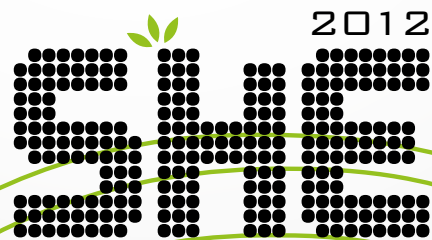


**HORTICULTURE  
IN A CHANGING  
WORLD**

**A SYMPOSIUM  
TO COVER ALL  
RESEARCH AREAS  
RELEVANT TO  
HORTICULTURE  
IN EUROPE**

**2<sup>ND</sup> SYMPOSIUM ON  
HORTICULTURE IN EUROPE**  
ANGERS, FRANCE **1<sup>ST</sup> ▶ 5 JULY 2012**



**SYMPOSIUM  
ON HORTICULTURE  
IN EUROPE**

<https://colloque.inra.fr/she2012>

**ABSTRACTS**

**Important dates**

February 29, 2012	Deadline for submission of abstracts
March 31, 2012	Notification of acceptance
April 30, 2012	Deadline for submission of full texts
May 31, 2012	Return papers for revision
June 30, 2012	Deadline for submission of revised full texts

**Abstract submission**

Abstracts of the oral and poster papers must be submitted electronically via a specific link to this symposium:  
<http://publish.actahort.org/ishs/handle/123456789/309>

This abstract must include:

- a very comprehensive title
- a preference between oral presentation or poster
- an indication of the topic and sub-topic
- the names and affiliations of all contributors
- up to 400 words.

The acceptance of contributions by the Scientific Committee will be notified to voluntary contributors by the end of March 2012.

**Paper submission**

Authors will submit their paper electronically via the same specific link as for abstracts:  
<http://publish.actahort.org/ishs/handle/123456789/309>

Contributions will be definitively accepted after registration of one of their authors.

Instructions on how to prepare a paper for publication in Acta Horticulturae can be found here:  
<http://www.ishs.org/wri/pap1.htm>

**Proceedings**

The proceedings consist of one volume of Acta Horticulturae issued by ISHS. They will be sent to participants regularly registered and having paid for the full registration fee.

**Publication of best papers in EJHS**

Selected manuscripts submitted to SHE 2012, e.g. keynote presentations and outstanding contributions within each theme, will be published within one or two issues of the European Journal of Horticultural Sciences in the second half of 2012, following a regular review process.

**Registration fees<sup>(1)</sup> (All taxes included)**

	until April 15, 2012	from April 16, 2012
Participant		
ISHS member <sup>(2)</sup>	220€	250€
ISHS non-member <sup>(2)</sup>	280€	310€
Student, PhD student <sup>(3)</sup>	100€	
Accompanying persons <sup>(4)</sup>	100€	

(1) For written cancellations received by the Organising Secretary no later than May 31, 2012, a penalty of 50% of the entire fee will be applied; no refund is provided for cancellations received after this date or for no-shows.

(2) The registration fees include: Symposium conferences, coffee breaks during the Symposium, abstracts booklet, the Symposium proceedings in Acta Horticulturae and the professional tours of July 4.

(3) The registration fees include: Symposium conferences, coffee breaks, abstracts booklet and the professional tours of July 4.

(4) The registration fees include: coffee breaks during the Symposium, a city pass and the professional tours of July 4.

**Lunch**

Lunches can be taken at the restaurant of the university (15€ per meal). Please subscribe during your registration.

**Gala dinner**

The gala dinner (50€ per person) will take place in a historical monument at walking distance from the Symposium venue.

**Accommodation**

Symposium participants will benefit from exclusive special rates in selected hotels (from 40€ per night). Booking will be made with the central reservation unit.

**Organising secretary:** [she2012@meetinangers.com](mailto:she2012@meetinangers.com)



**REGISTRATION**



**SCIENTIFIC COMMITTEE**

**Jean-Claude Mauget (chair)**  
AGROCAMPUS OUEST, France

**Uygun Aksoy**  
Ege University, Turkey

**Urbain Avermaete**  
ISHS Council member, Belgium

**Lukas Bertschinger**  
Agroscope Changins-Wädenswil ACW, Switzerland

**Geoffrey R. Dixon**  
ISHS Council member, United Kingdom

**Michel Génard**  
INRA Avignon, France

**Károly Hrotkó**  
Corvinus University of Budapest, Hungary

**Robert Pokluda**  
Mendel University in Brno, Czech Republic

**Krzysztof Rutkowski**  
ISK Skierniewice, Poland

**Massimo Tagliavini**  
Free University of Bolzano, Italy

**Uulke Van Meeteren**  
Wageningen University, The Netherlands

**Michelle Williams**  
Aarhus University, Denmark

**Jens Wünsche**  
University of Hohenheim, Germany

**SCIENTIFIC COMMITTEE**

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BNL-SHS, Belgium

**Kjell Brannäs**  
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**Christoph Carlen**  
ISHS Council member, Switzerland

