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3rd Global Summit on

Plant Science

August 07-09, 2017 Rome, Italy



Day 1 August 07, 2017

08:00-08:30 Registrations

Olimpica 1

conference**series.com** 08:30-09:00

Opening Ceremony

Keynote Forum

~~08:30-09:10~~ 09:10-09:40 **Introduction**

Title: Rapid development of a castor cultivar with increased oil content

09:10-09:40

Grace Chen, U.S. Department of Agriculture, USA

Title: Natural products from Brazilian biodiversity, a source of new templates for medicinal chemistry

09:40-10:10

Vanderlan da S. Bolzani, Sao Paulo State University, Brazil

Title: Plant phenolics: New remedies for old disease

10:10-10:40

Djebbar Atmani, University of Bejaia, Algeria

Group Photo 10:40-10:50

Network & Refreshment Break 10:50-11:05 @ Foyer

Sessions: Plant Science and Natural Products | Plant Physiology and Biochemistry | Medicinal and Aromatic Plant Sciences | Arabidopsis | Seed Science and Technology | Photosynthesis

Session Chair: Grace Chen, U.S. Department of Agriculture, USA

Session Co-chair: Petronia Carillo, University of Campania, Italy

Session Introduction

Title: Enhancing NGS performance through improvements in template preparation procedure

11:05-11:30

Caroline Janitz, Western Sydney University, Australia

Title: Physiological impacts on coffee plants submitted to water deficiency

11:30-11:55

Fernando Broetto, Sao Paulo State University, Brazil

Title: What is the best possible response of plants to combined stresses? Indeed the simplest one

11:55-12:20

Petronia Carillo, University of Campania, Italy

Workshop on

Title: Next-Generation sequencing—basics & applications: Tools and technologies

12:20-13:00

Caroline Janitz, Western Sydney University, Australia

Lunch Break: 13:00-14:00 @ Hotel Restaurant

Title: Polyamines and flavonoids of bee pollen with anti-tyrosinase and antioxidant activity

14:00-14:25

Mi Kyeong Lee, Chungbuk National University, South Korea

Title: Cytotoxic, antidiabetic and anti-inflammatory activities of selected Algerian medicinal plants: From traditional use to scientific validation

14:25-14:50

Djebbar Atmani, University of Bejaia, Algeria

Title: Anti-ulcer activities of a local plant from Algeria, *Clematis flammul*

14:50-15:15

Dina Atmani-Kilani, University of Bejaia, Algeria

Title: Breadfruit (*Artocarpus altilis*) gibberellin metabolic genes: Stem elongation and abiotic stress response

15:15-15:40

Yuchan Zhou, University of the Sunshine Coast, Australia

Network & Refreshment Break 15:40-16:00 @ Foyer

- 16:00-16:25 **Title: Arabidopsis root formation is altered by cadmium and arsenic**
Laura Fattorini, Sapienza University of Rome, Italy
- 16:25-16:50 **Title: Genetic engineering of PPV resistance in plum rootstock 'Elita' ((*Prunus pumila* L. x *P. salicina* Lindl.) x (*P. cerasifera* Ehrh.))**
Sergey Dolgov, Nikita Botanical Gardens, Russia
- 16:50-17:15 **Title: Determination of polyphenol composition in Hevea brasiliensis and rubber-processing effluent via spectrophotometry and spectroscopy analysis**
Aidilla Mubarak, Universiti Malaysia Terengganu, Malaysia
- 17:15-17:40 **Title: Differential localization of ethylene receptor OsERS1 and OsETR2 in rice and the expression of OsETR2 during submergence**
Wing Kin Yip, University of Hong Kong, Hong Kong

Panel Discussion

Day 2 August 08, 2017

Olimpica 1

Keynote Forum

- 09:00-09:30 **Title: Inferring salt and water distribution in an irrigated crop field using electromagnetic induction techniques**
Leon D van Rensburg, University of the Free State, South Africa
- 09:30-10:00 **Title: Production of marker-free transgenic tomato and apple plants using inducible site-specific recombinase and a bifunctional selectable gene**
Sergey Dolgov, Nikita Botanical Gardens, Russia

