



# *The VII International Symposium on Mineral Nutrition of Fruit Crops*

*22-25 May 2012, Chanthaburi, Thailand*

## *Sponsors:*



## Symposium Program

## *Organized by*



## Program Overview

Monday 21 May 2012

Time	Programme
16:00 - 20:00	Registration Grand Balloon1, Maneechan Resort

Tuesday 22 May 2012

Time	Programme
08:30 - 09:30	Registration
09:30 - 10:00	Opening Ceremony
10:00 - 10:35	<b>Invited Lecture 1</b> <b>Transpiration: Venue for Nutrients Delivery</b> <b><i>Suntaree Yingjajaval</i></b>
<b>10:35 - 11:05</b>	<b>Coffee Break</b>
11:05 - 11:40	<b>Invited Lecture 2</b> <b>Boron Nutrition in Higher Plants</b> <i>Masaru Kobayashi and <b><u>Toru Matoh</u></b></i>
<b>11:40 - 13:00</b>	<b>Lunch</b>

Tuesday 22 May 2012

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**Session 1: Tree Physiology and Plant Growth**

**Chair : Dr. Frank Peryea**

13:00 - 13:20	<b>Functional Variation among Roots in a Woody Root System</b> <i><u>David M. Eissenstat</u></i>
13:20 - 13:40	<b>Nutrition Costs of Flowering in Litchi: A Comparison between 'Feizixiao' and 'Baitangying'</b> <i><u>Shi-Ya Jiang</u>, Huan-Yu Xu, Hui-Cong Wang, Gui-Bing Hu and Xu-Ming Huang</i>
13:40 - 14:00	<b>The Effect of Arbuscular Mycorrhizal Fungi on the Establishment of Sour Orange (<i>Citrus Aurantium</i>) under Different Levels of Phosphorus</b> <i><u>Ghazi N. Al-Karaki</u></i>
14:00 - 14:20	<b>Effects of Foliar Fe Application on Photosynthetic Pigment Composition and Chl Fluorescence Parameters in Field Grown Peach Leaves</b> <i>Hamdi El-Jendoubi, Angeles Calatayud, Fermín Morales, <u>Javier Abadía</u> and Anunciación Abadía</i>
14:20 - 14:40	<b>Evaluation of New Selected Rootstocks for Grapevine: Nutritional Aspects</b> <i><u>Duilio Porro</u>, Pedò Stefano, Bertoldi Daniela, Failla Osvaldo, and Zamboni Maurizio</i>
<b>14:40 - 15:20</b>	<b>Coffee Break/ Poster Session</b>
15:20 - 15:55	<b>Invited Lecture 3</b> <b>Nutrient Uptake Requirements and Partitioning in Fruit trees</b> <i><u>Massimo Tagliavini</u> and Francesca Scandellari</i>
15:55 - 16:15	<b>Effect of Pre-harvest Calcium on Nutritional Uptake and Morphological Traits of Papaya Seedlings (<i>Carica papaya</i> l. cv. Eksotika II)</b> <i><u>Babak Madani</u>, Mahmud TengkuMudaMohamed, Yahya Awang, Jugah Kadir</i>
16:15 - 16:35	<b>Effects of Potassium Foliar Spray on Different Fruit Tree Species Over 6 years of Experiments</b> <i><u>Ben M. Mehdi</u> and Marchand Michel</i>
<b>18:30 - 20:30</b>	<b>Welcome Cocktail Reception</b>

