



con il supporto di:



BOLZANO, 14-15 LUGLIO 2022

III CONVEGNO AISSA #UNDER40

LA RICERCA SCIENTIFICA NEL PROCESSO DI
TRANSIZIONE ECOLOGICA IN AGRICOLTURA

13:30 **Registrazione partecipanti**

14:30 **Apertura dei lavori, saluti istituzionali e presentazione sponsor**

Dr. Damiano Zanotelli – Coordinatore Comitato Organizzatore
prof. Paolo Lugli – Rettore Libera Università di Bozen-Bolzano
prof. Marco Gobetti – Preside Facoltà Scienze e Tecnologie
prof. Massimo Tagliavini – Presidente AISSA
Sponsors – Bauernbund, VOGproducts, IDM

15:00 **Invited Lecture 1 (Aula Magna D0.01) – Paolo Bàrberi (Università Sant’Anna Pisa)**

Transizione agroecologica e giovani ricercatori: una grande opportunità da non mancare

15:30 **Coffee break**

S1 – AULA D0.01 RESILIENZA, ECONOMIA CIRCO- LARE E RUOLO DEL CONSUMATORE

**Chairs: Carla Cavallo (UNINA) e
Giovanna Sacchi (UNIBZ)**

16:00

Anna Corradini (UNIMI)

Hunted wild game meat consumption in the modern era: a systematic review

16:10

**Elisa Giampietri (UNIPD) e
Giulia Gastaldello (UNIBZ)**

Extending the Theory of Planned Behaviour (TPB) to explore Online Wine Tourism intention among consumers

16:20

Andrea Dominici (UNIFI)

Organic label and consumer wine choice: the effect of brand equity

16:30

Francesco Ferrero (UNITO)

Valorization of slurry to increase efficiency and sustainability of dairy farm

16:40

Marina De Bonis (UNIPD)

*Effect of the cultivation substrate on production and quality of *Pleurotus ostreatus**

16:50

Giuseppe Todde (UNISS)

The sustainability of agricultural residues valorization for bioenergy production

17:00

Michele Zoli (UNIMI)

Life cycle assessment (LCA) of different aquaculture systems: preliminary results from the SIMTAP project

↓ continua

S2 – AULA D1.01 NUOVE TECNOLOGIE, SMART AGRICULTURE AND FORESTRY

**Chairs: Giovanni Caruso (UNIFI),
Selena Tomada (UNIBZ) e
Alessandra Marti (UNIMI)**

Sara Francesconi (UNITUS)

*Nanotechnology-based agrochemicals for the control of *Fusarium* spp. disease and boost bread wheat growth and immunity*

Elisabetta Bizzarri (UNITUS)

Low intensity magnetic fields enhance growth and disease protection in tomato plants

Giulia Lauria (UNIFI)

*LED light supplementation in strawberry (*Fragaria × ananassa*) plants: leaf physiological responses and fruit resistance to pathogens*

Raffaele Zanchini (UNITO)

Assessing the effectiveness of sustainability and quality attributes in consumer selection of a wood waste heating product

Martina Corti (UNIMI)

*Detection of winterkill events of white mustard (*Sinapis alba* L.) by satellite-based remote sensing*

Luigi Formisano (UNINA)

Between light and selective shading: morpho-biochemical and metabolomics insight into the effect of blue photoselective shading on nursery seedlings

Saverio Francini (UNIFI)

A Google Earth engine set of tools for forest disturbance mapping and area estimation

↓ continua

S3 – AULA D1.03 BIOTECNOLOGIE, INNOVAZIONE VARIETALE, BIOSTIMOLANTI

**Chairs: Roberta Bulgari (UNITO) e
Carlo Nicoletto (UNIPD)**

Marzia Leporino (UNITUS)

Effects of vegetal-derived protein hydrolysate and its fractions on response of greenhouse tomato under optimal and suboptimal nitrogen conditions

Matteo Caser (UNITO)

*Development of a new protein hydrolysate from fish by-product. Potential application in the cultivation of *Ranunculus asiaticus* L.*

Gaia Cortinovis (UNIVPM)

Towards the common bean pangenome

Stefano Ambrosini (UNIVR)

Polyhydroxyalkanoates-protein hydrolysates coupled production: from waste to valuable resources

Flavia Mascagni (UNIFI)

*A new breeding tool: the haplotype-phased genome assembly for *Ficus carica**

Sebastiano Conti Taguali (UNICT)

A new natural biostimulant for controlling green mould of citrus fruit

Fabio Trevisan (UNIBZ)

Root exudates reuptake and alteration of carbon isotope fractionation by tomato plants under phosphorus deficiency

↓ continua

17:10	Giovanni Fiorile (UNINA) <i>Importance of fish traceability and familiarity with fish sustainability labels: evidence from Italy and Spain</i>	Cesar Alvites (UNIMOL) <i>Progress for the timber assortment evaluation through LiDAR. A review</i>	Arianna Lodovici (UNIUD) <i>Iron and Nitrogen nutrition in tomato plants: a physiological and molecular study</i>
17:20	Discussione	Discussione	Discussione
17:50	Presentazione poster Sessione 1	Presentazione poster Sessione 2	Presentazione poster Sessione 3
18:00	Poster session (S1, S2, S3)		
19:30	Cena sociale (Castel Mareccio, Bolzano)		

