



Università  
degli Studi di  
Messina

DIPARTIMENTO DI SCIENZE BIOMEDICHE,  
ODONTOIATRICHE E DELLE IMMAGINI  
MORFOLOGICHE E FUNZIONALI



Società Chimica Italiana  
Gruppo Interdivisionale  
Chimica degli Alimenti



# CHIMALI 2023

MARSALA



## XIII

# CONGRESSO NAZIONALE DI CHIMICA DEGLI ALIMENTI

[www.chimali2023.it](http://www.chimali2023.it)

29 – 31 maggio 2023

Hotel Resort Villa Favorita,  
Marsala (TP)

## PROGRAMMA

IN COLLABORAZIONE CON:



CON IL CONTRIBUTO DI:





CON IL PATROCINIO DI:



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ORDINE  
DEI DOTTORI AGRONOMI  
E DEI DOTTORI FORESTALI  
DELLA PROVINCIA DI MESSINA



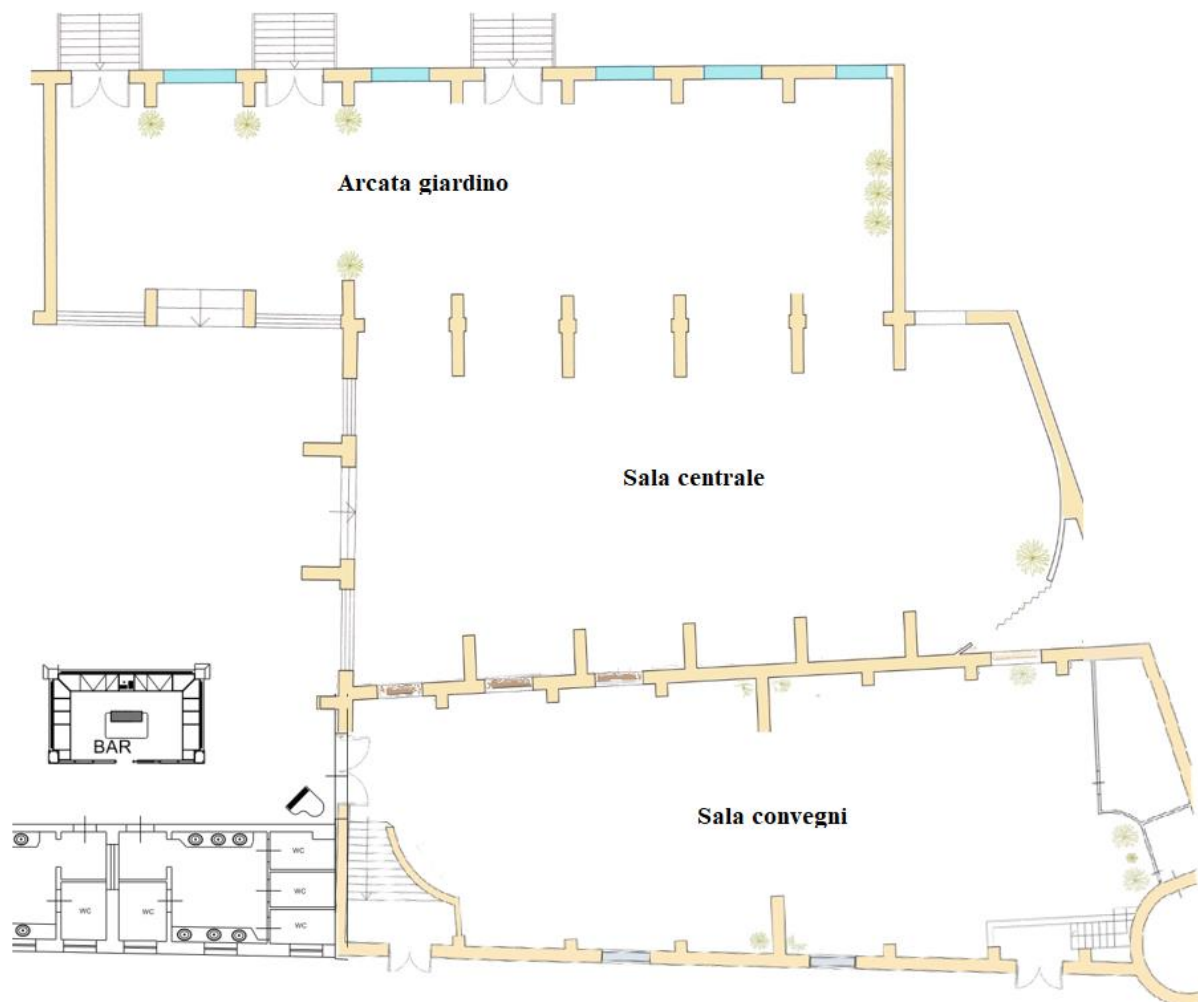
*Ministero della Giustizia*



consorzio  
universitario  
mediterraneo  
orientale



## AREA CONGRESSUALE – PLANIMETRIE



**XIII CONGRESSO NAZIONALE DI CHIMICA DEGLI ALIMENTI MARSALA,**

**29 – 31 maggio 2023**

**PROGRAMMA**

**Domenica 28 Maggio (Complesso Monumentale di San Pietro, Marsala)**

**19.00 *EVENTO DI BENVENUTO presso lo storico COMPLESSO MONUMENTALE DI SAN PIETRO, sito nel centro della città di Marsala: saluti delle Autorità e degustazione di prodotti tipici.***

