact of viticultural practices on soil biodiversity**  
Battle KARIMI, Jean-Yves CAHUREL, **Laure GONTIER\***, Laurent CHARLIER, Marc CHOVELON, Héloïse MAHE, Lionel RANJARD

### **12:40-1:35 Lunch**

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### **1:35 Buses to Cornell AgriTech**

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### **6:30 Arrive at Ventosa Winery**

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### **9:00 Buses depart**

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## **Wednesday, July 19**

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## **Session 8: Digital, precision, and mechanical viticulture**

Moderator: Luca Brillante

- ▲ 8:30–8:54 **Recent advances in measuring, estimating, and forecasting grapevine yield and quality**  
**J. Mason EARLES\***, Brent SAMS
- ▲ 8:55–9:08 **Grapevine Water Stress Assessment through Hyperspectral Imaging and D Data Fusion**  
**Chenchen KANG**, Geraldine Diverres, Manoj Karkee, , Qin Zhang, Markus Keller
- ▲ 9:09–9:22 **Assessing and mapping vineyard water status variability using a miniaturized NIR spectrophotometer from a moving vehicle**  
**Maria Paz DIAGO\***, Wenchao SHENG, Ignacio BARRIO, Fernando RUBIO-ORDOYO, Juan FERNANDEZ-NOVALES,
- ▲ 9:23–9:36 **Grapevine nitrogen retrieval by hyperspectral sensing at the leaf and canopy level**  
Yuto Kamiya, Alireza Pourreza\*, Sirapoom Peanusaha, **Matthew W. FIDELIBUS**
- ▲ 9:37–9:44 **Active Thermography to Determine Grape Bud Mortality: System Design and Feasibility**  
**Guangxun ZHAI**, Justine VANDEN HEUVEL , Steven LERCH , Yu JIANG\*
- ▲ 9:45–10:10 **Novel protocols for variable rate vineyard management**  
**Matteo GATTI\***, Tommaso FRIONI, Stefano PONI

## 10:11–10:40 Break and poster session

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## Session 9: Vine and soil management innovations

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Moderator: Carlos Lopes

- ▲ 10:41–11:05 **Designing and managing a sustainable vineyard in a climate change scenario**  
**Stefano PONI\***, Tommaso FRIONI, Matteo GATTI
- ▲ 11:06–11:19 **Identification of arbuscular mycorrhizal fungi species preferentially associated with grapevine roots inoculated with commercial bioinoculants**  
**Mariam BERDEJA\*** , Nicole REYNOLDS, Teresa PAWLOWSKA, Justine VANDEN HEUVEL
- ▲ 11:20–11:45 **Impact of management on vineyard soil health and soil health sustainability**  
**Cristina LAZCANO**, Charlotte DECOCK, Kerri STEENWERTH, Mallika NOCCO, Amelie GAUDIN, Elisabeth FORRESTEL, Patricia SKINKIS, Kristopher COVEY, Mark BATTANY8, Ellen BRUNO9, Noelymar GONZALEZ-MALDONADO, Corinne BUTLER, Connie T.F. WONG, Amanda RODRIGUEZ, Axel M HERRERA, Imane SLIMANI
- ▲ 11:46–12:00 **Vineyard floor management intensity impacts soil health indicators and biodiversity across south Australian viticultural landscapes**



Merek M. KESSER, Timothy R. CAVAGNARO, Roberta DE BEI, Cassandra COLLINS,\*

## 12:00 Buses to lunch at wineries

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## 6:00 Arrive at Anthony Road Winery

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## Thursday, July 20 - Professional Day

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- ▲ 8:30-8:35 Opening remarks

## Session 10

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derators: Kim Wagner, Terry Bates

8:35-9:00 **The Vineyard of the Future**

**Nick DOKOOZLIAN**

9:01-9:08 **Monitoring of grapevine stem potentials with an embedded microtensiometer**

**Alan N. LAKSO\***, Michael SANTIAGO, Maryrose LUND, Abraham D. STROOCK

- ▲ 9:09-9:15 **Smartphone as a tool for deficit irrigation management in Vitis vinifera**