Wednesday 23 May 2012

**Session 2: Nutrient Management**

**Chair : Dr. Gerry Nielsen**

08:30 - 09:05	<b>Invited Lecture 4</b> <b>Water Use, Mineral Nutrition, Tree Growth, Yield, and Fruit Quality of ‘Fuji’ and ‘Gala’ Apples under Various Irrigation Systems and Rootstocks</b> <i><u>Esmaeil Fallahi</u>, Bahar Fallahi and Bahman Shafii</i>
09:05 - 09:25	<b>Nitrogen and Potassium Citrus Tree Uptake, Fruit Removal and Seasonal Distribution in the Root Zone Under Mediterranean Climate</b> <i><u>Abdelkader Hammami</u>, Hafedh Jamil Mellouli and Mustapha Sanaa</i>
09:25 - 09:45	<b>Effects of Nitrogen, Phosphorus and Potassium on Yield and Fruit Quality of Three Navel Orange Cultivars</b> <i>Hong Huang, <u>Chengxiao Hu</u>, Qiling Tan and Xuecheng Sun</i>
09:45 - 10:05	<b>Fertilizer Management and Sustainable Production of Fruit In Tropical Climates</b> <i><u>Anke Kwast</u> and Miles Harriman</i>
<b>10:05 - 10:45</b>	<b>Coffee Break / Poster session</b>
10:45 - 11:20	<b>Invited Lecture 5</b> <b>Foliar Nutrient Uptake – of Myths and Legends</b> <i><u>Thomas Eichert</u></i>
11:20 - 11:40	<b>Does It Pay to Spray?</b> <i><u>Jon C. Frank</u></i>
11:40 - 12:00	<b>Nutrients Management in Kiwifruit in Shaanxi, China</b> <i><u>Yanan Tong</u> and Jian Wang</i>
<b>12:00 - 13:30</b>	<b>Lunch</b>

Wednesday 23 May 2012

**Session 3 : Interaction and Diagnosis of Plant Nutrient Status**

**Chair : Dr. Esmaeil Fallahi**

13:30 - 13:50	<b>Development of A Nutrient-Budget Approach and Optimization of Fertilizer Management in Almond</b> <i><u>Sebastian Saa</u>, Saiful Muhammad and Patrick Brown</i>
13:50 - 14:10	<b>Assessment of Chemical and Biochemical Indices for Diagnosing Zinc Deficiency and Soil Associated Factors of Citrus (<i>Citrus sinensis</i> L. Osbeck) Nutrition</b> <i><u>Vilas Patil</u></i>
14:10 - 14:30	<b>Influences of Different Ratio of N Supplied from Manure and Mineral Fertilizer on Nanguo Pear Growth, and Soil Nutrient Accumulation</b> <i>Xiuchun Liu, Binghua Wang, Bingyu Zhang, Juncai Li, Linan Chen and <u>Qing Chen</u></i>
14:30 - 14:50	<b>Kiwifruit Production - Using Nitrogen Efficiently</b> <i><u>Linda M. Boyd</u>, Andrew M. Barnett, Paul R. Johnstone and Warwick Catto</i>
<b>14:50 - 15:30</b>	<b>Coffee Break/ Poster session</b>
15:30 - 15:50	<b>Nutrient Analysis of Plant Parts to Assess the Effect of Gypsum Application in Longkong (<i>Aglaia dookoo</i> Griff.)</b> <i><u>Boonsong Krisornpornsan</u>, Sayan Sdoodee and Chairat Nilnond</i>
15:50 -16:10	<b>Effect of Potassium Supply as KNO<sub>3</sub>, K<sub>2</sub>SO<sub>4</sub> or KCl on Growth and Yield of Potted Tomato Plants Grown in Saline-Neutral or Saline-Alkaline Conditions</b> <i><u>Steve A. Oosthuysen</u></i>
16:10 – 16:30	<b>Response Mechanisms of Grapevine to Sustainable Strategies of Iron Chlorosis Prevention</b> <i>José I. Covarrubias and <u>Adamo D. Rombolà</u></i>
16:30 - 16:50	<b>Determination of Macro and Micro Elements of Different Pistachio Cultivars in “On” and “Off” Year Trees</b> <i><u>Bekir E. Ak</u> and Mine Fidan</i>
<b>17:00 - 18:00</b>	<b>ISHS Business Meeting</b>