## Lunedì 29 Maggio

**08.30** Registrazione Partecipanti (sala patio)

**09.00** Apertura Congresso (sala centrale)

**09.30** Prolusione

### **IL RUOLO DEL CHIMICO DEGLI ALIMENTI NELLA CERTIFICAZIONE DELLA FILIERA AGROALIMENTARE**

*Giacomo Dugo*

*I SESSIONE* (sala centrale)

Sessione Parallela: **Food composition and quality**

Moderatori:

**10.00 C01**

### **ARTEMIDE PIGMENTED RICE: IMPACT OF COOKING ON CHEMICAL COMPOSITION, NUTRITIONAL PROFILE AND BIOACCESSIBILITY OF PHENOLIC COMPOUNDS**

*Antonio Colasanto, Marco Arlorio, Fabiano Travaglia, Matteo Bordiga, Vincenzo Disca, Yassine Jaouhari, Jean Daniel Coïsson, Ivana Rabbone, Monica Locatelli*

**10.15 C02**

### **NOVEL INSIGHTS ON CHEESE DEFECTS IN PECORINO ROMANO PDO CHEESE: A CASE STUDY**

*Giacomo L. Petretto, Giovanni Patta, Giacomo Zara, Paolo Urgeghe, Severino Zara, Francesco Fancello*

**10.30 C03**

### **EVALUATION OF FOLATES IN CALABRIAN CITRUS FRUITS BY ORBITRAP MASS SPECTROMETRY**

*Lucia Bartella, Ines Rosita Talarico, Fabio Mazzotti, Ilaria Santoro, Melissa Cacciatore, Leonardo Di Donna*

**10.45 C04**

### **GREEN COFFEE, BIOACTIVE COMPOUNDS' ANALYSIS OF EXPERIMENTAL CULTIVATION IN SICILY: A NEW FRONTIER IN THE SICILIAN FOOD SECTOR**

*Vita Di Stefano, Carla Buzzanca, Fortunato Ruvutuso, Giovanni Gugliuzza, Dario Scuderi, Eristanna Palazzolo, Vittorio Farina*

*I SESSIONE* (sala convegni)

Sessione Parallela: **Natural compounds and Nutraceuticals**

Moderatori:

**10.00 C05**

### **NEUROPROTECTIVE AND ANTIOXIDANT EFFECTS OF UROLITHINS: QUANTUM MECHANICS (QM) AND MOLECULAR MECHANICS (MM) APPLICATIONS**

*Emanuela Marchese, Isabella Romeo, Giosuè Costa, Stefano Alcaro*

- 10.15 C06**  
**EXPLOITING NEW SE-GLYCOCONJUGATES AS ANTIOXIDANT SUPPLEMENTS IN OXIDATIVE STRESS RELATED DISEASES**  
*Giovanna Cimmino, Mauro De Nisco, Silvana Pedatella, Severina Pacifico*
- 10.30 C07**  
**ULVA LACTUCA L. OF ORBETELLO LAGOON: MULTIVARIATE OPTIMIZATION OF THE EXTRACTION OF ULVAN POLYSACCHARIDES**  
*Beatrice Zonfrillo, Maria Bellumori, Marzia Innocenti, Serena Orlandini, Sandra Furlanetto, Gianni Zoccatelli, Nadia Mulinacci*
- 10.45 C08**  
**PHENOLIC EXTRACT FROM HAZELNUT SKIN: CHEMICAL COMPOSITION AND PROTECTIVE ROLE AGAINST ADVANCED GLYCATION END-PRODUCTS (AGES)-DAMAGE IN THP-1-DERIVED MACROPHAGES**  
*Ludovica Spagnuolo, Laura Dugo, Laura De Gara*

**11.00 Pausa caffè**

*II SESSIONE* (sala centrale)

Sessione Parallela: **Food composition and quality**

Moderatori:

- 11.30 C09**  
**THE MOST REPRESENTATIVE TYPICAL DISH OF CATANZARO AS NEW MEDITERRANEAN DIET CASE STUDY**  
*Stefano Alcaro, Francesco Bianco*
- 11.45 C10**  
**AGEING AND PRODUCTION DISCRIMINATION OF PDO GRANA PADANO CHEESE WITH AN NMR-BASED METABOLOMIC APPROACH**  
*Valentina Maestrello, Pavel Solovye, Pietro Franceschi, Angelo Stroppa, Federica Camin, Luana Bontempo*
- 12.00 C11**  
**UNDERSTANDING THE CHEMISTRY OF THE SICILIAN AMARENA WINE DURING BOTTLE AGING**  
*Ambrogina Albergamo, Vincenzo Lo Turco, Angela Giorgia Potortì, Giuseppa Di Bella*
- 12.15 C12**  
**DIRECT INJECTION MASS SPECTROMETRY FOR FOOD VOLATILOMICS: EMERGING GREEN APPROACHES FOR THE RAPID AND ONLINE SCREENING OF MICROBIAL RESOURCES**  
*Iuliia Khomenko, Vittorio Capozzi, Antonia Corvino, Franco Biasioli*
- 12.30 C13**  
**SWATH-MS based proteomics and chemometrics tools to assess chicken meat authenticity within divergent production systems: organic versus antibiotic-free**  
*Laura Alessandroni, Gianni Sagratini, Renzo Galli, Mohammed Gagaoua*

