

List of the Oral presentation with timing.

Tuesday, 16th September – 8.30-13.00

1.1 - Land and Water Conservation

Chairman: P.P. Roggero

1.1a - Erosion control; point and diffuse pollution control (Phytodepuration, Phytoremediation and other techniques)

Keynote: M. Flury

8.30 *Soil and its Importance for Human Civilizations*

Markus Flury

9.00 *Bulk Atmospheric Deposition in an Urban and Rural Sites in the Southern Po Valley (Northern Italy)*

Pieri L., Matzneller P., Gaspari N., Rossi Pisa P., Dinelli G.

9.12 *Irrigated Agriculture and Urban Waste Water: the Cases of Bean and Tomato*

D'Andrea L., Campi P., Palombo A.D., Convertini G., Ferri D., Mastroianni M.

9.24 *Responses to Ozone Pollution of Alfalfa Grown with Increasing Levels of Salt Stress*

Fagnano M., Cefariello R., Maggio A.

9.36 *Effect of Salinity Stress on Germination Indices in Six Rapeseed (Brassica napus) Cultivar*

Jajarmi V **Probably not present**

9.48 *Growth of Hemp and Lupin in Chromium, Arsenic and Copper Contaminated Soil*

Manninen P., Mäkelä P., Hartikainen H., Santanen A., Seppänen M., Stoddard F., Yli-Halla M.

10.00 *Distribution of Some Heavy Metals in the System: Irrigation Water-Soil-Fresh Potatoes*

Zarkovic B., Blagojevic S., Kloppmann W.

10.12 *Phytoremediation of Arsenic by Woody Species in Pluri-Contaminated Wastes*

Vamerli T., Bandiera M., Mosca G.

10.24 *The Use of Potassium Humate for Regulation of Heavy Metal Uptake by Spring Wheat and White Mustard*

Svoboda P., Mühlbachová G.

10.40– 11.00 Break

11.00 *Water Infiltration and Soil Losses in a Permanent Bed Irrigated System in Southern Spain*

Boulal H., Gómez-Macpherson H., Gómez J.A.

11.12 *Sod Seeding and Soil Erosion in a Semi-Arid Mediterranean Environment of South of Italy*

Cosentino S., Mantineo M., Copani V.

11.24 *Application of a Crop-Farm-Indicators Modelling Chain to Assess the Impact of the EU Nitrate Directive in the Midi-Pyrenees Region*

Belhouchette H., Louhichi K., Flichman G., Therond O., Wery J.

11.36 *Nitrate Concentration of Runoff in Two Rural Micro-catchments of Central Italy: Results From a Ten-Years Survey*

Orsini R., De Sanctis G., Perugini M., Toderi M., Roggero P.P.

11.48 *Ability of Different Cover Crops to Reduce N Leaching in Irrigated Maize Under Mediterranean Conditions*

Salmerón M., Isla R., Cavero J.

12.00 *Effect of Cover Crops on Water Balance, Nitrate Leaching and Crop Productivity*

Gabriel J.L., Quemada M.

12.12 *Quantitative Parameters for the Evaluation of Cover Crop Performance in Relation to Soil Cover and Rooting Dynamics*

Bodner G., Himmelbauer M., Loiskandl W., Kaul H.P.

12.24 *Efficacy of Narrow Buffer Strips in Removing Agricultural Pollutants in the Shallow Subsurface Water Flux from a Cultivated Field in North-East Italy*

Passoni M., Borin M.

12.36 *Performance of a Constructed Surface Flow Wetland in Abating Nutrients in Agricultural Drainage Waters*

Salvato M., Passoni M., Borin M.

Tuesday, 16th September – 14.30 -18.30

1.1 Land and Water Conservation

Chairman: S. E. Jacobsen

1.1b - Agronomic techniques for preserving ecosystem services

14.30 Keynote: I. Minguez Tudela

A Context for Agronomic techniques to Preserve Ecosystem Services

Inés Minguez M.

15.00 *Survey and optimization of nitrogen management in farming and cropping systems*

Fumagalli M., Bechini L., Mazzetto F., Sacco P., Vidotto F., Sali G., Bulgheroni C., Pastori M., Acutis M.

