### Sunday
**January, 27 2019**

- **17:30-18:30** Registration
- **18:30-20:30** Welcome Reception, Sol Costa Atlantis Hotel

### Monday
**January, 28 2019**

- **08:00-09:00** Registration
- **09:00-09:45** Opening Ceremony

**SESSION I: Innovative strategies for irrigation, nutrition and management**

**Chairs:** Yosepha Shahak & Francesco Orsini

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>09:45-10:30</td>
<td><strong>Keynote lecture</strong>&lt;br&gt;Dimitrios Savvas, Agricultural University of Athens, Greece&lt;br&gt;Current knowledge and recent technological developments in nutrition and irrigation of greenhouse crops</td>
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<tr>
<td>10:30-10:50</td>
<td>Youssef Rouphael, University of Naples, Italy&lt;br&gt;Implications of microbial and non-microbial biostimulatory action on the quality of leafy and fruit vegetables</td>
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<td>10:50-11:10</td>
<td>Dana Charuvi, The Volcani Center, Israel&lt;br&gt;Daytime LED-interlighting for improving photosynthesis and productivity in bell pepper grown in high tunnels</td>
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<tr>
<td>11:10-11:30</td>
<td><strong>Coffee break</strong></td>
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<tr>
<td>11:30-11:50</td>
<td>Erik Van Os, Wageningen University, Netherlands&lt;br&gt;An investment order tool to facilitate coordinated development of greenhouse horticulture</td>
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<td>11:50-12:10</td>
<td>Thomas Bartzanas, CERTH, Greece&lt;br&gt;Assessing the sustainability of greenhouse crops using life cycle analysis tools</td>
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<tr>
<td>12:10-12:30</td>
<td>Esteban Baeza, Wageningen University, Netherlands&lt;br&gt;Exploring the Boundaries of the Passive Greenhouse in Jordan: a Modelling Approach</td>
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</table>
12:30-12:50 Georgia Ntatsi, Hellenic Agricultural Organization, Greece  
Metabolic profile of two different *Cichorium spinosum* L. ecotypes as influenced by nitrogen form and supply levels

12:50-13:10 Alexander Boedijn, Wageningen University, Netherlands  
Modelling and dimensioning of circular food production systems fed by geothermal energy: aquaponics

13:10-13:30 Erik Van Os, Wageningen University, Netherlands  
Application of the adaptive greenhouse concept in Lebanon

13:30-15:00 Lunch

**SESSION II: Abiotic stresses and environmental impacts**

**Chairs:** Dimitrios Savvas & David Ben-Yakir

**15:00-15:45 Keynote lecture**  
Rodney Thompson, University of Almeria, Spain  
Reducing nitrate leaching losses from vegetable production in Mediterranean greenhouses

**15:45-16:05 Dimitrios Savvas, Agricultural University of Athens, Greece**  
Can grafting onto suitable rootstocks contribute to less discharge of drainage water in semi-closed soilless cultivations of tomato?

**16:05-16:25 Lidia López-Serrano, Inst. Valenciano de Investigaciones Agrarias, Spain**  
Physiological mechanisms of tolerance of grafted pepper under salt stress

**16:25-16:45 Giuseppina Pennisi, University of Bologna, Italy**  
Salt stress in hydroponically grown lettuce is alleviated by greenhouse white plastic covering film and exogenous proline application

**16:45-17:05 Hagai Yasuor, Gilat, The Volcani Center, Israel**  
Plant nutrition as a tool for improving greenhouses vegetable crop performance and quality under heat stress condition

**17:05-17:15 Mirella Sorrentino, PSI Photon Systems Instruments, Czech Republic;**  
Lettuce reaction to drought stress: high-throughput automated phenotyping of growth and photosynthetic performance