**12.45 C14**  
**CHARACTERIZATION OF COLOR, PHENOLIC PROFILE, AND ANTIOXIDANT ACTIVITY OF ITALIAN PIGMENTED RICE VARIETIES AFTER DIFFERENT TECHNOLOGICAL TREATMENTS**

*Corinne Bani, Francesca Colombo, Carola Cappa, Francesca Mercogliano, Patrizia Restani, Chiara Di Lorenzo*

**13.00 C15**  
**QUALITY AND NUTRITIONAL PROFILE DETERMINATION OF THE HEMP ENRICHED FUNCTIONAL PASTA**

*Sonia Bonacci, Vita Di Stefano, Fabiola Sciacca, Carla Buzzanca, Nino Virzì, Antonio Procopio, Maria Grazia Melilli*

*II SESSIONE (sala convegni)*

Sessione Parallela: **Natural compounds and Nutraceuticals**

Moderatori:

**11.30 C16**  
**CHEMICAL CHARACTERIZATION AND BIOLOGICAL ACTIVITIES OF *RHUS CORIARIA* L. EXTRACT: ANTIOXIDANT, ANTIGLYCATION AND DPP4 INHIBITORY EFFECTS**

*Laura Dugo, Elisa Pannucci, Ludovica Spagnuolo, Luca Santi*

**11.45 C17**  
**A NEW MILLIFLUIDIC-BASED GASTROINTESTINAL PLATFORM TO INVESTIGATE ANTIGLYCATIVE AGENTS**

*Raffaella Colombo, Ilaria Frosi, Adele Papetti*

**12.00 C18**  
**POLYPHENOLS IN LIVESTOCK NUTRITION: THE CASE OF RENEWABLE FAGACEAE LEAVES**

*Marialuisa Formato, Alessandro Vastolo, Simona Piccolella, Serena Calabrò, Monica Isabella Cutrignelli, Christian Zidorn, Severina Pacifico*

**12.15 C19**  
**THERMAL DEGRADATION KINETICS OF RED CABBAGE (*BRASSICA OLERACEA* L. VAR *CAPITATA* F. *RUBRA*) ANTHOCYANINS**

*Laura De Marchi, Laura Salemi, Maria Bellumori, Federica Mainente, Ilaria Fierri, Roberto Chingola, Gianni Zoccatelli*

**12.30 C20**  
**THE POTENTIAL OF COMMON DUCKWEED (*LEMNA MINOR* L.) AS A MEAT EXTENDER DURING STORAGE OF PACKAGED BEEF BURGERS**

*Gabriele Rocchetti, Annalisa Rebecchi, Leilei Zhang, Michele Dallolio, Daniele Del Buono, Giorgio Freschi, Luigi Lucini*



**12.45 C21**  
**FLOW-BIOCATALYSIS FOR NATURAL FOOD BIOACTIVE AND NUTRACEUTICALS**  
*Martina Letizia Contente, Lucia Tamborini, Sabrina Dallavalle, Francesco Molinari, Andrea Pinto*

**13.00 C22**  
**ANTIOXIDANT AND ANTIGLYCATION EFFECTS OF MATCHA GREEN TEA EXTRACTS**  
*Elisa Pannucci, Luca Santi, Laura Dugo*

**13.30 Colazione di lavoro**

*III SESSIONE* (sala centrale)  
Sessione Parallela: **Food traceability**  
Moderatori:

**15.00 PL1**  
**FRESHNESS OF FOOD PRODUCTS OF ANIMAL ORIGIN: EFFECTIVE METABOLOMICS APPROACHES FOR MILK & EGG**  
*Michele Suman*

**15.30 C23**  
**THE CHALLENGES OF CLIMATE CHANGE ON THE CONSISTENCY OF THE COCOA FLAVOUR QUALITY**  
*Eloisa Bagnulo, Giulia Strocchi, Cristian Bortolini, Chiara Cordero, Erica Liberto*

**15.45 C24**  
**QUALITY AND AUTHENTICITY OF VACCINIUM CORYMBOSUM L.: A COMBINED CHEMICAL AND MOLECULAR APPROACH**  
*Manuel Martoccia, Valeria Fochi, Fabiano Travaglia, Monica Locatelli, Matteo Bordiga, Jean Daniel Coisson, Marco Arlorio*

**16.00 C25**  
**PRELIMINARY CHARACTERIZATION OF SICILIAN BLACK PIG MEAT ACCORDING TO THE GEOGRAPHICAL AREA OF BREEDING**  
*Federica Litrenta, Luigi Liotta, Alessandro Lazzaro, Vincenzo Chiofalo, Antonino Iuculano, Giuseppa Di Bella*

*III SESSIONE* (sala convegni)  
Sessione Parallela: **Natural compounds and Nutraceuticals**  
Moderatori:

**15.30 C26**  
**N-TRANS-CAFFEOYLTYRAMINE AND CANNABISIN A: A (NUTRI)COSMECEUTICAL INNOVATION FROM HEMP SEED MEAL**  
*Marialuisa Formato, Simona Piccolella, Severina Pacifico*

**15.45 C27**  
**ENHANCEMENT OF OLIVE TREE CV. CAIAZZANA PRUNING/DEFOLIATION RESIDUES FOR INNOVATIVE FOOD FORMULATIONS**  
*Hamid Mushtaq, Simona Piccolella, Marialuisa Formato, Severina Pacifico*

