

VI International Conference
on Safety, Health and Welfare
in Agriculture and Agro-food Systems
RAGUSA SHWA POSTER SESSION
September 15, 2021

Poster session - Main Room

17,15-18,00

TOPIC 2. WMSDs Work related Muscular-Skeletal Disorders

Biomechanical risk for the hand-arm system during work activities on peach fruit tree

Massimo Cecchini, Andrea Colantoni, Danilo Monarca, Filippo Cossio, Leonardo Bianchini, Simone Riccioni

Health and Safety Risks in hop-picking activities: an analysis of the state of the art

Giovanni Matranga, Niccolò Pampuro, Lucia Vigoroso, Eugenio Cavallo, Federica Caffaro

TOPIC 3. Machine Milking, Animal Welfare, Sustainable livestock farming

Pre-slaughtering phases and meat quality of highly profitable cattle (Piedmontese fat ox)

Simone Stella, Silvia Mazzola, Annamaria Costa, Erica Tirloni, Ernesto Beretta, Francesco Tangorra

Calculation of the mixing time as a function of the dairy cow diet chemical homogeneity inside the mixing hopper

Francesco Tangorra, Vera Perricone, Alessandro Agazzi, Aldo Calcante, Giovanni Savoini, Annamaria Costa

Gut inflammation in adult pigs exposed to high ammonia levels during neonatal life. The effects of manure management on pig health

Katarzyna Palus, Valentina Herrera, Silvia Modina, Alessia Di Giancamillo, Annamaria Costa

The effect of lift crates on piglet survival rate during farrowing

Annamaria Costa, Cecilia Salvagnini, Canzio Meneghello, Francesco Tangorra, Fabio Palmeri, Andrea Salvagnini, Silvia Mazzola

Use of the daily milk yield deviations as an index of resilience in water buffalo

Roberto Steri, David Meo Zilio, Giustino Gaspa, Alfredo Pauciullo

TOPIC 5. Instrumentation, Equipment, Periodic Procedures and Tests

Check and calibration of spraying machinery in Lombardy: results of more than 15-years activity [PPT](#) - [Video](#)

Domenico Pessina, Lavinia Eleonora Galli, Davide Facchinetti

TOPIC 6. Safety Health and Welfare in Building

Lighting of milking parlours: results from a field study

Francesco Tangorra

TOPIC 7. Agriculture 4.0, Automation, Remote Control, Robot and Innovative Vehicle

Rovitis 4.0: an autonomous robot for spraying in vineyards

Letizia Aiello, Cristiano Baldoin, Marcello Biocca, Cristian Bolzonella, Pietro Gallo, Massimo Gardiman, Francesco Meneghetti, Federico Pallottino, Giorgio Pantano, Matteo Pantano, Jurij Rakun, Peter Lepej, Denise Vicino, Nicola Vicino, Alessandro Zanzotto

Automatic Image Labelling for Deep-Learning-Based Navigation of Agricultural Robots

Dario Calogero Guastella, Domenico Longo, Giovanni Muscato

Estimating Costs of a Chestnut Mechanical Harvester

Arlindo Almeida

TOPIC 8. Noise, Vibration, Dust, Endotoxin, Microorganism

Wood dust exposure during dry pruning in vineyard

Pietro Gallo, Sabina Failla, Marcello Biocca, Enrico Paris, Giampaolo Schillaci*

Operators' exposure to hand-arm vibration in small olive growing

Angela Calvo, Roberto Deboli, Christian Preti

Hand Arm Vibration: comparison between laboratory and in field tests

Emanuele Cerruto, Giuseppe Manetto, Rita Papa

Fisherman's exposure to the noise emitted by a prototype of an on-board rotating sorting machine for clams (*Chamelea gallina*)

Laura Fornaciari, Roberto Fanigliulo, Giuseppina Mascilongo, Corrado Costa, Renato Grilli, Marcello Biocca, Daniele Pochi

A new methodology for assessing worker's safety in agriculture

Giuseppe Aiello, Pietro Catania, Eliseo Roma, Mariangela Vallone

TOPIC 9. Occupational Health

Critical Issues in the Application of the INAIL Methodology for the Assessment of Work – Related Stress in the Agricultural Sector

