
28th International Symposium of CIEC

Programme

Tuesday, November 3, 2020

09.00 - 9.30 Registration

09.30 - 10.00 Opening ceremony

10.00 - 11.00 Oral presentations - **Fertilizer technology**

Chair: Silvia Haneklaus, Ioannis Massas

10.00 – 10.20

The Greek fertilizer sector: Endorsing sustainability in a changing world

F. Giannakopoulou, D. Gasparatos, N. Koutsougeras, I. Vevelakis, N. Kyriakidis, D. Rouseas, C. Ehaliotis

10.20 – 10.40

Traditional nitrogen fertilizers compared to control release urea technology effect, on nitrogen use efficiency in bread wheat (*Triticum aestivum* L.), maize (*Zea mays* L.) and cotton (*Gossypium hirsutum* L.) in Balkan region

Vasilis Tsambardoukas, Thanasis Rosoglou

10.40 – 11.00

Preliminary assessment of N stabilizer N-Lock™ with Optinyte™ technology (nitrapyrin) applied with urea fertilizers in cotton (*Gossypium hirsutum* L.) agrosystem at Imathia, Greece

Georgios Giannopoulos, Georgios Zanakis, Lars Elsgaard, Nick Barbayiannis

11.00 -11.30 Break

11.30 – 12.50 Oral presentations - **Soil quality and amelioration**

Chair: Ewald Schnug, Petros Roussos

11.30 – 11.50

Silent alienation of soils through microplastics in the anthropocene

Xijuan Chen, Elke Bloem, Jie Zhuang, Ewald Schnug

11.50 – 12.10

Is acidification a suitable method to limit ammonia losses from slurry?

Silvia H. Haneklaus, Martin Kaupenjohann, Ewald Schnug

12.10 – 12.30

The nutritional profiles of fields cultivated with *Aloe barbadensis* crops in Neapolis, Laconia, Greece, and their impact on leaf sulfur status

Mary Perouli, Artemios Chatziartemiou, Styliani N. Chorianopoulou, Dimitris L. Bouranis

12.30 – 12.50

Glycine betaine, *Bacillus amyloliquefaciens* IT45 and zeolite-bentonite mixture as ameliorating agents against salt stress in strawberry

Ntanos Efstathios, Assimakopoulou Anna, Dionisios Gasparatos, Nikoleta-Kleio Denaxa, Kosta Anna, Roussos A. Petros

12.50 – 14.00 Break

14.00 – 15.20	<p>Oral presentations - Nutrient management</p> <p>Chair: Demet Seyhan, Dimitrios Savvas</p>
14.00 – 14.20	<p>Sustainable phosphorus management depends on safer phosphate fertilizers: mitigation of heavy metal contamination</p> <p><u>Liankai Zhang</u>, Yajie Sun, Bernd G. Lottermoser, Roland Bol, Miyuki Maekawa, Heike Windmann, Silvia H. Haneklaus, Ewald Schnug</p>
14.20 – 14.40	<p>Automation of phosphorus budgets for national agriculture</p> <p><u>Demet Seyhan</u>, Taner Ulusinan</p>
14.40 – 15.00	<p>NUTRISENSE: A novel software operating as an internet application to support plant nutrition and fertilization via nutrient solutions in greenhouse crops grown hydroponically</p> <p><u>Dimitrios Savvas</u></p>
15.00 – 15.20	<p>Effect of biostimulants on yield performance of two durum wheat cultivars</p> <p><u>Vasilis Koutsougeras</u>, Panayiota Papastylianou</p>
15.20 – 16.00	Break
16.00 – 17.20	<p>Oral presentations - Foliar applications</p> <p>Chair: Mario Malagoli, Thomas Sotiropoulos</p>
16.00 – 16.20	<p>Effects of silicon, potassium and calcium applications on kiwi fruit quality characteristics and nutrient concentration</p> <p>Ntanos Efstathios, Tsafouros Athanasios, Denaxa Nikoleta-Kleio, Kosta Anna, Assimakopoulou Anna, <u>Roussos A. Petros</u></p>
16.20 – 16.40	<p>Effect of foliar calcium fertilizers on fruit quality and nutritional status of the 'Red Chief' apple cultivar</p> <p><u>Thomas Sotiropoulos</u>, Antonios Voulgarakis, Dionisios Karaiskos, Frantzis Papadopoulos, Eirini Metaxa, Areti Bountla, Panagiotis Xafakos</p>
16.40 – 17.00	<p>Silicon foliar application influences drought tolerance in <i>Vitis vinifera</i> cv. Sauvignon blanc</p> <p><u>Mario Malagoli</u>, Enrico Sforzi, Stefania Sut, Stefano Dall'Acqua, Franco Meggio</p>
17.00 -17.20	<p>Metabolite variation in white grape <i>Vitis vinifera</i> cv Bianchetta induced by silicon treatment</p> <p><u>Mario Malagoli</u>, Stefania Sut, Simone Vincenzi, Franco Meggio, Stefano Dall'Acqua</p>