VENERDÌ 15 LUGLIO 2022

09:00 **Invited Lecture 2 (Aula Magna D0.01) – Luca Nerva (CREA & IPST-CNR)**
New plant breeding techniques (NPBTs) for a sustainable and resilient agriculture

S4 – AULA D0.01

MICROBIOLOGIA APPLICATA E MICROBIOMA

Chairs: **Elisa Salvetti (UNIVR)** e **Luigi Borruso (UNIBZ)**

09:30 **Sara Avesani (UNITN)**
Understanding of grapevine mechanisms mediated by volatile organic compounds against downy mildew using a metabolomics approach

09:40 **Sara Pipponzi (UNIMORE)**
*Mitigation of the infection induced by *F. oxysporum* f.sp. *lactucae* by Volatile Organic Compounds (VOCs) produced by a strain of *Streptomyces* sp.*

09:50 **Leilei Zhang (UNICATT)**
The interaction between strigolactones and mycorrhiza: a morpho-physiological and metabolomics investigation in tomato

10:00 **Ida Romano (UNINA)**
Development, Formulation and pre-efficacy evaluation of an innovative microbial-based biostimulant

10:10 **Roberta Prete (UNITE)**
Fermented foods: a reservoir of health-promoting lactic acid bacteria

10:20 Discussione

10:40 Presentazione poster Sessione 4

10:50 Coffee Break

11:10 **Invited Lecture 3 (Aula Magna D0.01) – Paolo Trevisi (Università di Bologna)**
Impiego di antibiotici nell'allevamento suinicolo nazionale: fattori di rischio e prospettive di riduzione

S5 – AULA D1.01

PRATICHE AGROECOLOGICHE IN PRODUZIONE

Chairs: **Vittoria Giannini (UNISS)** E **Hannes Schuler (UNIBZ)**

Emilio Lopresti (UNIRC)
Legumes affect bacterial communities of intercropped wheat due to phosphorus availability

Pierdomenico Spina (UNIMOL)
The fundamental role of Tree-related microhabitats for saproxylic beetles conservation

Cristina Pogolotti (UNITO)
Pheromone-mediated mating disruption to control chestnut tortrix moths

Filippo Sarvia (UNITO)
Mapping melliferous potential and productive honey areas through GIS: a more sustainable approach to beekeeping

Pasquale Napoletano (UNIMOL)
Carbon dynamics in constructed soils of New York City (USA)

Discussione

Presentazione poster Sessione 5

S6 – AULA D1.03

GESTIONE SOSTENIBILE DELLE RISORSE

Chairs: **Domenico Ronga (UNISA)** e **Serena Antonucci (UNIMOL)**

Pietro Todde (UNISS)
Spatiotemporal analysis of marginalization drivers in Gennargentu-Mandrolisai inland areas

Antonella Gori (UNIFI)
*Carbohydrate reserves limit *Quercus ilex* ability to recover after severe water stress more than embolism formation*

Giacomo Palai (UNIPI)
*Effect of different regulated deficit irrigation strategies on berry secondary metabolites in *Vitis vinifera* L. cv Sangiovese*

Enrico Pomatto (UNITO)
Evaluation of different ornamental perennial species combinations for weeds' containment in the urban environment

Rafael Dasilveira Bueno (UNIPA)
The role of sustainable agroforestry practices and food consumption to prevent tropical deforestation and increase ecosystem services

Discussione

Presentazione poster Sessione 6/a

**S7 – AULA D0.01
PRODUZIONI ANIMALI SOSTENIBILI**

**Chairs: Angela Costa (UNIPD) e
Valentina Caprarulo (UNIBS)**

- 11:40** **Claudia Stellini (UNIMI)**
Social Life Cycle Assessment of pig rearing facilities equipped with smart solutions for pollution control
- 11:50** **Alice Vanzin (UNIPD)**
Cytoflurimetric analyses revealed a pathogen-specific immune modulation in response to intramammary infection in Holstein cows
- 12:00** **Giorgia Mantovani (UNIPR)**
Effects of organic bedding materials on poultry's growth performances and welfare
- 12:10** **Angela Salzano (UNINA)**
Influence of biscuit flour administration on buffalo milk quality
- 12:20** **Francesco Bordignon (UNIPD)**
Polyculture of catfish, rainbow trout and Swiss chard in halaponics
- 12:30** **Discussione**
- 12:50** **Presentazione poster Sessione 7**

13:00 **Lunch break**

14:00 **Poster session (S4, S5, S6, S7, S8)**

14:30 **La ricerca in EU (Aula Magna D0.01 – online talk)**
Dibattito: Opportunità e modalità di accesso ai finanziamenti europei per la ricerca
Serena Borgna (APRE – Agenzia per la Promozione della Ricerca Europea)
Modera: Angelo Di Mambro