**16.00 C28**  
**WASTE BY-PRODUCTS FROM OLEA EUROPAEA AS A POTENTIAL APPLICATION IN INFLAMMATORY BOWEL SYNDROME**  
*Laura Beatrice Mattioli, Filomena Corbo, Maria Lisa Clodoveo, Roberta Budriesi*

**16.15 Pausa caffè**  
**16.15 – 16.45 Sessione Poster (arcata giardino)**

*IV SESSIONE* (sala centrale)  
Sessione Parallela: **Food traceability**  
Moderatori:

**16.45 C29**  
**METABOLOMIC PROFILING OF MEDICINAL AND AROMATIC PLANTS THROUGH AMBIENT MASS SPECTROMETRY COMBINED WITH CHEMOMETRICS: A POWERFUL TOOL AGAINST FRAUDULENT ACTIVITIES**  
*Francesca Rigano, Domenica Mangraviti, Paola Dugo, Luigi Mondello*

**17.00 C30**  
**HOW TO GUARANTEE THE NATURAL ORIGIN OF NUTRACEUTICAL AND PHARMACEUTICAL PRODUCTS? THE POTENTIAL OF THE STABLE ISOTOPE RATIOS ANALYSIS**  
*Matteo Perini, Silvia Pianezze*

**17.15 C31**  
**FOOD CHEMISTRY AS A USEFUL TOOL FOR BOTANICAL TAXONOMY: COFFEE DITERPENES AS MOLECULAR MARKERS**  
*Elena Guercia, Paola Crisafulli, Silvia Colombari, Luciano Navarini*

*IV SESSIONE* (sala convegni)  
Sessione Parallela: **Food waste**  
Moderatori:

**16.45 C32**  
**MOLECULAR CHANGES OF BLACK SOLDIER FLY LIPIDS WITH DIET, KILLING METHOD AND MICROBIAL FERMENTATION**  
*Veronica Lolli, Andrea Fuso, Anna Valentina Luparelli, Francesca Bonzanini, Jasmine Hadj Saadoun, Camilla Lazzi, Stefano Sforza, Augusta Caligiani*

**17.00 C33**

**THE FIRST 18 MONTHS OF THE H2020 “ECOEFSHENT” PROJECT:  
SUSTAINABILITY AND EFFICIENCY IN THE FISH PROCESSING SIDE-  
STREAMS**

*Federica Turrini, Federica Grasso, Valentina Orlandi, Giulia De Negri Atanasio, Elena Grasselli, Raffaella Boggia*

**17.15 C34**

**DEVELOPMENT OF A FERMENTATION PROCESS FOR THE PRODUCTION OF  
LACTIC ACID FROM OPUNTIA FICUS INDICA BY-PRODUCTS**

*Laura De Maria, Teresa Gervasi, Giovanna Lo Vecchio, Eleonora Di Salvo, Vincenzo Nava, Rossana Rando, Nicola Cicero*

**17.30-18.30 Tavola rotonda (sala centrale)  
ISTITUZIONI, ENTI DI CONTROLLO E SCIENZA A SOSTEGNO DELLE  
FILIERE AGRO-ALIMENTARI**

Intervengono:  
Giacomo Dugo (Moderatore)

**20.00 APERICENA BORDO PISCINA**

**Martedì 30 Maggio**

V SESSIONE (sala centrale)

Sessione Parallela: **Natural compounds and Nutraceuticals**

Moderatori:

**09.00 PL2**

**TRENDS IN THE NOVEL FOOD AREA**

*Rosangela Marchelli*

**9.30 C35**

**SECOIRIDOIDS FROM EXTRA VIRGIN OLIVE OIL EXTRACTS: CHEMICAL CHARACTERIZATION AND ANTI-INFLAMMATORY ACTIVITY IN OBESE CHILDREN**

*Filomena Corbo, Stefania De Santis, Laura Piacente, Anna Mestice, Pasquale Crupi, Paola Pontrelli, Antonio Moschetta, Maria Felicia Faienza, Maria Lisa Clodoveo*

**9.45 C36**

**CANNABIS SATIVA L. INFLORESCENCES AS POTENTIAL FUNCTIONAL FOOD: A PHYTOCHEMICAL CHARACTERIZATION**

*Cinzia Ingallina, Mattia Spano, Giacomo Di Matteo, Silvia Cammarrone, Francesca Ghirga, Bruno Botta, Enio Campiglia, Anatoly P. Sobolev, Luisa Mannina*

**10.00 C37**

**OPTIMIZATION OF URSOLIC ACID EXTRACTION IN OIL FROM ANNURCA APPLE TO OBTAIN OLEOLYTES WITH POTENTIAL NEUROPROTECTIVE APPLICATION**

*Maria Maisto, Paola Cuomo, Vincenzo Piccolo, Elisabetta Schiano, Fortuna Iannuzzo, Rosanna Capparelli, Gian Carlo Tenore*

**10.15 C38**

**SPECIALIZED METABOLITES FROM THE ENDEMIC SPECIES LAVANDULA AUSTROAPENNINA: A PROMISING BIORESOURCE TO BE EXPLOITED**

*Claudia Gravina, Simona Piccolella, Adriano Stinca, Severina Pacifico, Assunta Esposito*

**10.30 C39**

**EFFECT OF THE ADDITION OF JUJUBE (ZIZIPHUS JUJUBA MILL.) ON THE PRODUCTION OF VITAMINS AND PHENOLIC COMPOUNDS DURING KOMBUCHA FERMENTATION**