15.15 *Direct and Residual Effects of Organic Fertilisation on Crop Yields and Soil Organic Matter Content*

Nastri A., Triberti L., Giordani G., Comellini F., Baldoni G., Toderi G.

15.30 *Evolution of the Soil Nitrogen Mineral Content in a Wheat-Rapeseed Crop Rotation in Response to Nitrogen and Sulphur Fertilization*

Castellón A., Gallejones P., Unamunzaga O., Aizpurua A.

15.45 *The Effects of the Increasing Share of Cereals in Crop Rotations on the Selected Soil Properties*

Babulicová M.

16.00 *Effect of Farmyard Manure and Mineral Fertiliser on the Growth Parameters of Maize (Zea mays L.)*

Micskei G., Takács N., Lap Dang Q., Berzsenyi Z.

16.15 *Classification of Winter Triticale Cultivars based on Nitrogen Status Measurements*

Samborski S., Gozdowski D., Rozbicki J., Truszkiewicz W.

16.30 *Evaluation of Slow Release Nitrogen Fertilisers for Tall Cabbage Grown in Autumn*

Santos H., Rodrigues M.A., Dias L.G., Arrobas M.

16.45 *Sustainable N Management in Oilseed Rape*

Sieling K., Kage H.

17.00 *Selection of grain legumes species for intercropping system with maize – Polish experience*

Liszka-Podkowa A., Sowiński J.

17.15 *Effect of Cadmium on Plant Growth, Dry Matter Accumulation, Cd, and Zn Uptake of Different Tobacco Cultivars (Nicotiana tabacum L.)*

Vasiliadou S., Dordas C.

17.30 *A Combined Approach to Delineating Management Zones for Precision Agriculture*

Castrignanò A., Fiorentino C., Buttafuoco G., Troccoli A., Pisante M., Basso B.

17.45 *Highlights of an Experimental Study on the Vulnerability of a Soil-Crop System to Drought and Saline Water*

Tedeschi A., Lavini A., Basile A., Mele G., Menenti M.

18.00 *Myrosinase Immobilized on a Highly Demethylated Pectin: Effect of Soil Water and Organic Matter Content on the Enzyme Efficiency at Soil-Root Interface*

Braschi I., Cinti S., Faleo A.E., Leoni O., Palmieri S., Gessa C.E.

18.15 *Small Farmers' Access to Market: The Case of Quinoa, a Seed Crop from the Andes Region*

Jacobsen S.E., Mujica A., Canahua A.

Wednesday, 17th September – 8.30 -12.30

1.2 - Technologies for Biodiversity conservation

Chairmen: H. Stuetzel, O. Christen

1.2a - Ecological infrastructure – the interaction between natural resources and agriculture

Keynote: Alicja Pecio

8.30 *Relationships between natural conditions and crop production. Case study for Poland*
Pecjo A.

9.00 *Particle-Size Distribution and Associated Organic Matter under Different Cropping Systems and Tillage Practices in a Semi Arid Environment*
Barbera V., Poma I., Pristina L.

9.15 *Response of Microbial Activities to Additional Metal Amendment to Long-Term Heavy Metal Contaminated Soils*
Mühlbachová G.

9.30 *The Economic, Agronomic and Energetic Efficiency of Conservation Tillage in Organic Systems of Western France*
Aveline A., Amouchal M., Cannavacciuolo M., Peigne J.

9.45 *Cropping Sequences and Soil biodiversity. Case Study of Intensive Cropping Systems in the East Po Valley*
Manici L.M., Vicari A., Caputo F.

10.00 *Physiological Determinants of Grain Nitrogen in Wheats Released Since 1940 in Mediterranean Spain*
Acreche M.M., Slafer G.A.

10.15 – 11.00 Break

11.00 *Integrated Assessment of Agricultural Systems – a Modular System for Agricultural and Environmental Modelling (SEAMLESS-IF)*
van Ittersum M., Ewert F., Wery J., Heckelei T., Belhouchette H., Bergez J. E., Hengsdijk H., Janssen S., Russell G., Therond O.

11.15 *Assessment of Crop Management Using Agro-Ecological and Economic Indicators*
Bechini L., Castoldi N.