15:00 **Comunicare la scienza (Aula Magna D0.01)**
Dibattito: Il ruolo della divulgazione scientifica nella carriera del ricercatore
Elisa Weiss (NOI Techpark)
Modera: Angelo Di Mambro

15:30 **Coffee break**

16:00 **Tavola rotonda: Transizione ecologica: dalla teoria alla pratica**
Intervengono: Herbert Dorfmann (Parlamento EU), Davide Viaggi (prof. UNIBO), Stefano Francia (Pres. Naz. AGIA-CIA), Angelika Springeth (Bauernjugend)
Modera: Angelo Di Mambro

17:00 **Conclusione lavori, premiazioni (oral e poster) e
presentazione prossima edizione AISSA#under40**

**S8 – AULA D1.01
RIDUZIONE INPUT ESTERNI**

**Chairs: Ivan Baccelli (CNR-FI) e
Carmelo Maucieri (UNIPD)**

- Monserath Lascano (UNIBO)**
Investment, subsidies, and environmental performance: conflicting effects on farms using Dose-response function
- Virginia Fassa (UNIMI)**
Data fusion of soil and vegetation maps for site-specific nitrogen recommendations
- Daniela Hey (Laimburg R C)**
Impact of defoliation treatments on the nutrient balance of club variety apple trees
- Federico Colombo (UNIMI)**
Low-phytate grains to enhance phosphorus sustainability in agriculture: advances on the lpa1-1 maize mutant
- Elisa Seffin (UNIUD)**
Can the interaction between pollen and toxic compounds affect honey bee survival?
- Discussione**
- Presentazione poster Sessione 8**

**S6 – AULA D1.03
GESTIONE SOSTENIBILE DELLE
RISORSE**

**Chairs: Giovanni Mastrodonato
(UNIFI) e Luca Da Ros (UNIBZ)**

- Ilaria Zorzi (UNIFI)**
Does tree position along a hillslope affect sap flow rates? A case study in a beech forest stand in Central Italy
- Luigi Piemontese (UNIFI)**
Investing in sustainable intensification for smallholders: quantifying large-scale costs and benefits in Uganda
- Abdelhameed Moussa (UNIBZ)**
Role of the bacterial community in the outbreak dynamics of the European spruce bark beetle Ips typographus in Dolomites
- Stefania Diquattro (UNISS)**
Long-term influence of a municipal solid waste compost on the mobility of potentially toxic elements (PTEs) and bio-chemical properties of a contaminated soil: a field study
- Ermes Lopiccolo (UNIPI)**
The dark side of the light: influences of modern nocturnal illumination on urban trees
- Discussione**
- Presentazione poster Sessione 6/b**

Comitato Scientifico

Serena Antonucci (UNIMOL)
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Roberta Bulgari (UNITO)
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Carlo Nicoletto (UNIPD)
Domenico Ronga (UNISA)
Elisa Salvetti (UNIVR)

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Giovanni Carabin
Ilaria Carafa
Edoardo Longo
Andrea Polo
Giovanna Sacchi
Hannes Schuler
Selena Tomada
Enrico Tomelleri
Thomas Zanon
Damiano Zanotelli

POSTER PRESENTATIONS

S1 – ROLE OF CONSUMERS, POLICIES, AND SUSTAINABLE INNOVATION PROCESSES IN AGRI-FOOD, CIRCULAR ECONOMY, AND AGRO-FORESTRY SYSTEM RESILIENCE

P1 CONSUMEHealth. Using consumer science to improve healthy eating habits

Giovanni Sogari. UNIPR.

P3 The implementation of nudges to foster healthy and sustainable eating at the university canteen

Giulia Andreani. UNIPR.

P4 Chocolate consumer preferences and profiles considering lifestyle and socio-demographic features

Valentina Maria Merlino, Antonina Sparacino, Stefano Massaglia, Simone Blanc, Danielle Borra. UNITO.

P5 Strategic packaging: the use of bundling for the valorization of local Extra-Virgin Olive Oils

Cavallo Carla, Cicia Gianni, Sacchi Raffaele, Del Giudice Teresa. UNINA.

P6 *Lemna minor* and digestate: opportunities for a circular economy

Leonardo Verdi, Emanuele Fratarcangeli, Ada Baldi, Anna Lenzi. UNIFI.

P8 Sporeforming bacteria during one year storage of UHT milk at different temperatures

Arianna Ferrero, Francesco Ferrero, Daniele Nucera, Manuela Casale, Giorgio Borreani. UNITO.

P9 The influence of greenhouse climatic conditions on 13 strawberries varieties in quantitative and qualitative traits

Silvia Locatelli, Marina De Bonis, Carlo Nicoletto, Paolo Sambo. UNIPD.

P10 Nutrient's uptake and quality of lettuce and curly endive in aquaponic systems is affected by supplemental LED lighting

Giuseppe Carlo Modarelli, Lucia Vanacore, Antonio Luca Langellotti, Paolo Masi, Stefania De Pascale, Chiara Cirillo, Youssef Roupheal. UNINA.