*Chiara La Torre, Alessia Fazio*

**10.45 C40**

**ARTICHOKE WASTE VALORIZATION IN READY-TO-USE (POLY)PHENOL FOOD SUPPLEMENTS**

*Simona Piccolella, Severina Pacifico*

V SESSIONE (sala convegni)  
Sessione Parallela: **Innovative analytical techniques**  
Moderatori:

- 9.30 C41**  
**REDUCED TIME AND ECO-FRIENDLY CHROMATOGRAPHIC ANALYSES FOR FAST QUALITY CONTROL OF OXYGEN HETEROCYCLIC COMPOUNDS IN FOODS**  
*Marina Russo, Maria Rita Testa Camillo, Giovanna Cafeo, Paola Dugo, Luigi Mondello*
- 9.45 C42**  
**COMPUTATIONAL METHODS IN FOOD CHEMISTRY**  
*Giosuè Costa*
- 10.00 C43**  
**VOLATILOME FINGERPRINTING FOR THE ASSESSMENT OF OLIVE OIL QUALITY AND AUTHENTICITY BY INNOVATIVE MULTI-CUMULATIVE TRAPPING EXTRACTION METHODOLOGY**  
*Natasha D. Spadafora, Steven Mascrez, Laura McGregor, Alberto Cavazzini, Luisa Pasti, Giorgia Purcaro*
- 10.15 C44**  
**USE OF AN HPLC-MS/MS METHOD COUPLED WITH LINEAR RETENTION INDEX SYSTEM TO CHARACTERIZE THE OXYGEN HETEROCYCLIC FRACTION IN CITRUS FLAVORED DRINKS**  
*Giovanna Cafeo, Tania Maria Grazia Salerno, Marina Russo, Paola Dugo, Luigi Mondello*
- 10.30 C45**  
**INTEGRATING VOLATILOME, PRIMARY AND SPECIALIZED METABOLOME BY DATA FUSION TECHNIQUES: A COMPREHENSIVE EVALUATION OF HAZELNUTS QUALITY**  
*Simone Squara, Andrea Caratti, Angelica Fina, Carlo Bicchi, Chiara Cordero*
- 10.45 C46**  
**INNOVATIVE GC-IMS ANALYSIS RECORDS THE DIGITAL FINGERPRINTS OF VOLATILES TO GAIN COMPLEMENTARY INSIGHT IN FLAVOUR COMPOSITIONS AS KEY ASPECT IN FOOD QUALITY AND AUTHENTICITY ASSESSMENTS**  
*Cesare Rossini, Hansruedi Gygax, Thomas Wortelmann*

**11.00 Pausa caffè**  
**11.00 – 11.30 Sessione Poster (arcata giardino)**

VI SESSIONE (sala centrale)  
Sessione Parallela: **Food waste**  
Moderatori:

**11.30 C47**

**VALORIZATION OF APPLE POMACE AS A MULTIFUNCTIONAL INGREDIENT FOR THE DEVELOPMENT OF FUNCTIONAL FOODS**

*Lina Cossignani, Federica Ianni, Francesca Blasi*

**11.45 C48**

**GRAPE PRODUCTS AND BY-PRODUCTS: COMPARATIVE ANALYSIS OF PHENOLIC PROFILE AND IN VITRO BIOLOGICAL ACTIVITIES**

*Chiara Di Lorenzo, Corinne Bani, Enrico Sangiovanni, Francesca Mercogliano, Mario Dell'Agli, Patrizia Restani*

**12.00 C49**

**CHARACTERIZATION AND VALORIZATION OF PHENOLIC RICH EXTRACTS FROM MALUS DOMESTICA CV MELA ABBONDANZA ROSSA**

*Cinzia Mannozi, Diletta Piatti, Doaa Abouelenein, Laura Alessandroni, Gianni Sagratini, Sauro Vittori*

**12.15 C50**

**VALORIZATION OF LOMBARD CEREAL WASTES: EVALUATION OF CORN COB, RICE HUSK, AND WHEAT PROCESSING BY-PRODUCTS AS SOURCES OF POLYPHENOLS WITH ANTIGLYCATIVE CAPACITY**

*Ilaria Frosi, Anna Balduzzi, Raffaella Colombo, Chiara Milanese, Adele Papetti*

**12.30 C51**

**ANTHOCYANIN NANOENCAPSULATION THROUGH WASTE VALORISATION: WHEY PROTEIN/HIGH METHOXY APPLE PECTIN COMPLEX COACERVATION**

*Ilaria Fierri, Laura De Marchi, Giacomo Rossin, Federica Mainente, Anna Perbellini, Maria Bellumori, Ines Mancini, Gianni Zoccatelli*

**12.45 C52**

**'TULARE' WALNUT SUPPLY CHAIN WASTE: A NEW CULTIVAR AS POTENTIAL BIORESOURCE IN THE NUTRACEUTICAL SECTOR**

*Elvira Ferrara, Severina Pacifico, Simona Piccolella, Assunta Esposito, Milena Petriccione*

**13.00 C53**

**BIOCHEMICAL AND NUTRITIONAL CHARACTERIZATION OF RED AND PURPLE POTATOES PEEL**

*Debora Dessì, Giacomo Fais, Giorgia Sarais*

VI SESSIONE (sala convegni)  
Sessione Parallela: **Food safety and contamination**  
Moderatori:

- 11.30 C54**  
**ANALYSIS OF PESTICIDES IN CORN-BASED SAMPLES BY COMPREHENSIVE TWO-DIMENSIONAL LIQUID CHROMATOGRAPHY**  
*Francesco Cacciola, Katia Arena, Paola Dugo, Luigi Mondello*
- 11.45 C55**  
**PESTICIDE RESIDUE LEVELS IN SEVERAL FOOD SAMPLES COMING FROM THE FERMO AREA, MARCHE REGION**  
*Annamaria Iannetta, Giovanni Angelozzi, Francesca Mazza, Lucia Coppola, Sabrina Tait, Enrica Fabbrizi, Lorella Ciferri, Cinzia La Rocca, Monia Perugini*
- 12.00 C56**  
**THE FIGHT AGAINST WINE'S BIOGENIC AMINES BEGINS IN THE VINEYARD**  
*Andrea Salvo, Cinzia Ingallina, Fabrizio Masciulli, Enrico Romano, Donatella Ambroselli, Federica Proietti, Giovanna Loredana La Torre, Archimede Rotondo*
- 12.15 C57**  
**ORGANIC AND INORGANIC CONTAMINANTS IN MOROCCAN MONOFLORAL HONEYS**  
*Vincenzo Nava, Angela Giorgia Potortì, Benedetta Sgrò, Vincenzo Lo Turco, Giuseppa Di Bella*
- 12.30 C58**  
**BIOACCUMULATION OF DEHT IN MYTILUS GALLOPROVINCIALIS AND POTENTIAL IMPLICATIONS IN THE NUTRITIONAL VALUE**  
*Miriam Porretti, Ambrogina Albergamo, Federica Litrenta, Caterina Faggio; Giuseppa Di Bella,*
- 12.45 C59**  
**MIGRATION OF MINERAL OIL HYDROCARBONS FROM RECYCLED PAPERBOARD UNDER ACCELERATED CONDITIONS**  
*Laura Barp, Chiara Conchione, Michele Suman, Francesca Lambertini, Sabrina Moret*
- 13.00 C60**  
**GREEN AND INNOVATIVE AGROCHEMICAL FORMULATIONS BASED ON LIPOSOMAL TECHNOLOGY**  
*Francesco Corrias, Ines Castangia, Salvatore Marceddu, Arturo Cocco, Roberto Mannu, Maria Manconi, Ignazio Floris, Alberto Angioni*

**13.30 Colazione di lavoro**

VII SESSIONE (sala centrale)  
Sessione Parallela: **Innovative analytical techniques**  
Moderatori:

- 15.00 PL3**  
**CONTROLLI ANTIFRODE E QUALITÀ AGROALIMENTARE: ICQRF-MASAF**  
*Stefania Carpino*
- 15.30 C61**  
**OPTIMIZATION OF GREEN EXTRACTION CONDITIONS TO RECOVER POLYPHENOLS FROM SALICORNIA EUROPEA L.**  
*Francesco Limongelli, Marilena Muraglia, Roberta Tardugno, Pasquale Crupi, Sabrina Fiorentino, Maria Lisa Clodoveo, Filomena Corbo*
- 15.45 C62**  
**TOWARDS THE STANDARDIZATION OF A METHOD FOR THE DETERMINATION OF SELECTED VOLATILE COMPOUNDS IN VIRGIN OLIVE OILS**  
*Tullia Gallina Toschi, Diego Luis García-González, Enrico Casadei, Ramón Aparicio-Ruiz, Maurizio Servili, Florence Lacoste, Stefania Vichi, Enrico Valli, Clemente Ortiz Romero, Roberto Selvaggini, Julien Escobessa, Beatriz Quintanilla-Casas, Alba Tres, Pierre-Alain Golay, Paolo Lucci, Erica Moret, Anastasios Koidis, Paul Brereton, Lanfranco Conte, Alessandra Bendini*
- 16.00 C63**  
**DEVELOPMENT OF A PRESSURIZED LIQUID EXTRACTION METHOD FOR GLUCOSINOLATES RECOVERY FROM BY-PRODUCTS OF CAMELINA SATIVA (L.) CRANTZ SEED**  
*Stefania Pagliari, Ciro Cannavacciuolo, Chiara Maria Giustra, Matilde Forcella, Paola Fusi, Massimo Labra, Luca Campone*
- 16.15 C64**  
**QUANTITATIVE DETERMINATION OF THE LIPIDIC HYDROPEROXIDES IN VIRGIN OLIVE OILS BY USING A GREEN, EASY-TO-USE, AND SENSITIVE SPECTROPHOTOMETRIC METHOD**  
*Francesco Longobardi, Vito Michele Paradiso*

VII SESSIONE (sala convegni)  
Sessione Parallela: **Food composition and quality**  
Moderatori:

- 15.30 C65**  
**THE WINE IS “NAKED”: FLINT GLASS BOTTLES CAUSE WINE AROMA IDENTITY DEGRADATION**  
*Silvia Carlin, Fulvio Mattivi, Victoria Durantini, Stefano Dalledonne, Panagiotis Arapitsas*



**15.45 C66**

**SAMPLE PREPARATION STRATEGIES FOLLOWED BY GC×GC BASED TECHNIQUES FOR FATTY ACIDS AND MINOR LIPID COMPONENTS INVESTIGATION IN FOOD-RELATED SAMPLES**