Workshop on

- 10:00-10:40 **Title: Salt management of irrigated soils**
Leon D van Rensburg, University of the Free State, South Africa

Network & Refreshment Break 10:40-11:00 @ Foyer

Sessions: Plant Pathology and Plant-Micro-Biology | Plant Morphology and Plant Metabolism | Soil Science and Soil-Plant Nutrition | Plant Breeding and Molecular Breeding | Plant Biotechnology and Plant Tissue Culture | Agricultural Science

Session Chair: Vanderlan da S. Bolzani, Sao Paulo State University, Brazil

Session Co-chair: Minkyun Kim, Seoul National University, South Korea

Session Introduction

- 11:00-11:25 **Title: Effects of acute ozone exposure on the release of stress volatiles, and the expression of a monoterpene synthase gene in *Nicotiana tabacum* leaves through recovery**
Arooran Kanagendran, Estonian University of Life Sciences, Estonia
- 11:25-11:50 **Title: Study of the mechanisms underlying tomato innate immunity mediated by two Bwr12 genes**
Chiu-Ping Cheng, National Taiwan University, Taiwan
- 11:50-12:15 **Title: Indole-3-butyric acid promotes adventitious rooting in Arabidopsis thin cell layers**
Federica Della Rovere, University of Rome, Italy
- 12:15-12:40 **Title: Complementary interaction of two starch biosynthesis genes confers a mild sugary endosperm in rice**
Hee-Jong Koh, Seoul National University, South Korea
- 12:40-13:05 **Title: Regulation of floral terpenoid emission and biosynthesis in sweet basil (*Ocimum basilicum*)**
Jiayan Ye, Estonian University of Life Sciences, Estonia

Lunch Break 13:05-14:05 @ Restaurant

Poster Presentations 14:05-14:35 @ Foyer

Poster Judge: Vanderlan da S. Bolzani, Sao Paulo State University, Brazil

Title: Influence of plant height on chrysanthemum transformed with SHI (Short Internodes related genes)

EunJung Suh, National Institute of Agricultural Science, South Korea

- P02** Title: **Genome-wide characterization of the *Brassica rapa* genes encoding serine/arginine-rich proteins: Regulation of alternative splicing events by abiotic stress and hormone treatments**
Soo In Lee, National Institute of Agricultural Sciences, South Korea
- P03** Title: **Diploid *Perilla* de novo genome sequencing**
Tae-Ho Kim, National Institute of Agricultural Science, South Korea
- P04** Title: **The polycistronic expression using non-mammalian viral 2A sequences for carotenoid metabolic engineering in rice plants**
Sun-Hwa Ha, Kyung Hee University, South Korea
- P05** Title: **The effect of exogenous applications of salicylic acid at different growth stages to Iraqi wheat cv. Tamooz 2 on the up-regulation of the drought response regulon**
Fakhriya M. Kareem, Plymouth University, UK
- P06** Title: **The effect of sowing rate and variety on the yield, protein content and height of faba beans**
Margit Olle, Estonian Crop Research Institute, Estonia
- P07** Title: **The chemical forms of Fe used as in vivo substrate in uptake process of chloroplast**
Brigitta Lantos, Eotvos Lorand University, Hungary
- P08** Title: **Genetic and epigenetic variability of wild and cultivated watercress (*Rorippa nasturtium aquaticum*)**
Marcela Veronica Gutierrez Velazquez, CIIDIR Durango, Mexico
- P09** Title: **Phytochemical variation among populations of *Fouquieria splendens* Engelm (*Fouquieriaceae*)**
Hugo Manuel Monreal Garcia, CIIDIR Durango, Mexico
- P10** Title: **High-throughput phenotyping of rice using RGB imaging**
Kyung-Hwan Kim, National Institute of Agricultural Sciences, South Korea
- P11** Title: **Influence of symptoms, growth, mineral uptake and ginsenoside contents of *Ginseng* (*Panax ginseng* C.A.Meyer) to potassium concentrations in hydroponic culture**
Jin Yu, Department of Herbal Crop Research, NIHHS, South Korea
- P12** Title: **The grain yield and photosynthetic characteristics responses of rice to oxygen status in rhizosphere as affected by soil aerations**
Qianyu Jin, China National Rice Research Institute, China
- P13** Title: **Transcriptome analysis of dwarf soybean derived from crossing of *G. max* and *G. soja***
Chanseok Shin, Seoul National University, South Korea
- P14** Title: **A blend of volatile compounds emitted from *Alcaligenes faecalis* modulated hormonal pathways and ion transporters to induce salt tolerance in *Arabidopsis thaliana***
Yong Hoon Lee, Chonbuk National University, Republic of Korea
- P15** Title: ***P. nodorum* effectors resistance among Polish wheat and triticale germplasm**
Jakub Walczewski, Plant Breeding and Acclimatization Institute (IHAR), Poland