P11 Application of LCA methodology to a Recirculating Aquaponics System (RAS) prototype

Lucia Vanacore, Giuseppe Carlo Modarelli, Emanuela Campana, Antonio Luca Langellotti, Paolo Masi, Youssef Roupheal, Stefania De Pascale, Chiara Cirillo. UNINA.

P12 Betacyanin accumulation and physiological responses in *Beta vulgaris* L. leaves under N starvation and salt stress

Costanza Ceccanti, Ermes Lo Piccolo, Giulia Lauria, Marco Landi, Lucia Guidi. UNIPR.

P13 The effect of microplastic foliar exposure on rhizosphere ecology in tomato plant (*Solanum lycopersicum* L.)

Oussama Bouaicha, Fabio Trevisan, Raphael Tiziani, Martin Brenner, Wolfram Weckwerth, Luigi Lucini, Stefano Cesco, Tanja Mimmo, Luigimaria Borruso. UNIBZ.

P14 Blockchain technologies: the potential for application in forest nursery traceability systems

Stefano Bruzzese, Simone Blanc, Andrea R. Proto, Valentina Maria Merlino, Simone Figorilli, Corrado Costa, Cecilia Ripa, Filippo Brun. UNITO.

S2 - NEW TECHNOLOGIES APPLIED TO THE PRODUCTION CYCLE, PRECISION AGRICULTURE, SMART AGRICULTURE, PRECISION FORESTRY; CLIMATE SMART FORESTRY

P15 Effects of vegetation parameters on LAI as a proxy for mountain grassland yield estimation

Alexander Dovas, Gabriel Sicher, Giovanni Peratoner. LAIMBURG R. C.

P16 SOIL BANK project: invest on soil

Angelo Betto, Carmelo Mauccieri, Giorgia Raimondi, Giancarlo Renella, Maurizio Borin. UNIPD.

P17 Potential of cultivation of oats (*Avena sativa* L.) for human consumption in South Tyrol

Daniel Ortler, Alessia Castellan, Manuel Pramsohler, Giovanni Peratoner. LAIMBURG R. C.

P19 Validation of a novel sensor for non-destructive online monitoring of plant water status

Francesca Alderotti, Cecilia Brunetti, Dalila Pasquini, Carlo Stella, Antonella Gori, Cassandra Detti, Lapo Azzini, Francesco Ferrini, Marco Righela, Mauro Centritto. UNIFI.

P20 The Tuscany Living Lab for increasing the digitalization of agricultural advisory service for olive growing

Iride Volpi, Susanna Marchi, Klean Hoxha, Michele Mammì, Diego Guidotti. AEDIT.

P21 Smart Land South Tyrol: optimized irrigation scheduling through soil moisture tension measurements with sensor-based, wireless technology

Lorenzo Panizzon, Andreas Wenter, Hansjörg Hafner, Roland Burger, Martin Thalheimer. LAIMBURG R. C.

P22 The effect of Blue: Red light proportion on germination parameters, growth attributes, and quality of borage (*Borago officinalis* L.) sprouts

Beatrice Falcinelli, Roberta Bulgari. UNITO.

P23 Assessing the carbon stock in a Mediterranean forest plantation through UAV-LiDAR data.

Cesar Alvites, Marco Marchetti, Bruno Lasserre, Giovanni Santopoli. UNIMOL.

P24 Chitosan nanocarriers-mediated delivery of double-stranded RNA "in planta"

Dora Scarpin, Walter Chitarra, Luca Nerva, Loredana Moffa, Francesca D'Este, Marco Vuerich, Antonio Filippi, Enrico Braidot, Elisa Petrusa. UNIUD.

P25 An RNAi-based approach for non-chemical management of the troublesome weed *Amaranthus hybridus* L.

Serena Bordignon, Silvia Panozzo, Silvia Farinati, Andrea Milani, Laura Scarabel, Serena Varotto. IPSP CNR

P26 *Arachis hypogaea* L. cultivation in Campania: technical and operational characteristics of mechanised

Maura Sannino, Mariano Crimaldi, Rossella Piscopo. UNINA.

P27 Smart Glasses for Augmented Reality: a valid support during maintenance activities

Gabriele Sara, Giuseppe Todde, Maria Caria. UNISS.

P28 MULTIFRU project: Multifunctional Valorisation of Pigmented Wheat Varieties for production of Flavonoid Rich Foods and Nano-Agrochemicals for Sustainable Wheat Protection

Linda Felici, Francesco Sestili, Matteo Vitali, Pasquale de Vita, Samuela Palombieri, Giorgio M. Balestra. UNITUS.

P29 Evaluation of the variability of C mineralization in different management zones defined by soil electrical conductivity mapping of a rice field

Giada Toscani, Andrea Gasparini, Nicolò Pricca, Roberto Fucella, Giovanni Cabassi. CREA.

P30 Antioxidant spray treatment as a sustainable alternative to dipping for fresh-cut apples

Flavia Bianchi, Noreen Fallar, Elena Venir. LAIMBURG R. C.