*Marco Beccaria, Angelica Fina, Chiara Cordero, Marco Piparo, Pierre Giusti, Pierre-Hugues Stefanuto, Luisa Pasti, Alberto Cavazzini, Jean-François Focant, Giorgia Purcaro*

**16.00 C67**

**A MULTIMETHODOLOGICAL APPROACH FOR THE CHEMICAL CHARACTERIZATION OF EDIBLE INSECTS: THE CASE STUDY OF ACHETA DOMESTICUS**

*Mattia Spano, Giacomo Di Matteo, Alba Lasalvia, Carlotta Fila Totaro, Stefania Garzoli, Maria Elisa Crestoni, Luisa Mannina*

**16.15 C68**

**COMPREHENSIVE METABOLOMIC INVESTIGATION OF FAUSTRIME FRUIT BY LC-MS AND GC-MS DATA FUSION COUPLED WITH MULTIVARIATE DATA ANALYSIS**

*Ciro Cannavacciuolo, Stefania Pagliari, Chiara Maria Giustra, Sonia Carabetta, Mariateresa Russo, Paola Branduardi, Massimo Labra, Luca Campone*

**16.30 Pausa caffè**

**16.30 – 17.00 Sessione Poster (arcata giardino)**

**17.00 RIUNIONE GICA**

**18.00 RIUNIONE ITACHEMFOOD**

**20.00 CENA SOCIALE presso Villa Favorita**

**Mercoledì 31 Maggio**

VIII SESSIONE (sala centrale)

Sessione Parallela: **Innovative analytical techniques**

Moderatori:

- 9.00 C69**  
**DETERMINATION OF CHIRAL PESTICIDES IN HEMP SEEDS BY USING ON-LINE SFE-ENANTIOSELECTIVE SFC-QQQ/MS**  
*Maria Rita Testa Camillo, Marina Russo, Paola Dugo, Luigi Mondello*
- 9.15 C70**  
**APPLICATION OF DIRECT ANALYSIS IN REAL-TIME MASS SPECTROMETRY (DART-MS) AND MULTIVARIATE APPROACH FOR THE RAPID AND AUTOMATIC EVALUATION OF EDIBLE OILS**  
*Domenica Mangraviti, Francesca Rigano, Cinzia Cafarella, Paola Dugo, Luigi Mondello*
- 9.30 C71**  
**DEVELOPMENT OF AUTHENTICATION MODELS BASED ON 1H-NMR SPECTROSCOPY COUPLED WITH CHEMOMETRICS FOR CHOCOLATE PRODUCTS**  
*Eleonora Truzzi, Davide Bertelli*
- 9.45 C72**  
**LABEL-FREE QUANTIFICATION OF THE KUNITZ INHIBITOR OF TRYPSIN KTI3 IN SOY PRODUCTS BY LIQUID CHROMATOGRAPHY – TANDEM MASS SPECTROMETRY**  
*Barbara Prandi, Chiara Vacca, Stefano Sforza, Tullia Tedeschi*
- 10.00 C73**  
**QUALI-QUANTITATIVE SCREENING OF BIOACTIVE COMPOUNDS FROM HEALTH FOOD THROUGH COMPREHENSIVE TWO-DIMENSIONAL LIQUID CHROMATOGRAPHY**  
*Katia Arena, Francesco Cacciola, Paola Dugo, Luigi Mondello*
- 10.15 C74**  
**INVESTIGATING HAZELNUT ROASTING WITH A MULTI-ANALYTICAL TECHNIQUE APPROACH**  
*Maria Mazzucotelli, Iulia Khomenko, Brian Farneti, Emanuela Betta, Elena Gabetti, Luca Falchero, Andrea Cavallero, Eugenio Aprea, Franco Biasioli*
- 10.30 C75**  
**FOOD METABOLOMICS BY GCXGC-TOF MS AND TANDEM IONIZATION: UNDERSTANDING THE IMPACT OF CLIMATE EVENTS ON EDIBLE CROPS QUALITY**  
*Angelica Fina, Nemanja Koljančić, Simone Squara, Donatella Ferrara, Carlo Bicchi, Ivan Špánik, Chiara Cordero*

**10.45 C76**

**COMPUTER VISION TO ANALYZE CHEMICAL SIGNATURES: A NOVEL WORKFLOW FOR RATIONALIZING RAW DATA EXPLORATION IN GC×GC**

*Andrea Caratti, Simone Squara, Angelica Fina, Stephen E. Reichenbach, Qingping Tao, Carlo Bicchi, Giorgio Borreani, Francesco Ferrero, Chiara Cordero*

VIII SESSIONE (sala convegni)

Sessione Parallela: **Food waste**

Moderatori:

**9.00 C77**

**GREEN EXTRACTION OF HYDROLYZED COLLAGEN PEPTIDES (HCPS) OBTAINED FROM TUNA YELLOWFIN SIDE-STREAMS AFTER INDUSTRIAL DEHYDRATION PROCESS**

*Valentina Orlandi, Federica Grasso, Lorenzo Dondero, Elena Grasselli, Federica Turrini, Raffaella Boggia*

**9.15 C78**

**INTEGRATED STRATEGIES AGAINST FOOD WASTE: BYPRODUCTS EXPLOITATION FOR SHELF-LIFE EXTENSION AND PACKAGING DEVELOPMENT**

*Antonella Cavazza, Maria Grimaldi, Edmondo Messinese, Daniel Milanese, Olimpia Pitirolo, Corrado Sciancalepore, Claudio Corradini*

