

Final program

VIII ISHS Symposium on Mineral Nutrition of Fruit Crops



Monday, 26 June 2017

17:00-19:00 Registration of participants

Tuesday, 27 June 2017

09:00 Opening Ceremony

09:45 **Opening lecture**
Building resilience: future directions in mineral nutrition of woody perennial crops
Neilsen D., Neilsen G., Forge T.

10:25 Coffee break

10:55 **Keynote**
Nutrient availability in the rhizosphere
Mimmo T.

11:25 **Uptake and allocation of nutrients**

Breeding apple rootstock for modulation of mineral nutrient composition in scions
Fazio G., Cheng L., Francescatti P., Lordan J., Grusak M., Robinson T.

Iron deficiency root responses and effects of different iron fertilization practices in *Prunus*
Abadia J., Luis-Villarroya A., Gogorcena Y., Abadia A., Alvarez-Fernández A.

Effect of plant growth-promoting rhizobacteria on the growth and quality of strawberry (*Fragaria ananassa*)
Pii Y., Graf H., Valentinuzzi F., Cesco S., Mimmo T.

12:30 Lunch

14:00 **Keynote**
From isotopes to x-ray fluorescence and high-resolution 3-D visualization: alternative approaches for studying calcium uptake and distribution in apple
Kalcsits L., Giordani L., Van Der Heijden G., McNear D.

14:30 **Uptake and allocation of nutrients**

Potassium affects the sugar content and the expression of key genes involved in sugar metabolism in leaves and fruit of “Huangguan” pear
Dong C., Shen C., Xu Y.

Impact of reduced post-véraison leaf area on the relationship between petiole and fruit composition
Holzapfel B., Rossouw G., Smith J.

Uptake and internal allocation of nitrogen in apple trees
Swarts N., Close D., Morris M.

Leaf and root nitrogen uptake from simulated atmospheric deposition in potted apple trees
Zanotelli D., Panzacchi P., Scandellari F., Mosca E., Tagliavini M.

15:45 Coffee break

16:15 **Mineral nutrition and environmental stresses**

Evaluating the efficiency of a pre-harvest combination of calcium and boron as foliar application to reduce sunburn on “Cripps Pink” apples
Lötze E., Daiber S.H., Midgley S.J.E.

Effect of soil phosphorous addition on growth, nutritional status and photosynthesis of potted grapevine plants grown with an excess of copper

Baldi E., Miotto A., Sorrenti G., Quartieri M., Brunetto G., Ceretta C.A., Toselli M.

Peach rootstock tolerance to excess zinc in sandy acidic soil

Brunetto G., Tiecher T.L., Hammerschmitt R.K., Basso Facco D., Ferreira P.A.A., De Conti L., Oliveira Stefanello da Silva L., Mayer N.A., Correa Antunes L.E., Cesco S., Mimmo T.

17:15 Introduction to the poster session

17:35 Poster session

18:35 Welcome cocktail

Wednesday, 28 June 2017

All day field trip

Thursday, 29 June 2017

09:00 **Keynote**

Olive fertilization requirements under intensive cultivation management
Dag A., Erel R., Ben-Gal A., Yermiyau U.

09:30 **Mineral nutrition and fruit quality**

Effects of potassium nutrition on fruit yield and quality of the Maltese citrus cultivar (*Citrus sinensis*, L.)
Mimoun M.B., Dbara s., Lahmer K., Marchand M.

Potassium nutrition and its effect on yield, fruit quality and storage life of tropical and subtropical fruits
Mitra K.S.

A review on balancing nitrogen and potassium nutrition of the pear cultivar 'Conference'
Gomand A., Vercammen J., Siongers V., Bylemans D.

10:30 Coffee break

11:00 **Agronomic techniques and mineral nutrition**

Cover crops effects on grape yield and yield quality, and soil nitrate concentration in three vineyards in Ontario, Canada
Sharifi M., Carter K., Baker S., Verhallen A., Nemeth D.

Remediation of soil fertility and management of mineral nutrition in fruit orchards under a sustainable farming system in semi-arid conditions
Xiloyannis C., Mininni A.N., Dichio B., Pascazio s., Crecchio C., Sofo A.

Five year nutritional study of apples in commercial high density orchards
Crassweller R.M., Baugher T., Smith D.

The effect of transition from flood irrigation method to drip irrigation on leaf nutrient concentrations of apple cv. Starkrimson Delicious
Uçgun K., Küçükyumuk C., Bayav A.

12:20 Lunch

13:50 **Keynote**

Role of mycorrhizae on mineral nutrition of fruit trees
Ortas I.

14:20 **Mineral nutrition in organic farming**

Apple root systems for organic orchards: what might be the contribution of the rootstock
Atkinson D.

Vine performance and wine composition of chardonnay in relation to organic soil amendment in Mediterranean environment
Tarricone L., di Gennaro D., Debiase G., Amendolagine A.M., Gentile G., Masi G.

Fertilization strategies to increase nitrogen content in organic apple trees in the flowering period
Vangdal E., Koort A.

15:20 Introduction to the poster session
15:40 Coffee break
16:10 Poster session
17:10 Business meeting
20:00 Social dinner

Friday, 30 June 2017

09:00 **Keynote**
Supplying nutrients through fertigation and the impact of rootstock to optimize yield and maximize quality in tree fruit
Fallahi E., Neilsen D.

09:30 **Nutrient supply methods**

Uptake and effect studies with foliar-applied or fertigated phosphorus with apple and pear grown on soils with and without calcium carbonate
Van der Maas M.P.

Apple orchard spraying with commercial sources of calcium to improve fruit quality
Amarante C., Katsurayama J., Pereira A., Steffens C.

Foliar zinc applications in Prunus: from lab experience to orchard management
Saa Silva S., Negron C., Brown P.

10:30 Coffee break

11:00 **Nutrient supply methods**

Combination of manure and chemical fertilizers improve Nanguo pear (*Pyrus ussuriensis* Maxim) growth and soil fertility in Northeastern China
Liu X., Cheng L., Chen Q.

Autumn fertilization in raspberry, blackberry and strawberry
Sønsteby A., Woznicki T.L., Heide O.M

Quantity and quality of production, partitioning of dry matter and of mineral nutrients in apple trees subjected to four-year different fertilization strategies
Porro D., Pedò S., Pasqualini J., Bertoldi D.

12:00 **Memorial lecture**
Professor Dr. hab. Andrzej Witold Sadowski
Neilsen G., Wrona D., Atkinson D.

12:40 Closing ceremony

13:00 Lunch

 Fakultät für Naturwissenschaften und Technik
Facoltà di Scienze e Tecnologie
Faculty of Science and Technology



ISHS
International Society for Horticultural Science



Official media partner