P31 Effect of foliar fertilizers from fish by-product on growth and development of Lettuce (*L. sativa*) in green-house conditions

Mortadha Ben Hassine, Federica Caradonia, Justyna Anna Milc, Giovanni Caccialupi, Francesca Masino, Andrea Pulvirenti, Enrico Francia, Andrea Antonelli. UNIMORE.

P32 Sensory and electronic nose analysis of Noble goat's milk from Cilento (Italy)

Andrea Balivo, Raffaella Tudisco, Raffaele Sacchi, Alessandro Genovese. UNINA.

S3 - BIOTECHNOLOGY, BREEDING AND INNOVATIVE VARIETIES, BIOSTIMULANTS

P33 Changes in qualitative traits of rocket varieties (*Eruca sativa* and *Diplotaxis tenuifolia*) as influenced by biostimulants

Giulia Franzoni, Sara Vignati, Davide Guffanti, Francesco Elia Florio, Giacomo Cocetta, Antonio Ferrante. UNIMI.

P34 Towards the unraveling of the regulatory mechanisms of starch and prolamine accumulation in durum wheat

Cecilia Miccoli, Francesco Camerlengo, Francesco Sestili, Stefania Masci. UNITUS.

P35 Understanding effectors: a novel way to dismantle phytoplasmas?

Mattia Tabarelli, Cecilia Mittelberger, Simone Egger, Katrin Janik. LAIMBURG R.C.

P36 Molecular genetic characterization of *Castanea sativa* Mill. Trees in South Tyrol

Federico Scaiattolini, Sanja Baric. UNIBZ.

P37 Foliar treatments with wood distillate boost yield and nutritional properties of chickpea seeds

Riccardo Fedeli, Silvia Celletti, Andrea Vannini, Viviana Maresca, Silvana Munzi, Cristina Cruz, Dmitry Alexandrov, Stefano Loppi. UNISI.

P38 Are two biostimulants better than one? Assessment of fulvic acids and protein hydrolysates action to overcome crops Fe-deficiency

Giacomo Rodegher, Stefano Ambrosini, Zeno Varanini, Anita Zamboni. UNIVR.

P39 The effect of strigolactones on salt stress mitigation

B. Miras-Moreno, P. Ganugi, V. Buffagni, F. Araniti, Daniele del Buono, Marco Trevisan, Luigi Lucini. UNICATT.

P40 Use of biostimulants to increase biomass production in Lavadin (*Lavandula x intermedia*) cultivated in Tuscan-Emilian Apennines

Giovanni Caccialupi, Federica Caradonia, Mortadha Ben Hassine, Eleonora Truzzi, Stefania Benvenuti, Domenico Ronga, Enrico Francia. UNIMORE.

P41 Phenotyping of *Amaranthus hybridus* biotypes carrying two different allelic variants of acetolactate synthase (ALS)

Andrea Milani, Samuele Pinton, Silvia Panozzo. CNR.

P42 A LAMP (loop-mediated isothermal amplification) assay to detect the 574-Leu mutation endowing acetolactate synthase (ALS) resistance in three weedy amaranth species

Andrea Milani, Silvia Panozzo, Laura Scarabel. CNR.

P43 Plant-derived biostimulants differentially mitigate salinity stress in lettuce and tomato plants

Monica Alzate, Sonia Monterisi, Youssef Rouphael, Giuseppe Colla, Luigi Lucini, Stefano Cesco, Youry Pii. UNIBZ.

P44 The roles of brassinosteroids in root architecture and adaptation in *Arabidopsis thaliana* in limiting phosphate conditions

Mauro Maver, Asia Colmagro, Simon Unterholzner, Stefano Cesco, Tanja Mimmo. UNIBZ.

P105 Somatic embryogenesis is a sustainable tool for inducing biotic stress resistance in grapevine

Floriana Nuzzo, Chiara Pagliarini, Amedeo Moine, Paolo Boccacci, Giorgio Gambino, Irene Perrone. IPSP CNR.

S4 - APPLIED MICROBIOLOGY, ENHANCEMENT OF THE MICROBIOME MANAGEMENT

P45 Rearing mealworm larvae on substrates contaminated by foodborne pathogens

Adolfo Lepre, Sara Ruschioni, Lorenzo Corsi, Lucia Aquilanti, Cinzia Mannozi, Cristiana Cesaro, Andrea Osimani, Nunzio Isidoro, Paola Riolo. UNIVPM.

P46 Characterisation of *Fusarium musae*, agent of crown rot disease of banana fruits

Valeria Tava, Anna Prigitano, Carmela Esposito, Marco Saracchi, Andrea Kunova, Cristina Pizzatti, Paolo Cortesi, Matias Pasquali. UNIMI.

P47 Bioformulates as a promising and sustainable tool against wheat soil-borne pathogens

Eleonora Cappelletti, Chiara Braglia, Daniele Alberoni, Martina Cali, Maria Teresa Senatore, Diana Di Gioia, Antonio Prodi. UNIBO.

P48 Unraveling the capacity of the epiphytic bacterium *Stenotrophomonas rhizophila* Ep2.2 to protect tomato leaves against *Botrytis cinerea* infection

Aida Raio, Federico Brillì, Rita Baraldi, Francesca Orlando, Claudio Pugliesi, Xiaoyulong Chen, Ivan Baccelli. IPSP CNR.