Wednesday, November 4, 2020

09.30 – 10.00 Registration

10.00 - 12.00 Oral presentations – **Sulfur nutrition**

Chair: Luit De Kok, Dimitris Bouranis

10.00 – 10.20

Regulation of sulfur homeostasis in C₄ monocots

Ties Ausma, Chiel-Jan Riezebos, Timothy O. Jobe, Parisa Rahimzadeh Karvansara, Stanislav Kopriva, Luit J. De Kok

10.20 – 10.40

Sulfate assimilation in C₄ plants

Silke Gerlich, Anna Koprivova, Ivan Zenzen, Parisa Rahimzadeh Karvansara, Timothy O. Jobe, Stanislav Kopriva

10.40 – 11.00

Impact of sulfur nutrition on the expression and activity of Group 1 sulfate transporters in developing *Brassica pekinensis* seedlings

Dharmendra H. Prajapati, Ties Ausma, Tahereh A. Aghajanzadeh, Luit J. De Kok

11.00 – 11.20

Sulfur nutrition and fertilization of CAM crops: The cases of *Aloe barbadensis* and *Opuntia ficus-indica* crops

Dimitris L. Bouranis, Mary Perouli, Styliani N. Chorianopoulou

11.20 - 11.40

Crop biofortification with sulfur: Methionine as fertilizer additive

George Mentzos, Despina Dimitriadi, Kostantinos Lagos, Andriani Tzanaki, Violetta Constantinou-Kokkotou, Styliani N. Chorianopoulou, Dimitris L. Bouranis

11.40 - 12.10 Break

Poster session

12.10 – 14.10
Chair: Ties Ausma, Styliani Chorianopoulou

12.10 – 12.20

Responses of plant and soil to poly- γ -glutamic acid (γ -PGA)

Lei Zhang, Xueming Yang, Yuanliang Shi, Decai Gao, Jie Li, Lingli Wang, Zhanbo Wei, Nana Fang

12.20 – 12.30

Effects of nitrification inhibitor on the nutrient cycles of the brown soil and red soil in China

Lingli Wang, Zhanbo Wei

12.30 – 12.40

Effects of maize residue return rate on nitrogen transformations and gaseous losses in an arable soil

Jie Li, Jiafa Luo, Yuanliang Shi, Hongbo He, Xudong Zhang

12.40 – 12.50

Effect of iron deprivation on maize root phenotype

Yannis E. Ventouris, Sotiris Filippaios, Sotiria-Theoklitia Protopappa, Venetia Psarra, Athina Velentza, Dimitris L. Bouranis, Styliani N. Chorianopoulou

12.50 – 13.00

Selenium adsorption characteristics of selected acid and calcareous Greek cultivated soils