**Gustavo PEREYRA**, Anne Pellegrino, Remi Gaudin, Milka Ferrer

- ▲ 9:16-9:30 **Subsurface irrigation: A means to reduce chemical and water inputs in vineyards**

**Mark KRASNOW\***, Danielle MCMILLAN, Allison HAYWOOD

- ▲ 9:31-9:45 **Irrigation as a tool for heatwave mitigation: The effect of irrigation intensity and timing in Cabernet Sauvignon**

**Pietro PREVITALI**, Luis SANCHEZ, Nick DOKOOZLIAN

- ▲ 9:46-9:52 **Monitoring grapevine water status using Landsat 8 images: a two-year case study in a Merlot vineyard**

Vincenzo CIANCIOLA, Eve LAROCHE-PINEL, Khushwinder SINGH, **Luca BRILLANTE\***

- ▲ 9:53-10:00 **Effect of scion-rootstock combinations on the performance of a near-infrared (NIR) spectroscopy method for determining vine water status**

**Carlos POBLETE-ECHEVERRIA\***, Thomas CHALMERS, Melane VIVIER, Juan FERNANDEZ-NOVALES, Ignacio

BARRIO, Mary Paz DIAGO,

- ▲ 10:01-10:16 **The informative potential of remote and proximal sensing application on vertical- and overhead-trained vineyards in Northeast Italy**  
Ron SHMULEVIZ\*, Marianna FASOLI, Giovanni Battista TORNIELLI

## 10:17-10:45 Break

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## Session 11

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Moderators: Michael Colizzi, Jennifer Russo

- ▲ 10:46-11:11 **Scalable asymptomatic Grapevine Leafroll Virus Complex- detection through integrated airborne imaging spectroscopy, autonomous robotics, and cloud computing**  
Kaitlin M. GOLD\*, Fernando E. ROMERO GALVAN, Gloire RUBAMBIZA, Ertai LIU, Stephanie BOLTON, Charles STARR, Mimar ALSINA, Nick DOKOOZLIAN, Alyssa WHITCRAFT, Hakim WEATHERSPOON, Ryan P. PAVLICK, and Yu JIANG
- 11:12-11:19 **Toward an automatic way to identify red blotch infected vines from hyperspectral images acquired in the field**  
Eve LAROCHE-PINEL, Benjamin CORALES, Erica SAWYER, Khushwinder SINGH, Kaylah VASQUEZ, Monica COOPER , Marc FUCHS , Luca BRILLANTE\*
- 11:20-11:35 **Use of UV light for suppression of grapevine diseases**  
David M. GADOURY, Lance CADLE-DAVIDSON, Kaitlin GOLD
- ▲ 11:36-11:51 **Managing Grapevine Powdery Mildew with Ultraviolet-C Radiation in Washington State**  
Alexa MCDANIEL, Maria MIRELES, David GADOURY, Michelle MOYER\*
- ▲ 11:52-12:07 **Chitosan treatment to manage grapevine downy mildew**  
Gianfranco ROMANAZZI\*, Simone PIANCATELLI, Roberto POTENTINI, Giuliano D'IGNAZI, Marwa MOUMNI
- ▲ 12:08-12:23 **Preplant Fumigation only temporarily reduces northern root-knot nematode**  
Michelle M. MOYER\*, Maria MIRELES, Bernadette GAGNIER, Katherine E. EAST, and Inga A. ZASADA

## 12:24-1:25 Lunch

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## Session 12

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Moderators: Donnell Brown, Hans Walter-Peterson