P49 Root and Collar Rot caused by *Phytophthora nicotianae* and *Phytophthora palmivora*, a new disease on *Paulownia* in Europe

Mario Riolo, Francesco Aloï, Sebastiano Conti Tiguai, Elena Santilli, Rossana Parlascino, Federico La Spada, Ermes Ivan Rovetto, Antonella Pane, Santa Olga Cacciola. UNICT.

P50 Eco-sustainable approaches to understand and contain the kiwifruit decline syndrome in Italy

Antonella Cardacino, Sara Francesconi, Daniele Schiavi, Giorgio M. Balestra. UNITUS.

P51 Molecular assessment of the feeding behavior of the Brown marmorated stink bug *Halyomorpha halys*

Maja Fluch, Erika Corretto, Stefanie Fischnaller, Hannes Schuler. UNIBZ.

P52 Plant-derived foliar biostimulants vs. root-colonizing plant growth-promoting rhizobacteria: ameliorative effects salt-stressed tomato plants

Sonia Monterisi, Monica Alzate, Begoña Miras-Moreno, Youssef Rouphael, Giuseppe Colla, Luigi Lucini, Stefano Cesco, Youry Pii. UNIBZ.

P53 Gradual crop replacement strongly shapes soil fauna and microbial communities in long-lasting tree crops

Rita Noto, Marco Signorini, Giulio Genova, Alessia Bani, Georg Niedrist, Andreas Hilpold, Alex J. Dumbrell, Ulrike Tappeiner, Stefano Cesco, Tanja Mimmo, Luigimaria Borruso. UNIBZ.

P54 HoloHerbarium: herbaria preserve plant microbiota responses

Gianluca Grasso, Roland Marmeisse, Valeria Bianciotto. UNITO.

P55 Characterization and valorization of the biodiversity of a collection of *Metschnikowia pulcherrima*-related strains for agri-food applications

Ilaria Larini, Eleonora Troiano, Veronica Gatto, Elisa Salvetti, Renato Leal Binati, Francesco Martelli, Giovanna E. Felis, Sandra Torriani. UNIVR.

P56 Metagenomics unravel the microbial heritage of Italian typical fermented foods

Giuseppina Sequino, Alessia Esposito, Sara Cavaliere, Vincenzo Valentino, Danilo Ercolini, Sao Mai Dam, Francesca De Filippis. UNINA.

P57 Lactic Acid Bacteria resident in cheesemaking facilities drive the technological properties and impact on the cheese quality

Vincenzo Valentino, Giuseppina Sequino, Francesca De Filippis, Danilo Ercolini. UNINA.

P58 Unculturable taxa of insects pests microbiomes: a focus on genera *Erwinia*, *Pantoea* and *Blattabacterium*

Ilaria Checchia, Nicola Mori, Massimiliano Pasini, Elisa Salvetti, Giovanna E. Felis. UNIVR.

P59 Assessment of Biolog EcoplateTM method for functional metabolic diversity of aerotolerant pig fecal microbiota

Alice Checcucci, Diana Luise, Monica Modesto, Federico Correa, Paolo Bosi, Paola Mattarelli, Paolo Trevisi. UNIBO.

S5 - AGRO-ECOLOGICAL AND FORESTRY PRACTICES, BIODIVERSITY PRESERVATION, CARBON FARMING

P60 Into the economics of organic agriculture: a topic modelling review of the scholars' interests

Leonardo Cej, Luca Rossetto, Edi Defrancesco, Gianluca Stefani. UNIPD.

P61 Floristic-vegetational sciences and landscape ecology contributions for the accounting of agrobiodiversity and farmland ecological functionality: assessment of a certification scheme

Gemma Chiaffarelli, Ilda Vagge. UNIMI.

P62 Microalgal biostimulant on lettuce: a possible solution to overcome drouth stress

Vincenzo Alfano, Raffaele Cavaliere, Barbara Pintus, Elisa Biazzì, Aldo

Tava, Enrica De Falco, Antonella Vitti, Domenico Ronga. UNISA.

P63 Polyphenolic and terpenic composition of different lavender species and rosemary varieties: contribution to the knowledge of the officinal Mediterranean flora

Luana Beatriz dos Santos Nascimento, Dalila Pasquini, Cecilia Brunetti, Francesco Ferrini, Antonella Gori. UNIFI.

P64 Urban Forests: science-based perspectives for air quality amelioration

Irene Vigevani, Denise Corsini, Jacopo Mori, Alice Pasquinelli, Marco Gibin, Sebastien Comin, Przemysław Szwałko, Edoardo Cagnolati, Francesco Ferrini, Alessio Fini. UNIFI.

P65 Leaves of *Arbutus unedo* L. as sources of phytocomplexes: does water stress affect the seasonal arbutin and phenolic content?

Cassandra Detti, Luna Beatriz dos Santos Nascimento, Francesca Alderotti, Francesco Ferrini, Cecilia Brunetti, Antonella Gori. UNIFI.