11.30 *A Method to Appraise Multiple Agro-Environmental Functions in Farming Regions*
Marraccini E., Rapey H., Galli M., Lardon S., Bonari E.

11.45 *Agricultural Land Use and Optimization of the Ecological Network Pattern: the Apulian “Monti Dauni Meridionali” Case Study*
Cammerino A.R.B., Piacquadio L., Marrese M., Monteleone M.

12.00 *Biodiversity as a Measure of Differences between Organic and Conventional Farming: a Case Study*

Vitali G., Lazzerini G., Epifani R., Vignudelli M., Vicari A.

12.15 *Greenhouse Structure Techno-Economic Material Selection and Simulation; SUGREMEMA Low Cost Greenhouse Case Study*

Valerio A.A., Reyes E., Valiente J., Molina A

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Wednesday, 17th September – 13.30 -15.30

1.2 – Technologies for Biodiversity conservation

Chairman: W. Grzebisz

1.2b - Vegetation and Seed bank dynamic

Part I. Seed Bank, Dormancy and Emergence

13.30 *Ecological Features of Ambrosia spp Seeds from Genetically Modified Soybean Fields*
Tanveer A., Nadeem Abbas R., Benvenuti S., Marotti I., Catione P., Dinelli G.

13.42 *Evaluation of Germination of Wild Plants in Order to Return this Species to the Nature*
Bláha L., Poková H.

13.54 *Modelling the Effects of Cropping Systems on Weed Emergence: How to Develop a Multi-specific Model?*
Gardarin A., Dürr C., Colbach N.

14.08 *The Seed Bank Dynamics as a Tool for Evaluating the Pasture Improvement Efficiency in a Mediterranean Environment*
Franca A., Seddaiu G., Sanna F., Caredda S.

Part II. Weed control and weed seed production

14.20 *Critical Period of Weed Control in Soybean (Glycine max L. (merr))*
Agha Alikhani M., Soufizadeh S., Etemadi F.

14.32 *The Changes in Weed Infestation of Spring Barley Caused by Soil Tillage*
Winkler J., Smutný V.

14.44 *Changes in Weed Community as affected by Tillage Systems in a Semi-Arid Environment*
Santín Montanyá I., Tenorio Pasamón J.L., García-Baudín J.M.

14.56 *Influence of Fodder Crop Rotations on the Potential Weed Flora in Maize Crops in Irrigated Lowlands of Lombardy, Italy*
Tomasoni C., Borrelli L., Caradonna S.

Part III. Weed seed bank – seed predation

15.06 *Predation by Ground Beetles on Weed Seeds Exhumed From Soil Bank*
Martinkova Z., Honek A.

15.18 *Weed Population Dynamics In Maize Crop Characterized By High And Low Weed Density*
Graziani F., Pannacci E., Covarelli G.

Tuesday, 16th September – 14.30 -18.30

2.1 - Functional foods and nutraceuticals

Chairman: G. Dinelli

Co-Chairman: D. Di Gioia

Keynote: A. Cifuentes

14.30 *New Analytical Perspectives for the Agronomic Research in the Field of Functional Food and Nutraceuticals*

León C., García-Cañas V., Ibáñez E., Cifuentes A.

15.00 *The Antioxidant Potential of Wheat Milling Fractions*

Sakač M., Mišan A., Mandić A., Sedej I., Kevrešan Z.

15.15 *Antioxidant Activity in Wheat Grains With Different Ploidy Levels*

Gagliardi A., Nicoletta Laus M., De Vita P., Flagella Z., Pastore D.

15.30 *Functional Properties of Wheat: Phytochemical Profiles of Old and New Varieties*

Dinelli G., Benedettelli S., Marotti I., Sonetti A., Ghiselli L., Segura Carretero A.

15.45 *Fluctuation of Isoflavone Concentration in Soybean Varieties Under Conventional and Organic Farming*

Barion G., Hewidy M., Mosca G., Zanetti F., Vamerali T.

16.00 *Iodine Fortification for the Development of Functional Foods*

Caffagni A., Albertazzi G., Milc J., Francia E., Meriggi P., Perata P., Acciarri N., Secchioni N.

16.15 *Application of Calcium and Magnesium Improves Yield and Essential Oil Yield of Oregano (Origanum vulgare ssp. hirtum)*

Dordas C.