**Owen P.E. Doyle**  
ISHS Council member, Ireland

**Gordana Đurić**  
ISHS Council member, Bosnia and Herzegovina

**Maria Elvira Ferreira**  
APH, Portugal

**Paolo Inglese**  
SOI, Italy

**Sebastian Menke**  
DGG, Germany

**Dragan Nikolic**  
ISHS Council member, Serbia

**Hilde Nybom**  
ISHS Council member, Sweden

The 2nd Symposium of Horticulture in Europe is organised by AGROCAMPUS OUEST under the aegis of ISHS and APH, DGG, PSHS, IOH, SECH, BNL-SHS, SOI, SGPW/SSA





The Organizing Committee is delighted to invite you to the 2nd Symposium on Horticulture in Europe (SHE 2012). It will take place on 1-5 July 2012 in Angers, France.

The Symposium is open to scientists, teachers, professionals and students interested in a forum to discuss their respective scientific advances and build new cooperations.

The objective of the Symposium is to give scientists who study all aspects of horticulture an opportunity to exchange knowledge, information, ideas and techniques. It will cover all research areas relevant to horticulture in Europe, e.g. plant physiology, plant genetics, plant health, plant-environment relationships, plant quality, economy and technical engineering. The spatial scale will range from cell level to the cropping systems and the landscape.

SHE 2012 will give the opportunity to network and build new interdisciplinary research projects and European courses at Master and PhD level.

## ABOUT ANGERS

### A land of excellence for specialised plant

The Loire Valley has always been known as the 'Garden of France'.

In the shadow of the stately homes along the banks of the Loire, the end of the Middle Ages saw the first orchards and gardens planted with aromatic and medicinal plants brought from other countries. Far from sticking to its albeit glorious past, the region has developed a veritable industry (4,000 companies, with 25,000 jobs) which has been enriched by a unique know-how in horticulture, arboriculture, greenhouse cultivation and seed production.

Today, the Pays de la Loire region is a land of excellence for specialised crops, with several leading companies in this field, professional organisations, training centres and laboratories on an international scale. This region was thus the obvious place for a world-scale competitiveness cluster, Végépolys, to be set up in 2005.

Professional tours will be organized on July 4 in the afternoon and July 5 all day long to discover the horticultural industry in the area of Angers.

### Travelling to Angers

**by car:** A11 Motorway - Paris/Angers 3hrs (295 km including 286 km on motorway)

**by high-speed train (TGV):** Paris/Angers 1hr30 - www.voyages-sncf.com

**by plane:** Direct flights from Nantes airport (Paris/Nantes 1hr05 then 1hr drive to Angers)



## Symposium venue

Faculté de Droit, d'Economie et de Gestion  
Université d'Angers  
13, allée François Mitterrand  
F-49000 Angers

## Convener

Prof. Jean-Claude Mauget  
AGROCAMPUS OUEST  
2 rue Le Nôtre  
F-49045 ANGERS Cedex 01  
Phone: +33 (0)6 26 49 40 91  
she2012@agrocampus-ouest.fr

## Keynote speakers

**Tomas Garcia Azcarate**  
Agricultural Market Economic Advisor,  
The European Commission

**Gerhard Buck-Sorlin**  
AGROCAMPUS OUEST, France

**Lena Ekelund**  
Swedish University of Agricultural Sciences,  
Alnarp, Sweden

**Elias Fereres**  
University of Cordoba, Spain

**Erik Pekkeriet**  
Wageningen UR, The Netherlands

**Michel Pitrat**  
INRA, Avignon, France

**Kathy Steppe**  
Ghent University, Belgium

**Christian Ulrichs**  
Humboldt University, Germany

**Cristos Xiloyannis**  
University of Basilicata, Italy



**SUNDAY, JULY 1** 16:00 Registration of participants and welcome cocktail party

## MONDAY, JULY 2

9:00 Opening Plenary: **Horticulture in a changing environment**

Speaker: **Tomas Garcia Azcarate**, Agricultural Market Economic Advisor, The European Commission

□ PLENARY SESSION

9:30 Theme 1. **Contribution of innovative technologies to new developments in horticulture**

Chairperson (morning): **Geoffrey Dixon** (UK)

Keynote speaker: **Erik Pekkeriet** (Wageningen UR, The Netherlands)

10:00 Theme 2. **Consumer-driven sustainable supply chains management**

Chairperson (morning): **Robert Pokluda** (Mendel University, Czech Republic)

Keynote speaker: **Lena Ekelund** (Swedish University of Agricultural Sciences, Alnarp, Sweden)