P66 The effects of climate change on grape growing and harvest properties in the wine producing region of South Tyrol, Italy, during 1996-2016

Laura Nocker, Simon Tscholl, Arno Schmid, Lukas Egarter Vigl. LAIMBURG R. C.

P67 The evolutionary history of *Phaseolus vulgaris* as revealed by chloroplast and nuclear genomes

Giulia Frascarelli, Elisa Bellucci, Marzia Rossato, Teresa R. Galise, Nunzio D'Agostino, Salvatore Cozzolino, Andrea Benazzo, Massimo Delledonne, Elena Bitocchi, Roberto Papa. UNIVPM.

P68 Evaluating rye and squarrose clover cover crops for no-till organic tomato production

Lara Abou Chehade, Daniele Antichi, Christian Frascioni, Marco Mazzoncini, Massimo Sbrana, Lorenzo Gabriele Tramacere, Andrea Peruzzi. UNIFI.

P69 Multi-parametric evaluation of mechanical termination of cover crops: experimental procedures and preliminary results

Anastasia Shchegolikhina, Daniele Manenti, Marco Torrente, Paolo Soffiatti, Stefano Bonini, Juri Chetia, Luca Bechini, Aldo Calcante, Roberto Oberti. UNIMI.

P70 Study the bioethology of a quasi social parasitoids as a first step in biological control

Serena Malabusini, Silvia De Milato, Alessandro L. Heinzl, Costanza Jucker, Daniela Lupi. UNIMI.

P71 Evaluation of different "Attract and Kill" techniques against olive fruit fly *Bactrocera oleae* (Rossi) [Diptera: Tephritidae].

Federico Marangoni, Corrado Perin, Ilaria Checchia, Giacomo Santoiemma, Luca Mazzon, Nicola Mori. UNIVR.

P72 Predicting the potential distribution of *Toumeyella parvicornis* Cockerell in the Mediterranean basin

Nicolò Di Sora, Luca Rossini, Mario Contarini, Roberto Mannu, Stefano Speranza. UNITUS.

P73 The use of biochar to mitigate the risk of a realistic exposure of pesticides applied to *Brassicaceae* crops

Mariangela Triozzi, Claudia Campanale, Daniela Losacco, Carmine Massarelli, Vito Felice Uricchio. IRSA CNR.

P103 An Uncertainty Hovers in Forestry

Samuele De Petris, Filippo Sarvia, Enrico Borgogno-Mondino. UNITO.

S6 - SUSTAINABLE USE OF PRODUCTIVE RESOURCES

P74 Effect of cover crops introduction in a long-term vegetable succession

Raimondi Giorgia, Zanon.M, Maucieri C., Nicoletto C., Sambo.P, Borin M. UNIPD.

P75 Stomatal dynamics in grapevine: new traits for optimizing resources-use efficiency?

Michele Faralli, Massimo Bertamini. UNITN.

P76 The role of Trees Outside Forests in the cultural landscape of the Colline del Prosecco UNESCO site

Antonio Santoro, Francesco Piras, Beatrice Fiore, Niccolò Frassinelli, Alessandra Bazzurro, Mauro Agnoletti. UNIFI.

P77 Responses of five *Quercus* species exposed to drought and flooding in a common-garden

Mondanelli Lucia, Mariotti B., Martini S., Maltoni A., Salbitano F., Traversi ML, Giovannelli A, Maserti BE, Coccozza C. UNIFI.

P78 Assessing resilience components in maritime pine provenances grown in common gardens

Lisella Concetta, Antonucci Serena, Santopuoli Giovanni, Marchetti Marco, Tognetti Roberto. UNIMOL.

P79 Assessment of biochar amendment in nitrate capture, soil quality, N-metabolism, and yield of *Brassica oleracea* L. var. *botrytis*

Daniela Losacco, Marina Tumolo, Claudia Campanale, Mariangela Triozzi, Pietro Cotugno, Valeria Ancona, Carmine Massarelli, Francesco Porcelli, Maria Concetto de Pinto, Vito Felice Uricchio. IRSA CNR.

P80 Biochar and *Cannabis sativa* L. as alternative for integrated bioenergy production and restoration of potentially toxic elements contaminated soils

Matteo Garau, Mauro Lo Cascio, Maria Vittoria Pinna, Giacomo Patteri, Costantino Sirca, Donatella Spano, Giovanni Garau, Pier Paolo Roggero, Paola Castaldi. UNISS.

P81 Particulate matter emissions from agricultural activities: the maize case study

Elio Padoan, Franco Ajmone Marsan, Luca Rollè, Jacopo Maffia, Elio Dinuccio. UNITO.

P82 Land-use change from arable lands to orchards with grassed floor improves soil quality: a study case in Emilia-Romagna Region

Mauro De Feudis, Gloria Falsone, Chiara Poesio, William Trenti, Livia Vittori Antisari. UNIBO.

P83 Life cycle assessment (LCA) of different aquaculture systems: preliminary results from the SIMTAP project

Michele Zoli, Lorenzo Rossi, Michele Costantini, Jacopo Bacenetti. UNIMI.