- ▲ 1:30-1:55 **Spotted lanternfly, a new invasive insect in vineyards: Is it a threat to grapevines?**  
Michela CENTINARI \*, Andrew HARNER, Taran ROWELS, Claudia SCHIMDT, Flor ACEVEDO, Cristina ROSA
- ▲ 1:56-2:03 **Does spotted lanternfly phloem-feeding have downstream effects on wine volatiles?**  
Andrew HARNER\*, Suraj KAR, Zeke WARREN, Misha KWASNIEWSKI, Michela CENTINARI
- ▲ 2:04-2:19 **Litchi Tomato as a Fumigation Alternative in Washington State Wine Grape Vineyards**  
Bernadette GAGNIER\*, Inga ZASADA, Maria MIRELES, Michelle M. MOYER
- ▲ 2:20-2:26 **Under vine cover crops induces grapevine tolerance to bunch root**  
Andrés CONIBERTI, Florencia BONJOUR, Facundo IBÁÑEZ, Marcelo FALERO, Martin GERVASINI Gerardo ECHEVERRIA
- ▲ 2:27-2:34 **Reducing chemical use in vineyards. Evidence from the analysis of a national demonstration network**  
Ester Fouillet, Bruno Rapidel, Anne MEROT
- ▲ 2:35-2:41 **Fleurtai, Soreli and Tocai Friulano: perspectives for quality integration of wine together with protection of the docg lison classico appellation**  
Emilio CELOTTI \*, Rebecca VALENT, Giovanni MIAN, Andrea NATOLINO
- 2:42-2:57 **Vineyard nutrient budget and sampling protocols**  
Nataliya SHCHERBATYUK\*, Pierre DAVADANT, Markus KELLER
- 2:58-3:11 **Rootstock regulation of scion phenotypes: The relationship between rootstock parentage and petiole mineral concentration**  
Marine MOREL\*, Sarah Jane COOKSON, Nathalie OLLAT, Elisa MARGUERIT
- ▲ 3:12-3:19 **Implications of herbicide, cultivation or cover crop under-vine soil management on the belowground microbiota**  
Maidar VELAZ, Gonzaga SANTESTEBAN, Paula RESANO-GOIZUETA, Maite LOIDI, Nazareth TORRES
- ▲ 3:20-3:27 **Effects of the biodynamic preparations 500 and 501 on vine and berry physiology, pedology and the soil microbiome**  
Markus RIENTH\*, Frederic Lamy, Clément Chessex, Thierry Heger

## 3:30-3:54 Break

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## Session 13

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Moderators: Erin Troxell, Tim Martinson

- ▲ 3:55-4:08 **Carry over effect of shoot trimming and deficit irrigation on fruit yield and berry total soluble solids**  
Alessandro MATAFFO, Pasquale SCOGNAMIGLIO, Maurizio TEOBALDELLI, Carlo MOLINARO, Antonio. DENTE, **Boris BASILE**
  
- ▲ 4:09-4:25 **Mechanization of pre-flowering leaf removal under the temperate climate conditions of Switzerland**  
**Thibaut VERDENAL\***, Vivian Zufferey, Ágnes Dienes-Nagy, Gilles Bourdin, Jean-Laurent Spring
  
- ▲ 4:26-4:32 **Mechanical fruit zone leaf removal and deficit irrigation practices interact to affect yield and fruit quality of cabernet sauvignon grown in a hot climate**  
**Shijian ZHUANG**, Qun SUN, Paolo SABBATINI, Karl LUND, Kaan KURTURAL, Matthew FIDELIBUS
  
- ▲ 4:33-4:40 **Ultra-low doses of ethylene and ethephon increase fruit set in *Vitis vinifera* L. Malbec**  
Christian CHERVIN, **Olivier GEFFROY**
  
- ▲ 4:41-4:48 **The use of elicitors in viticulture: a tool to obtain highly colored wines with a reduce alcohol content?**  
M.Pilar MARTINEZ-PEREZ, Ana B. BAUTISTA-ORTÍN, Alejandro MARTINEZ-MORENO, **Encarna GÓMEZ-PLAZA\***
  
- 4:49-4:5:05 **Dynamic agrivoltaics, climate protection for grapevine driven by artificial intelligence**  
**Damien FUMEY\***, Jérôme CHOPARD, Gerardo LOPEZ, Severine PERSELLO, Perrine JUILLION, Vincent HITTE, Yassin ELAMRI, Joris DUBOSC, Benjamin TIFFON-TERRADE, Jean GARCIN, Alexandre MALON, Benoît VALLE, Angélique CHRISTOPHE, Thierry SIMONNEAU, Nicolas SAURIN, Arnaud CHAMPETIER, François BERUD, Silvère DEVEZE, Julien THIERY, Valérie DIDIER, Jean-Christophe PAYAN, Francis SOURD

## **5:05-6:00 Giesco Business Meeting**

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## **6:00 Buses to downtown**

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## **7:00 Buses to Ithaca Yacht Club for banquet**

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