**17:15-18:15 Poster session & coffee break**
# SESSION III: Sustainable systems and pest management

**Chairs:** Esteban Baeza & Salvador Lopez-Galarza

<table>
<thead>
<tr>
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<tr>
<td>08:30-09:15</td>
<td><strong>Keynote lecture, Carlo Leifert, Southern Cross University, Australia</strong>&lt;br&gt;Integrating the use of resistant rootstocks/varieties, suppressive composts and elicitors to improve yields and quality in protected organic cultivation systems</td>
</tr>
<tr>
<td>09:15-09:35</td>
<td>David Ben-Yakir, The Volcani Center, Israel&lt;br&gt;Means to reduce invasion and infestation of small insect pests in protected crops</td>
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<td>09:35-09:55</td>
<td>Ockert Stander, University of Stellenbosch, South Africa&lt;br&gt;The influence of drape-nets on foliar spray deposition, insect pests, and important tree phenological responses of ‘Nadorcott’ mandarin</td>
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<td>09:55-10:15</td>
<td>Gérald Chouinard, R&amp;D Institute for Agri-Environment, Canada&lt;br&gt;Exclusion nets, a step towards pesticide-free apple growing in North America</td>
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<td>10:15-10:35</td>
<td>Nikolaos Katsoulas, University of Thessaly, Greece&lt;br&gt;Development of an insect screen with silica coating for environmental friendly control of insects in greenhouses</td>
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<td>10:35-11:00</td>
<td><strong>Coffee break</strong></td>
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<tr>
<td>11:00-11:45</td>
<td><strong>Keynote lecture, Jan van der Blom, COEXPHAL, Spain</strong>&lt;br&gt;Biological control: the only sustainable basis for pest management in greenhouse horticulture</td>
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<tr>
<td>11:45-12:05</td>
<td>Ard Nieuwenhuizen, Wageningen University, Netherlands&lt;br&gt;Automated spider mite damage detection on tomato plant leaves in greenhouse</td>
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<td>12:05-12:25</td>
<td>Juan A. Fernandez, Universidad Politécnica de Cartagena, Spain&lt;br&gt;Effect of the application of a compost tea on the production of baby leaf lettuce in a floating system</td>
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<tr>
<td>12:25-12:55</td>
<td>José A. Pascual Valero, CEBAS-CSIC, Spain&lt;br&gt;Soil fungicides to control soil-borne diseases of Mediterranean crops grown under greenhouse</td>
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<td>12:55-14:30</td>
<td><strong>Lunch</strong></td>
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### SESSION IV: Climate control

**Chairs:** Jan van der Blom & Giuseppe Colla

**14:30-15:15** *Keynote lecture, Esteban Baeza, Wageningen University, Netherland*
Smart greenhouse covers: a Look into the future

**15:15-15:35** Shabtai Cohen, The Volcani Center, Israel
Exploiting dynamic changes in internal screenhouse climate to inform irrigation in bananas

**15:35-15:55** Maayan Friman Peretz, The Volcani Center and Ben-Gurion University, Israel
Organic Photovoltaic Modules as a Greenhouse cover: Determination of the Spectral and Thermal Properties and the Electricity Production Efficiency

**15:55-16:15** Thomas Bartzanas, CERTH, Greece
Numerical evaluation of greenhouse's covering materials

**16:15-16:35** Meir Teitel, the Volcani Center, Israel
Light intensity and distribution in screenhouses with different roof shape

**16:35-16:55** Josef Tanny, The Volcani Center, Israel
Microclimate, evapotranspiration and water use efficiency of pepper in high-tunnel greenhouses and screenhouses in semi-arid regions

**16:55-17:15** Hanna Schwartz, Kafrit Group, Israel
Method for evaluation of heat buildup reduction efficiency of various solutions

**17:15-18:15** Posters & Coffee

**18:15-19:15** Working Group Business Meeting
Chairs: Youssef Rouphael & Juan A. Fernandez

**20:30** Farewell dinner (buses leave for dinner)

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### Wednesday
January 30, 2019

### SESSION V: Semi protected horticulture

**Chairs:** Carlo Leifert & Meir Teitel

**08:30-09:15** *Keynote lecture, Yosepha Shahak, The Volcani Center, Israel*
Netting and photosensitive netting: friendly solutions for high-quality production together with crop protection.
09:15-09:35 Avi Sadka, the Volcani Center, Israel
Top netting as a practical tool to mitigate the effect of climate change and induce productivity in citrus

09:35-09:55 Graham Barry, University of Stellenbosch, South Africa
Microclimate and tree physiology of 'Nadorcott' mandarin are affected by shade netting

09:55-10:15 Yishai Netzer, Eastern R&D, Israel
Shading table grapes-effect on water consumption, physiology and yield parameters