16.30 *Application of Neural Networks for the Prediction of Lavender's Essential Oil Quality from Environmental Growing Conditions and Analytical Data*

Danuso F., Barbaro M., Conte L., Mondello L., Dalla Costa L., Giovanardi R.

Keynote: M. Penttilä,

16.45 *The biotech production of chemicals and materials from crop biomasses*
Penttilä M.

17.15 *Production of vaccines in plants: Safety first!*

Lössl A., Mayer F., Hassan S.W., Waheed T.M., Najafian Razavi M., Lössl E.

17.30 *Production of Vanillin from Wheat Bran Hydrolyzates Via Microbial Bioconversion*

Di Gioia D., Sciubba L., Ruzzi M., Fava F.

17.45 *Fresh Tomato Packinghouse Waste as Lycopene Biosource*
Riggi E., Avola G.

Wednesday, 17th September – 8.30 -13.00

2.2 - Biomass and energy production

Chairman: M. Askew

Keynote: C. Panoutsou

8.30

Panoutsou C.

9.00 *4F CROPS Future Crops for Food, Feed, Fibre and Fuel*

Alexopoulou E., Christou M., Eleftheriadis I.

9.15 *Resource Use for Food and Energy Crops*

Spiertz H., Ewert F.

9.30 *Testing Resource Use-Efficiency in Annual Energy Crops*

Barbanti L., Monti A., Pritoni G., Vecchi A., Venturi G.

9.45 *Energy Balance of Sweet Sorghum Genotypes (Sorghum Bicolor L. Moench) in a Semi-arid Environment of South of Italy*

Mantineo M., Copani V., Cosentino A., Scordia D.

10.00 *Effects of an Intensified Biomass Production of Agricultural Enterprises on Ecological and Economic Indices*

Reinicke F., Heinrich J., Steininger M., Wagner B., Christen O.

10.15 *Protecting Water Resources in Biofuels Production*

Huffaker R.

10.30 – 11.00 Break

11.00 *Identification of Biomass Crop Production Area and Genetic Algorithm Application for Optimal Location of Processing Plants*

Danuso F., Serafino L., Rosso S., Giovanardi R.

11.15 *Comparison of 7 Ligno-Cellulosic Biomass Feedstock Species: 6-Years Results in the Low Po Valley*

Di Candilo M., Ceotto E., Diozzi M.

11.30 *Biomass Production in Hilly Areas of Central Italy*

Orlandini S., Ferrise R., Mancini M., Orlando F., Natali F., Bindi M.

11.45 *Assessment of Mediterranean Pastures Biomass and Nitrogen Status Using Field Spectrometry*

Fava F., Colombo R., Bocchi S., Sitzia M., Meroni

12.00 *Physiological Background of Biomass Accumulation by Perennial C4 grasses in Poland*

Kołtoniak K., Maciorowski R.

12.15 *Site Adapted Choice of Energy Crops for Methane Production – Model Based Analysis of Drought Limitations on Maize Yield Potential*

Wienforth B., Schittenhelm S., Wulkau S., Herrmann A., Sieling K., Taube F., Kage H.

12.30 *Influence of Substrate Hormonal Composition on in vitro Multiplication of Arundo donax L.*

Cavallaro V., Patanè C., Tringali S., Cosentino S.L.

Thursday, 18th September – 8.30 -13.00

2.3 - Genomics for a more sustainable agriculture

Chairman: R. Tuberosa

Keynote: F. Tardieu

Invited Speakers: G. Fincher, M. A. J. Parry

8.30 *Plant Cell Wall Biology; Solving Old Problems with Functional Genomics*

Fincher G. B.

9.10 *The Genetic Improvement of Pyrethrum (Chrysanthemum Cinerariaefolium L.): a Biotechnological Approach*

Carrubba A., Catalano C., Abbate L., Motisi A., Tusa N.

9.30 *Genetic Dissection of Resistance to Soil-Borne Cereal Mosaic Virus (SBCMV) in Durum Wheat*

Ratti C., Maccaferri M., Rubies-Autonell C., Tuberosa R., Demontis A., Massi A., Stefanelli S., Vallega V., Sanguineti M.C.