Ioannis Zafeiriou, Dionisios Gasparatos, Georgios Kalyvas, Ioannis Massas

13.00 - 13.10

Selenium assimilation by broccoli: Effect of Se inputs on the biosynthesis of secondary metabolites under normal or reduced S inputs

Marigo Adamopoulou, Emmanuel A. Bouzas, Vassilis Siyiannis, Mary Perouli, Maroula Kokotou, Styliani N. Chorianopoulou, Violetta Constantinou-Kokotou, Dimitris L. Bouranis

13.10 – 13.20

Evaluation of the effect of different levels of nitrogen fertilization on oregano cultivation (*Origanum x intercedens*) concerning morphological, quantitative and chemotypic characteristics of essential oils. Monitoring of the plantation using Geographic and Information Systems

Alexandros Assariotakis, Andriana Karachaliou, Konstantina Lontou, Ioannis Katsikis, Dionysios Kalyvas, Petros Tarantilis, Garyfalia Economou

13.20 – 13.30

Plant growth promoting endophytic bacteria (PGPEB) from *Calendula officinalis* effect on plant growth and root architecture of *Arabidopsis thaliana* Col-0

P.C. Tsalgatidou, E.E. Thomloundi, A. Venieraki, P. Katinakis

13.30 – 13.40

Characterization of endophytic bacteria from medicinal plants and growth effect on *Arabidopsis thaliana* in vitro

E.E Thomloundi, P. Tsalgatidou, A. Venieraki, P. Katinakis

13.40 – 13.50

The use of alternative, environmentally friendly, fertilization forms of symbiotic epiphytic and endophytic microorganisms towards reducing water pollution

Kallimachos Nifakos, Eirini Evangelia Thomloundi, Polina C. Tsalgatidou, Anastasia Venieraki, Costas Delis, Anastasios Kotsiras, Panagiotis Katinakis

13.50 – 14.00

Nickel toxicity in *Brassica rapa* seedlings: Impact on sulfur metabolism and mineral nutrient content

Dharmendra H. Prajapati, Ties Ausma, Jorik de Boer, Malcolm J. Hawkesford, Luit J. De Kok

14.00 – 14.10

Comparison study on the phytoremediation potential of three energy crops

Danai Kotoula, Eleni G. Papazoglou

14.10 – 15.00

Vote for best poster

Break

15.00– 16.40 Oral presentations – **Plant microbe interactions**

Chair: Constantinos Ehaliotis, Panagiota Papastylianou

15.00 – 15.20

Influence of sulfur nutrition on plant microbe interactions

Anna Koprivova, Jan Mandelkow, Philipp Spohr, Gunnar Klau, Stanislav Kopriva

15.20 – 15.40

Plant growth promoting arylsulfatase producing rhizobacteria isolated from wheat effect on plant growth

Anastasia Venieraki, Styliani N. Chorianopoulou, Panagiotis Katinakis, Dimitris L. Bouranis

15.40 – 16.00

Impact of different crop rotation schemes on biological nitrogen fixation, N availability and yield in common bean grown for fresh pod production

I. Karavidas, G. Ntatsi, T. Ntanasi, I. Vlachos, A. Tampakaki, P. Iannetta, D. Savvas

16.00 – 16.20

***Pyrenophora teres* and *Rhynchosporium secalis* infections in malt barley as influenced by nitrogen fertilization: Assessing their epidemiology and effect on yield and quality**

Petros Vahamidis, Angeliki Stefopoulou, Christina S. Lagogianni, Garyfalia Economou, Nicholas Dercas, Vassilis Kotoulas, Dimitrios I. Tsitsigiannis

16.20 – 16.40

Colonization with arbuscular mycorrhizal fungi (AMF) enhances growth and mineral acquisition of tomato (*Solanum lycopersicum* L.) plants under normal and drought stress conditions

G. Leventis, M. Tsiknia, M. Feka, E.V. Ladikou, I.E. Papadakis, K. Papadopoulou, C. Ehaliotis

16.40 – 17.30 Best poster award

Closing ceremony