P100 Smart irrigation strategies for tomato: a Mediterranean case study

Andrea Martelli, Leonardo Verdi, Anna Dalla Marta, Simone Orlandini, Filiberto Altobelli. CREA.

P102 Ecofriendly humic-like substances from the upscaling of municipal biowaste as biobased fertilizers

Elio Padoan, Fernando Fragalà, Enzo Montoneri. UNITO.

S7 - SUSTAINABLE ANIMAL PRODUCTION, FARM ANIMAL WELFARE

P84 Ruminant enteric methane emissions of a high-Input and a low-Input dairy production system

Thomas Zanon, Greta Fichter, Laura Nocker, Paul Mittermair, Matthias Gauly, Giovanni Peratoner. UNIBZ.

P85 The conservation of endangered livestock breeds: an agricultural

economics perspective

Maria Elena Marescotti, Annafrancesca Corradini, Eugenio Demartini, Valentina Lodde, Federica Franciosi, Anna Gaviglio. UNIMI.

P86 Breeding for quality and health: genetic parameters for somatic cells and milk traits in the local cattle producing PDO "Parmigiano Reggiano" cheese

Guido Gomez Proto, Enrico Mancin, Cristina Sartori, Beniamino Tuliozzi, Roberto Mantovani. UNIPD.

P87 Non-genetic factors affecting milk differential somatic cell count in specialized and dual purpose dairy cows

Silvia Magro, Matteo Santinello, Angela Costa, Massimo De Marchi. UNIPD.

P88 Associations between milk mineral profile and blood energy metabolites in Holstein cattle

Alessandro Toscano, Diana Giannuzzi, Sara Pegolo, Alice Vanzin, Vittoria Bisutti, Alessio Cecchinato, Stefano Schiavon. UNIPD.

P90 Improving animal welfare by means of automatic monitoring of goat vocalizations: development of a bleating recognition filter

Stefania Celozzi, Mael Vittorio Vena, Stavros Ntalampiras, Luca Andrea Ludovico, Giorgio Presti, Monica Battini, Silvana Mattiello. UNIMI.

P91 Fertility and management parameters in a tool for the simplified evaluation of global warming potential related to the milk production

Giulia Gislon, Valentina Ferrari, Maddalena Zucali, Luciana Bava, Alberto Tamburini, Anna Sandrucci. UNIMI.

P92 Could Automatic Milking Systems reduce dairy farms greenhouse gases emissions?

Maria Cecilia Bianchi, Giulia Gislon, Serena Bonizzi, Sara Mondini, Maddalena Zucali. UNIMI.

P93 Application of Selective Dry Cow Therapy protocol based on total and differential somatic cell count to reduce antimicrobial use at dry off

Sara Mondini, Giulia Gislon, Maddalena Zucali, Serena Bonizzi, Maria Cecilia Bianchi, Luciana Bava. UNIMI.

P94 Importance of calf management in dairy farms: an Italian investigation

Serena Bonizzi, Maria Cecilia Bianchi, Giulia Gislon, Sara Mondini, Martina Pavesi, Stefania Colombini, Maddalena Zucali. UNIMI.

P95 Towards an in-flight assessment of gaseous and particulate emissions of livestock farming: development of a prototype UAV-based system

Valentina Becciolini, Marco Merlini, Gabriele Coletti, Diego Bedin Marin. UNIFI.

P104 Exploitation of the GEE platform to Apennine grasslands monitoring

Laura Stendardi, Chiara Aquilani, Giovanni Argenti, Edoardo Bellini, Andrea Confessore, Marco Moriondo, Matilde Pisi, Carolina Pugliese, Nicolina Staglianò, Camilla Dibari. UNIFI

S8 - REDUCTION OF EXTERNAL INPUTS

P96 Sewage sludge amendment for rice: a potential alternative to inorganic fertilizer

Antonella Calzone, Elena Baldoni, Giada Toscani, Andrea Gasparini, Giovanni Cabassi, Valentina Picchi. CREA.

P97 Grafting with non-suckering rootstocks stimulates stress resilience of European hazelnut (*Corylus avellana* L.) to drought

Amedeo Moine, Paolo Boccacci, Luca Nerva, Chiara Agliassa, Walter Chitarra, Giorgio Gambino, Francesca Secchi, Chiara Pagliarani. CNR IPSP.

P98 Biochar soil amendment for the urban tree establishment phase: What consequences for tree physiology, soil quality and environment?

Michelangelo Becagli, Ermes Lo Piccolo, Costanza Ceccanti, Giulia Lauria, Valentina Cantini, Lucia Guidi, Roberto Cardelli, Marco Landi. UNIFI.

P99 Copper extraction potential of citrate and malate in vineyard soils

David Heiss, Raphael Tiziani, Stefano Cesco, Tanja Mimmo. UNIBZ.

P101 Groundwater contamination by glyphosate, glufosinate ammonium, and AMPA: occurrences and sources in hilly vineyards

Nicoleta Suciù, Maura Calliera, Gian Piero Luciani, Marco Trevisan, Ettore Capri. UNICATT.