**9.30 C79**

**COMPOSITION OF DISCARDED SICILIAN FRUITS OF OPUNTIA FICUS INDICA L.: PHENOLIC CONTENT, MINERAL PROFILE AND ANTIOXIDANT ACTIVITY IN PEEL, SEEDS AND WHOLE FRUIT**

*Maria Bellumori, Marzia Innocenti, Luisa Andrenelli, Fabrizio Melani, Lorenzo Cecchi, Gaetano Pandino, Giovanni Mauromicale, Stefano La Malfa, Nadia Mulinacci*

**9.45 C80**

**INTEGRATED AND SUSTAINABLE STRATEGY FOR THE INVESTIGATION AND VALORIZATION OF EXTRA VIRGIN OLIVE OIL EXTRACTS AND BY-PRODUCTS**

*Martina Bartolomei, Carlotta Bollati, Jianqiang Li, Carmen Lammi*

**11.00 Pausa caffè**

**11.00 – 11.30 Sessione Poster (arcata giardino)**

IX SESSIONE (sala centrale)

Sessione parallela: **Natural compounds and Nutraceuticals**

Moderatori:

**11.30 C81**

**CALENDULA ARVENSIS FLORETS: EFFECT OF FREEZE-DRYING ON THE ENCAPSULATION OF ITS SPECIALIZED METABOLITES AND ORAL BIOACCESSIBILITY**

*Marika Fiorentino, Simona Piccolella, Assunta Esposito, Severina Pacifico*

- 11.45 C82**  
**NMR AND HPLC CHARACTERIZATION OF GENTIANA LUTEA L. AERIAL PARTS: FLOWERS AS INGREDIENT FOR FUNCTIONAL FOODS WITH ANTI-MICOTOXINS ACTIVITY**  
*Giacomo Di Matteo, Mattia Spano, Luisa Mannina*
- 12.00 C83**  
**COMBINATION OF POMEGRANATE EXTRACT, B VITAMINS, AND VITAMIN C AGAINST PROLONGED FATIGUE: A MONOCENTRIC, RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED CLINICAL TRIAL**  
*Lorenza Francesca De Lellis, Hammad Ullah, Daniele Giuseppe Buccato, Alessandra Baldi, Gaetano Piccinocchi, Roberto Piccinocchi, Alessandro Di Minno, Maria Daglia*
- 12.15 C84**  
**INVESTIGATION OF THE HYPOCHOLESTEROLEMIC ACTIVITY OF AN INNOVATIVE PLANT DERIVED EXTRACT**  
*Lorenza d'Adduzio, Davide Marangon, Umberto Musazzi, Carlotta Bollati, Martina Bartolomei, Davide Lecca, Carmen Lammi*
- 12.30 C85**  
**COLD PRESSED SEED OILS AS A NEW SOURCE OF NUTRACEUTICALS – A COMPREHENSIVE CHEMICAL CHARACTERIZATION**  
*Cinzia Cafarella, Francesca Rigano, Emanuela Trovato, Paola Dugo, Luigi Mondello*

*IX SESSIONE (sala convegni)*

Sessione Parallela: **Food waste and Food Composition**

Moderatori:

- 11.30 C86**  
**VALORISATION OF RESIDUAL ORANGE PEELS FROM PDO CULTIVARS OF THE RIBERA AREA, SICILY (ITALY): EXTRACTION, CHARACTERIZATION AND BIOACTIVITY ASSESSMENT OF ESSENTIAL OILS AND SECONDARY METABOLITES**  
*Gregorio Peron, Sara Marcheluzzo, Giulia Bernabé, Gokhan Zengin, Kouadio Ibrahime Sinan, Michela Paccagnella, Ignazio Castagliuolo, Mirella Zancato, Stefano Dall'Acqua*
- 11.45 C87**  
**FROM AGRO-FOOD WASTE TO ZERO-IMPACT SOURCE: THE POMEGRANATE AS A MODEL SYSTEM**  
*Francesco Cairone, Chiara Salvitti, Irene Arpante, Caterina Frascchetti, Antonello Filippi, Stefania Cesa*
- 12.00 C88**  
**EVALUATION OF THE PISTACHIO'S AROMA COMPOUNDS BY HIGH-CAPACITY CONCENTRATION TOOLS COUPLED WITH MULTI-DIMENSIONAL GAS CHROMATOGRAPHY**  
*Andrea Schincaglia, Giorgia Purcaro, Nicola Marchetti, Alberto Cavazzini, Marco Beccaria*

**12.15 C89**

**INNOVATIVE ACTIVE LAYER-BY-LAYER EDIBLE COATING FORMULATION  
TO PRESERVE THE QUALITATIVE AND BIOCHEMICAL TRAITS OF ‘DELLA  
RECCA’ SWEET CHERRIES**

*Anna Magri, Rosaria Cozzolino, Livia Malorni, Gianluca Picariello, Francesco Siano,  
Milena Petriccione*

**12.45 Premiazioni**

**13.30 Colazione di lavoro**

**15.00 Chiusura attività congressuali**

**17.00** *Visita facoltativa alle CANTINE STORICHE DELLA FLORIO e degustazione di vini  
Marsala e fast food siciliano con spettacolo musicale.*