Sessions: Plant Pathology and Plant-Micro-Biology | Plant Morphology and Plant Metabolism | Soil Science and Soil-Plant Nutrition | Plant Breeding and Molecular Breeding | Plant Biotechnology and Plant Tissue Culture | Agricultural Science

- 14:35-15:00** Title: **The roc10, a rice hd-zip transcription factor gene, modulates lignin biosynthesis for drought tolerance**
Ju-Kon Kim, Seoul National University, South Korea
- 15:00-15:25** Title: **Analysis of OsmiR399 expression and down-regulation of LTN1 in rice**
Minkyun Kim, Seoul National University, South Korea
- 15:25-15:50** Title: **Stomata closure and pre-exposure to low-level O₃ protect leaves against high-level O₃-induced damage in *Phaseolus vulgaris***
Shuai Li, Estonian University of Life Sciences, Estonia
- 15:50-16:15** Title: **Arsenic and cadmium affect the crosstalk between auxin and jasmonate in *Oryza sativa* L.**
Marilena Ronzan, Sapienza University of Rome, Italy

- P16** Title: Roles of *Arabidopsis* ALDH10 enzymes in plant development and stress resistance
Florian Jacques, University of Technology of Compiègne, France
- P17** Title: Novel identification of CBF genes in rye and phylogenetic relationship in the *Triticeae*
Yong Weon Seo, Korea University, South Korea
- P18** Title: Biochemical characterisation of maize landraces for grain quality improvement
Danijela Ristic, Maize Research Institute Zemun Polje, Serbia
- P19** Title: Application of molecular markers (SSRs) in foreground selection for maize quality traits
Marija Kostadinovic, Maize Research Institute Zemun Polje, Serbia
- P20** Title: A new species of the genus *Malenchus* (Nematoda; Tylenchidae) from the rhizosphere of forest trees in northern Iran
Majid Pedram, Tarbiat Modares University, Iran
- P21** Title: Investigation of certain elicitor's effect on some gene's (TXS, TBT, and DBAT) relative expression level and paclitaxel production in *Taxus baccata* cell suspension culture
Mokhtar Jalali Javaran, Tarbiat Modares University, Iran
- P22** Title: Identification of gene sequences involved in chicoric acid biosynthesis pathway in *Echinacea purpurea* through RNA-SEQ transcriptome analysis
Mohammad Sadegh Sabet, Tarbiat Modares University, Iran
- P23** Title: Survey of five *Artemisia* species with different artemisinin contents in view of relative expression of 13 genes involved in artemisinin production, karyology, and nuclear DNA content
Ghasem Karimzadeh, Tarbiat Modares University, Iran
- P24** Title: Novel medium for enhancing callus growth in hazel (*Corylus avellana* L.)
Ahmad Moieni, Tarbiat Modares University, Iran
- P25** Title: Genome-wide screening and functional characterization of long intergenic noncoding rnas in *Arabidopsis*
Choonkyun Jung, Seoul National University, South Korea
- P26** Title: Oxalates assessment in the roots and shoots of taro (*Colocasia esculenta* (L.) Schott) submitted to drought conditions
Carla S.S Gouveia, University of Madeira, Portugal
- P27** Title: Characterization of *Avena* germplasm collection in National Centre for Plant Genetic Resources, Radzikow, Poland
Jerzy Czembor, Institute of Plant breeding and acclimatization - National Research Institute, Poland
- P28** Title: Morphological and molecular study of *Cryptaphelenchus* sp. (Nematoda, Ektaphelenchinae) associated with dead and dying pine trees in Iran
Majid Pedram, Tarbiat Modares University, Iran
- P29** Title: Increased resistance to virus infection through overexpression of some important host genes involved in plant defense in potato (*Solanum tuberosum* L.)
Mohammad Sadegh Sabet, Tarbiat Modares University, Iran
- P30** Title: UV illumination on *Crithmum maritimum* in vitro cell culture: A biomimetic approach
Julien Fouilland, France