**Thursday 24 May 2012**

**Mid-Symposium Technical Tour**

**8:00 -17:00 Field Tour of Tropical Fruit Orchards and Ao Koong Krabane Development Study Center (Also for Accompanying persons)**

08:00 Depart from Maneechan Resort

08:15 Arrive Mr. Somwong and Mr. Preecha Mangosteen and Salacca (Snake fruit) Orchards

10:00 Depart

10:45 Arrive Mr. Yong Durian Orchard

12:00 Lunch

13:15 Depart from Restaurant

14:00 Arrive Ao Koong Krabane Development Study Center Under the Advice of His Majesty the King

14:30 A walk through the 1,600 m. long mangrove forest (about 2 hrs)

16:30 Depart for Hotels

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<b>19:00 - 21:30</b>	<b>Farewell Party</b>
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Friday 25 May 2012

#### Session 4: Plant Nutrient and Fruit Quality

Chair : Dr. Yongyuth Osotspa

08:30 - 09:05	<b>Invited Lecture 6</b> <b>The Bottleneck of Ca Translocation into Fruit in Litchi</b> <i>Wei Chen, Hui-Cong Wang, <u>Xu-Ming Huang</u> and Yan Fan</i>
09:05 - 09:25	<b>Mapping the Distribution of Calcium in Apple Tissue with Proton-Induced X-ray Emission – After Application of Additional Pre-harvest Foliar or Soil Calcium</b> <i>Robert E. Wilsdorf, Jolanta M. Mesjasz-Przybylowicz, Wojciech J. Przybylowicz and <u>Elmi Lötze</u></i>
09:25 - 09:45	<b>Physiological Disorders in Relation to Compositional Changes in Mango (<i>Mangifera indica</i> L. cv. ‘Chiin Hwang’ ) Fruit</b> <i><u>Huey-Ling Lin</u>, Ching-Chang Shiesh and Pei-Jen Chen</i>
09:45 - 10:05	<b>Pectin and Calcium Distribution in Cell Wall of Physiological Disorder Mangosteen Fruits</b> <i><u>Sumitra Poovarodom</u> and Naree Phanchindawan</i>
<b>10:05 - 10:40</b>	<b>Coffee Break</b>

#### Session 5: Fruit Nutrition and Bioactive Compounds

Chair : Wichien Chatupote

10:40 - 11:15	<b>Invited Lecture 7</b> <b>Nutritional and Pharmaceutical Applications of Bioactive Compounds in Tropical Fruits</b> <i>Sumitra Poovarodom, Ratiporn Haruenkit, Suchada Vearasilp and Pramoj Ruamsuke, Hanna Leontowicz, Maria Leontowicz, Jacek Namiesnik, Simon Trakhtenberg and <u>Shela Gorinstein</u></i>
11:15 - 11:35	<b>Foliar Urea Applications Can Increase Berry Yeast-Assimilable N in Wine (<i>Vitis Vinifera</i>) Grapes</b> <i><u>Gerry Neilsen</u>, Denise Neilsen, Kirsten Hannam, Peter Millard and Andy Midwood</i>
11:35 - 11:55	<b>Effect of Nitrogen, Potassium Fertilizers and Clusters Per Vine on Yield and Anthocyanin Content in Cabernet Sauvignon Grape</b> <i>Vason Boonterm, Anek Silapapun and <u>Nantakorn Boonkerd</u></i>
<b>11:55 -12.15</b>	<b>ISHS Award Ceremony</b>
<b>12:15 - 13:30</b>	<b>Lunch</b>
<b>13:30 - 14:10</b>	<b>Poster session</b>
14:10 - 14:45	<b>Closing Lecture:</b> <b>Assessing Risks from Climate Change and Variability in Perennial Horticultural Crops</b> <i><u>Denise Neilsen</u>, Gerry Neilsen, Alex Cannon, Bill Taylor, Ted Van der Gulik, Scott Smith and Istvan Losso</i>

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**14:45 - 15:00**

**Closing Ceremony**

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