9.50 *Genomic Tools for the Study of the Adaptation of Barley Crop to Climatic Constraints*

Tondelli A., Barabaschi D., Stanca A.M., van Eeuwijk F.A., Grando S., Mastrangelo A., Li Destri Nicosia O., Akar T., Al-Yassin A., Benbelkacem A., Romagosa I., T.B. Thomas W., Pecchioni N., Francia E.

10.15 *Integrated Approaches To Wheat Improvement Under Drought*

Parry M.A.J., Baudo M., Madgwick P., Phillips A., Habash D.

10.40 – 11.00 Break

11.00 *Tailoring Plants to Environmental Constraints by Scaling up from Molecular Biology to Crop Physiology*

Tardieu F., Parent B., Simonneau T., Turc O., Welcker C.

11.45 *QTLs Associated to Yield under Different Water and Nitrogen Availability in Durum Wheat*

Demontis A., Maccaferri M., Ammar K., Massi A., De Ambrogio E., Reynolds M., Monasterio I.O., Corneti S., Stefanelli S., Tuberosa R., Sanguineti M.C.

12.10 *Genetic and Agronomic Aspects of Heterosis in Maize: QTL Analysis, Development and Evaluation of Near Isogenic Lines for Heterotic QTL*

Frascaroli E., Canè M.A., Landi P., Pea G., Morgante M., Pè M.E.

12.30 *Development of Bioinformatic Tools Aimed at Spreading Microarray Profiling Techniques in Wild and Non-Model Crops*

Bagnaresi P.

Wednesday, 17th September – 8.30 -13.00

3.1- Assessment of the vulnerability of agricultural systems and areas

Chairman: G. Maracchi

Keynote: F. Chmielewsky

Vulnerability of Fruit Growers to Climate Change Observed Impacts and Assessments
Chmielewski F.-M., Blümel K., Henniges Y., Müller A.

9.00 /Bonamano A., Borin M., Berti A., Chiaudani A./ Adaptation of Maize Phenology to Climate Change in Veneto Region.

9.15 / Ventura F., Salvatorelli F., Matzneller P., Gaspari N., Rossi Pisa P./ Phenology Of Maize And Temperature Changes In The Last 40 Years.

9.30 /Tomei F., Pavan V., Antolini G., Marletto V., Villani G., Ventura F/. Seasonal weather predictions and crop modelling for wheat yield forecasting in Northern Italy.

9.45 /Utset A., del Río B., Santos J. M./ Starting a Bottom-Up Strategy to Introduce Climate-Change Adaptation Options in Castilla y Leon Agriculture.

10.00 /Colonna N., Lupia F., Iannetta M./ Expert Knowledge-Based Methodology for Land Degradation Risk Evaluation.

10.15/Manderscheid R., Erbs M., Nozinski E., Weigel H. J/. Interaction of Free Air Carbon Dioxide Enrichment and Controlled Summer Drought on Soil and Plant Water Relations and on Canopy Growth in a Maize Field.

10.30 –11.00 Break

11.00/Trimborn M., Heck C., Asch F., Brück H./ Options for the Management of Water Use in Energy Crop Production in Areas Prone to Summer Drought.

11.15/Qi A., Jaggard K. W./ The Effects of Climatic Drought on the Sugar Beet Yield in England Now and in the Future.

11.30 / *Giupponi C., Povellato A./ Climate Change and CAP Reform: Opportunities and Risks for Mediterranean Agriculture.*

11.45 /El Jarroudi M. , Tychon B. , Maraite H. , Hoffmann L./ Statistical Analysis of the Night Weather Conditions Favouring the Epidemic of the Brown Rust in the Grand Duchy of Luxemburg.

12.00/ *van Delden S. H., Brouwer G., Stomph T. J., Vos J.* Towards an Ideotype of Teff for Temperate Climates.

Thursday, 18th September – 8.30 -13.00

3.2 - Adaptation

Chairman: F. Villalobos

Keynote: J. Olesen

8.30 *Adaptation Strategies for Coping with Climate Change*
Olesen J. E.

Part I. New developments in crop modelling

9.00 *Functional-Structural Plant Modelling, Applied to Tillering in Wheat*
Evers J.B., Vos J., Andrieu B., Chelle M., Buck-Sorlin G.H.