Day 3 August 09, 2017

Sessions: Forest Science and Technology | Plant Genetics and epigenetics | Plant Genome Sciences
| Plant Synthetic Biology

Session Chair: Dina Atmani-Kilani, University of Bejaia, Algeria

Session Introduction

- 09:00-09:25 **Title: Glandular trichomes as a barrier against atmospheric oxidative stress**
Shuai Li, Estonian University of Life Sciences, Estonia
- 09:25-09:50 **Title: Nitrogen transformation characters in soil, use efficiency and rice grain yield as affected by soil aeration**
Lianfeng Zhu, China National Rice Research Institute, China
- 09:50-10:15 **Title: To flower or not to flower? The crucial decision of *Lilium longiflorum* bulbs**
Silit Lazare, Ben Gurion University, Israel
- 10:15-10:40 **Title: Barley stem reserves and yield maintenance under terminal drought: Molecular dissection of fructan biosynthesis and remobilization**
Zahra Sadat Shobbar, Agriculture Biotechnology Research Institute of Iran, Iran

Network & Refreshment Break 10:40-10:55 @ Foyer

- 10:55-11:20 **Title: Germplasm identification and salinity- tolerant gene isolation on *G. hirsutum* L.**
Wuwei Ye, Chinese Academy of Agricultural Sciences, China
- 11:20-11:45 **Title: Performance of rice varieties under rainfed condition in wet and dry tropics of Queensland, Australia**
Sachesh Silwal, CQUniversity, Australia
- 11:45-12:10 **Title: Phytochemical screening and *in vitro* free radical scavenging activity of different solvent extracts from *Convolvulus virgatus* Boiss**
Taoufik Saleh Ksiksi, UAE University, UAE
- 12:10-12:35 **Title: Construct a high-density genetic map in upland cotton and its application to genetic regulation analysis for yield and fiber quality traits**
Yulu Yuan, Chinese Academy of Agricultural Sciences, China
- 12:35-13:00 **Title: NPR1 mediated the cross talk between salicylate- and jasmonate- mediated pathways in *Carica papaya* in response to *Phytophthora palmivora***
Rui Zong Jia, China Academy of Tropical Agricultural Sciences, China

Lunch Break 13:00-14:00 @ Restaurant

- 14:00-14:25 **Title: Functional analysis of ALSAP domains "a20/an1" in abiotic stress tolerance mechanism**
Omar Moustafa Azab, King Saud University, Saudi Arabia
- 14:25-14:50 **Title: Phylogenetic study of indigenous pulses based on morphological and inter simple sequence repeat (ISSR) marker**
Filemon Yusuf, Bogor Agricultural University, Indonesia

Network & Refreshment Break 14:50-15:00 @ Foyer

Awards Ceremony

Bookmark your dates

5th Global Summit on

Plant Science

October 29-30, 2018 Madrid, Spain

E-mail: plantscience@conferenceseries.net; plantscience@plantscienceconferences.com; plantscience@agriconferences.com