10:15-10:35 Maanea L Ramphinwa, University of Venda, South Africa
Effect of net shading and season on plant growth, productivity and quality of bush tea (*Athrixia phylicoides* dc)

10:35-11:00 Coffee break

11:00-11:20 Paul J.R. Cronje, University of Stellenbosch, South Africa
The influence of 20 % white shade nets on fruit quality of `Nadorcott´ mandarin

11:20-11:40 Fernando José Hawerroth, Est. Exper. de Fruticultura de Clima Temp., Brazil
Anti-hail nets in apple orchards in Southern Brazil: current situation and perspectives to improve fruit production and quality

11:40-12:00 Mike Nichols, Massey University, New Zealand
Recent changes in berry fruit production in New Zealand

12:00-12:20 Juan Carlos Diaz-Perez, University of Georgia, GA, USA
Bell Pepper (*Capsicum annum* L.) Plant Growth and Fruit Yield Under Colored Shade Nets

12:20-12:40 Mirella Aoun, American University of Beirut, Lebanon
Assessment of a netting system for apple production in a Mediterranean semi-arid climate

12:40-13:00 Leonardo Soldatelli Paim, Federal University of Rio Grande Do Sul, Brazil
Sequential application of budbreak promotors in 'Baigent' apple trees under anti-hail nets in orchards of Southern Brazil

13:00-13:30 Closing ceremony

13:30-15:00 Lunch
SESSION VI: Industry perspective of protected and semi protected agriculture

15:45 - 16:00 Presentación

16:00 - 16:30 Secretos, verdades y mentiras de los textiles destinados a la protección de cultivos contra plagas. Antonio J. Álvarez. Universidad de Almería (CRIADO & LÓPEZ)

16:30 - 17:00 Uso de pantallas y mallas anti-insecto en la producción bajo invernadero. Nelson Pérez. SVENSSON

17:00 - 17:30 Plásticos inteligentes para aumentar rendimientos. Celeste Savio. POLITÍV EUROPA

17:30 - 17:45 Innovative solutions for Agricultural films with Kafrit Masterbathes. Hanna Schwartz. KAFRIT

17:45 - 18:15 Descanso

18:15 - 18:45 Manejo Integrado de Microorganismos en cultivos protegidos. Experiencias y resultados. Manuel Pérez Escobar. ASM de SYMBORG (Andalucía Oriental y Canarias)

18:45 - 19:00 Desarrollo de difusores de feromona para el control de Tuta absoluta en tomate y de Cosmopolites sordidus en platanera. Fernando Pinacho. ECOBERTURA

19:00 - 19:15 Experiencias de suelta de Trichogramma sp. en el control de Chrysodeixus chalcites en platanera en invernadero de malla y en aire libre. Tomás Martín. BIOAGROLÓGICA

19:15 - 19:30 Hidroponía recirculante: sostenibilidad e intensificación de rendimientos. Antonio Oliva. DIRECTOR I+D DE NGS

19:30 - 19:45 La importancia de la información para un fertirriego eficiente. Antonia Felices. WISE-AGROTECNOLOGÍA

19:45 - 20:00 Efecto de NOVIHUM® sobre la producción y calidad de cultivos de pimiento y tomate en invernadero. Carmen García. IFAPA La Mojonera (NOVIUM TECHNOLOGIES, S.L.)
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<tr>
<td>08:00</td>
<td>Departure (Hotel Sol Costa Atlantis, Puerto de la Cruz)</td>
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<tr>
<td>09:30 - 11:00</td>
<td>Pitaya Farm (PITABER <a href="http://www.pitaber.com">http://www.pitaber.com</a>)</td>
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<td>11:00 - 11:30</td>
<td>Coffee at the facilities of PITABER</td>
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<tr>
<td>12:00 - 13:30</td>
<td>Strawberry Farm (SAT IZAÑA <a href="http://www.iza%C3%B1a.com">http://www.izaña.com</a>)</td>
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<td>14:00 – 16:00</td>
<td>Lunch in San Cristóbal de La Laguna</td>
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<tr>
<td>16:00 - 18:00</td>
<td>San Cristóbal de la Laguna</td>
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**CULTURAL VISIT**