Massimo Cecchini, Leonardo Bianchini, Filippo Cossio, Simone Riccioni

Effects of Climate Change on Health of People Working in Agriculture and Forestry

Erich Koch

Tackling Work-related Diseases in Agriculture

Gert van der Laan

Innovative Solutions to Reduce the Risk Levels of Accidents and Occupational Diseases in Hazelnut Cultivation

Danilo Monarca, Leonardo Bianchini, Andrea Colantoni, Filippo Cossio, Simone Riccioni, Giampaolo Schillaci, Luciano Caruso, Emanuele Cerruto, Giuseppe Manetto, Massimo Cecchini

TOPIC 10. Impacts of crops and livestock productions

Ammonia emissions from a BAT farrowing room. Results of a yearly monitoring survey

Annamaria Costa, Cecilia Salvagnini, Fabio Palmeri, Andrea Salvagnini, Francesco Tangorra

Evaluation of employed equipment for plant protection product application in olive orchards

Souraya Benalia, Bruno Bernardi, Giuseppe Zimbalatti

Safety in hazelnut mechanical harvesting

Pietro Catania, Maria Alleri, Eliseo Roma, Mariangela Vallone

Potential bioenergy and biofertiliser production from livestock waste in Mediterranean islands [PPT](#) - [Video](#)

George Attard, Noel Azzopardi, Antonio Comparetti, Carlo Greco, Antony Gruppetta, Santo Orlando

The influence of tractors on soil compaction in the last four decades

Santo Orlando, Antonio Comparetti, Pierluigi Febo, Carlo Greco

A case study of circular bioeconomy in Sicily through a home biowaste valorisation system

Carlo Greco, Antonio Comparetti, Santo Orlando

TOPIC 11. Precision farming and traceability

Purpose-intended modification of a conventional sprayer machine for application in Precision Agriculture

Elio Romano, Giampaolo Schillaci, Domenico Longo, Carlo Bisaglia, Sabina Failla

Farm Management Information Systems: digital register of farm management in Southern Italy

Paola D'Antonio

TOPIC 13. Environment Safety, People Health Protection and Welfare

Environmental and health hazard from urban waste compost: the role of information to overcome users' beliefs

Lucia Vigoroso, Giorgia Bagagiolo, Niccolò Pampuro, Eugenio Cavallo

Evaluation of sustainable weeding methods for the control of spontaneous flora in urban areas

Lucia Bortolini

Analysis of spray behaviour using different sprayers in Citrus groves

Souraya Benalia, Laura Violi, Pasquale Barreca, Giuseppe Zimbalatti, Bruno Bernardi

Error on drop size measurement due to image analysis digitisation

Giuseppe Manetto, Emanuele Cerruto, Domenico Longo, Rita Papa

TOPIC 14. ROPS and Stability Research

"Ask me what I need": Investigating users' training needs and design requirements to encourage the correct operation of Foldable Rollover Protective Structures

Federica Caffaro, Lucia Vigoroso, Margherita Micheletti Cremasco, Giuseppe Paletto, Eugenio Cavallo

A method to ascertain the lateral stability of wheeled narrow-track tractors

Domenico Pessina, Davide Facchinetti, Lavinia Eleonora Galli, Maurizio Cutini, Carlo Bisaglia - [PPT](#) - [PPT audio](#)

Track widening for a safe travelling of a timber tractor-trailer combination

Gianfranco Airoidi, Marco Manzone, Angela Calvo

ROPS design guidelines for the effective driver's protection in case of tractor overturning

Domenico Pessina, Lavinia Eleonora Galli, Davide Facchinetti

TOPIC 17. Food Safety

Effect of Nano Particles of Pomegranate Peel Extract on Shelf Life of some Fruit and Vegetable Products

Domenico Rongai, Francesca Baldassarre, Carlo Di Marco, Giuseppe Ciccarella

Comparison of cold brew and cold drip coffee extraction methods and stabilization technologies to extend the shelf life [PPT](#) - [PPT audio](#)

Giulia Angeloni, Piernicola Masella, Lorenzo Guerrini, Agnese Spadi, Ferdinando Corti, Maria Bellumori, Marzia Innocenti, Luca Calamai, Alessandro Parenti