Website: plantscience.global-summit.com

Oral Session: 2

Day 2 August 08, 2017

Plant Pathology and Plant-Micro-Biology | Plant Morphology and Plant Metabolism | Soil Science and Soil-Plant Nutrition | Plant Breeding and Molecular Breeding | Plant Biotechnology and Plant Tissue Culture | Agricultural Science

Session Chair

Vanderlan da S Bolzani

Sao Paulo State University, Brazil

Session Co-Chair

Chiu-Ping Cheng

National Taiwan University, Taiwan

Session Introduction

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Marilena Ronzan, Sapienza University of Rome, Italy

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Indole-3-butyric acid promotes adventitious rooting in *Arabidopsis* thin cell layers

Federica Della Rovere, Laura Fattorini, Angela Veloccia, Simone D'Angeli, Giuseppina Falasca and Maria Maddalena Altamura
Sapienza University of Rome, Italy

Adventitious roots (ARs) are post-embryonic roots formed *in planta* by tissues of the primary root in secondary vascular structure and by tissues of the aerial organs. Indole-3-acetic acid (IAA), and its natural precursor indole-3-butyric acid (IBA), control AR formation *in planta* and *in vitro*, however IBA roles is still far to be elucidated. *Arabidopsis* thin cell layers (TCL) consist of stem inflorescence tissue external to the vascular system and 10 μM IBA applied with 0.1 μM Kinetin induce AR formation from stem TCL. In the *Arabidopsis* transversal stem cuttings, it has been hypothesized that the induction of AR formation by exogenous IBA occurs by an interaction with the endogenous IAA content, but there is no information about the interaction between the two auxins in the TCLs. In *Arabidopsis* seedlings, it has been demonstrated that IBA is sufficient to stimulate IAA transport because PIN-FORMED1 (PIN1) IAA-efflux carrier, auxin resistant1 (AUX1) and like auxin resistant3 (lax3) iaa-influx carriers are active also in the presence of iba alone. The weak ethylene-insensitive2/anthranilate synthase alpha1 (WEI2/ASA1) and wei7/anthranilate synthase beta1 (ASB1), are genes involved in IAA-biosynthesis and required for AR formation in *Arabidopsis* seedlings. It is unknown whether the same genes are involved in AR-formation by TCLs. The aim of the research was to determine the endogenous levels of IBA and IAA at the onset of the culture in *Arabidopsis* TCLs. Another aim was to understand whether IBA alone was able to induce AR formation in TCL, whether the IAA transport by PIN1, LAX3, and AUX1 was affected, whether an IBA conversion into IAA was needed, and whether an IAA biosynthesis by WEI2/ASA1 and WEI7/ASB1 was also involved. Results indicate that IBA induced AR-formation by conversion into IAA, with this process involving nitric oxide formation and activity, and by positively affecting IAA-transport and ASA1/ASB1-mediated IAA-biosynthesis.

Biography

Federica Della Rovere investigated the mechanisms affecting the initiation and development of adventitious roots *in planta* and *in vitro* systems, with a special interest in the genetic control affecting this organogenic process and in the definition of stem cell niche of the apical root meristem in *Arabidopsis*. She is also interested in the somatic embryogenic process in numerous species, and the genetic and hormonal control involved in xylogenesis.

federica.dellarovere@uniroma1.it

Notes:

Upcoming Agriculture Conferences

10th International Conference on
Agriculture & Horticulture

October 02-04, 2017 London, UK
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7th International Conference on
Aquaculture & Fisheries

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19th International Conference on
Food Processing & Technology

October 23-25, 2017 Paris, France
foodtechnology.conferenceseries.com

2nd International Conference on
Food Microbiology

November 29-30, 2017 Madrid, Spain
foodmicrobiology.conferenceseries.com

Bookmark your dates

5th Global Summit on

Plant Science

October 29-30, 2018 Madrid, Spain

E-mail: plantscience@conferenceseries.net; plantscience@plantscienceconferences.com; plantscience@agriconferences.com

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