9.15 *IXIM: A New Maize Simulation Model For DSSAT v 4.5*
Lizaso J.I., Boote K.J., Jones J.W., Porter C.H.

9.30 *Simulation of Growth and Production of Open-field Bell Pepper under Mediterranean Conditions*
De Melo e Abreu J.P., Vieira M.I., Ferriera M.E., Monteiro A.

Part II. Crop modelling with biotic factors

10.00 *ALOMYSYS: a Model for Evaluating and Developing Cropping Systems for Integrated Weed Management*
Colbach N., Sassi A., Granger S.

10.15 *Intercropping Winter Wheat with a Cover Crop in No-Till: a Modelling Approach*
Shili I., De Tourdonnet S., Launay M., Doré T.

10.30 – 11.00 Coffee Break

11.00 *A Model Framework For Simulating Plant Disease Epidemics*
Salinari F., Rossi V., Manici L.M.

Part III. Application of crop models. General

11.15 *From Detailed to Summary Models of the Crop-Soil System for Larger Scale Applications*
Adam M., Tiftonell P., Bergez J.E., Ewert F., Leffelaar P.

11.30 *Yield Modelling of Mediterranean Crops: a Probabilistic Approach*
Ferrise R., Moribondo M., Bindi M.

11.45 *From Site-Specific Modelling Supported by Monitoring Data to Regional Application*
Perego A., Acutis M., Velardo M.C., Brenna S., Pastori M., Bonfante A., De Mascellis R., Terribile F., Manna P., Basile A.

Part IV. Application of crop models. Climate change

12.00 *Using Long-Term Data and Crop Modelling to Assess Climate Change Impacts on Durum Wheat Production in the Mediterranean*

Cesaraccio C., Dettori M., Duce P., Spano D., Motroni A., Mereu V.

12.15 *Land, Climate and Resources (LandCaRe) 2020 – Foresight and Potentials in Rural Areas under Regional Climate Change*

Köstner B., Berg M., Bernhofer C., Franke J., Gömann H., Kersebaum K.C., Kuhnert M., Lindau R., Manderscheid R., Mengelkamp H.T., Mirschel W., Nendel C., Nozinski E., Pätzold A., Simmer C., Stonner R., Weigel H.J., Wenkel K.O., Wieland R.

12.30 *Using Agro-Meteorological Metrics to Communicate Climate Change Impacts to Land Managers*

Rivington M., Matthews K., Bellocchi G., Buchan K., Miller D.

Thursday, 18th September – 14.00 -16.30

3.3 - Greenhouse gas emissions from agriculture

Chairman: J R. Porter

Keynote: P. Kuikman

14.00 *Agriculture Climate Change and Mitigation – What Can Agriculture Do?*
Kuikman P.

14.30 *New Insight into Plant Gas Exchange Models Including Chemical and Hydraulic Signaling*
Ahmadi S.H., Andersen M.N., Poulsen R.T., Plauborg F.

14.45 *Should We Store Straw Carbon For Reducing Net Carbon Dioxide Emissions?*
Ceotto E., Marletto V.

15.00 *Soil Carbon Stocks, Carbon Dioxide Sequestration and Tillage Techniques*
Francaviglia R., Farina R., Corti G., De Sanctis G., Roggero P.P.

15.15 *Soil CO₂ Emissions under Different Management Systems*
Martin D., De Andrés E.F., Walter I., Zambrana E., Tenorio J.L.

15.30 *Carbon Sequestration in Tilled Soils as Influenced by Agronomic Practices*
Nastri A., Triberti L., Cirillo E., Giordani G., Comellini F., Baldoni G., Toderi G.

15.45 *Does Conservation Agriculture Mitigate the Negative Effects of Climatic Change on Crop Production: a Modelling Analysis for a Case Study in Zimbabwe*
Corbeels M., Thierfelder C., Delve R.J., Porter C.H.

16.00 *Micrometeorological Techniques for Field Measurements of Ammonia Volatilisation from Arable Lands*
Ferrara R.M., Loubet B., Martinelli N., Rana G.

16.15 *Estimates of Regional Ammonia Emissions from Agriculture for Poland*
Bieńkowski J., Jankowiak J.