10:30 Coffee break

\\ PARALLEL SESSION

11:00 Theme 1. **Contribution of innovative technologies to new developments in horticulture**

Chairperson: **Geoffrey Dixon** (UK)

5 oral presentations

12:30 Lunch

\\ PARALLEL SESSION

14:00 Theme 1. **Contribution of innovative technologies to new developments in horticulture**

Chairperson: **Jordi Marsal** (IRTA, Spain)

Keynote speaker: **Kathy Steppe** (Ghent University, Belgium)

5 oral presentations

Theme 1 poster introductions

15:45 Coffee break

16:45 **Poster sessions themes 1 and 2**

**Open spaces:** Horticultural potential in Eastern European Countries (convener K. Hrotko) • Horizon 2020: opportunities for Horticulture (convener: T. Hall, to be confirmed) • Climate change (convener: Joergen Olesen, to be confirmed) • Economics and management (convener: W. Bokelman)

11:00 Theme 2. **Consumer-driven sustainable supply chains management**

Chairperson: **Robert Pokluda** Mendel University (Czech Republic)

6 oral presentations

14:00 Theme 2. **Consumer-driven sustainable supply chains management**

Chairperson: **Olaf van Kooten** (Wageningen UR, The Netherlands)

5 oral presentations

Theme 2 poster introductions

## TUESDAY, JULY 3

□ PLENARY SESSION

9:00 Theme 3. **Conception and assessment of innovating sustainable horticultural systems, including organic horticulture**

Chairperson: **J.J Alarcon** (CEBAS, Spain)

Keynote speaker: **Cristos Xiloyannis** (University of Basilicata, Italy)

9:30 Theme 4. **Horticulture and biodiversity: contribution to its loss, conservation or increase?**

Chairperson: **Mathilde Causse** (INRA Avignon, France)

Keynote speaker: **Michel Pitrat** (INRA Avignon, France)

10:00 Coffee break

\\ PARALLEL SESSION

10:30 Theme 3. **Conception and assessment of innovating sustainable horticultural systems, including organic horticulture**

Chairperson: **J.J Alarcon** (CEBAS, Spain)

6 oral presentations

12:00 Lunch

\\ PARALLEL SESSION

13:30 Theme 3. **Conception and assessment of innovating sustainable horticultural systems, including organic horticulture**

Chairperson: **Christoph Carlen** (ACW, Switzerland)

Keynote speaker: **Elias Fereres** (University of Cordoba, Spain)

5 oral presentations

Theme 3 poster introductions

10:30 Theme 4. **Horticulture and biodiversity: contribution to its loss, conservation or increase?**

Chairperson: **Mathilde Causse** (INRA Avignon, France)

6 oral presentations

13:30 Theme 4. **Horticulture and biodiversity: contribution to its loss, conservation or increase?**

Chairperson: **Pere Arus** (IRTA Barcelona, Spain)

5 oral presentations

Theme 4 poster introductions

15:15 Coffee break

15:45 **Poster sessions themes 3, 4, 5 and 6**

**Open spaces:** Horticulture for the developing world (convener: N. Looney) • Ecologically intensive horticulture (convener: E. Malézieux, M. Génard) • Education and training (convener: /) • How to address the new European research funding landscape (convener: L. Corelli-Grapadelli)

20:00 Gala dinner

## WEDNESDAY, JULY 4

□ PLENARY SESSION

9:00 Theme 5. **From molecular processes to plant population functioning: towards integrative biology in horticulture**

Chairperson: **Paul Struik** (Wageningen UR, The Netherlands)

Keynote speaker: **Gerhard Buck-Sorlin** (AGROCAMPUS OUEST, France)

9:30 Theme 6. **Landscaping and urban horticulture**

Chairperson: **Emmanuel Geoffriau** (AGROCAMPUS OUEST, France)

Keynote speaker: **Christian Ulrichs** (Humboldt University, Germany)

10:00 Coffee break

\\ PARALLEL SESSION

10:30 Theme 5. **From molecular processes to plant population functioning: towards integrative biology in horticulture**

Chairperson: **Paul Struik** (Wageningen UR, The Netherlands)

8 oral presentations

Theme 5 poster introductions

12:45 **Farewell session**

13:00 Lunch

14:30 **Professional tours**

1. Plant in the city: urban landscape and city arboretum • 2. Ornamental transplant: production and european regulation • 3. Terra Botanica, theme park on the plant world • 4. Research activities on fruits and vegetables • 5. Seed production and quality control

10:30 Theme 6. **Landscaping and urban horticulture**

Chairperson: **Emmanuel Geoffriau**

(AGROCAMPUS OUEST, France)

8 oral presentations

Theme 6 poster introductions

## THURSDAY, JULY 5

9:00 **Professional tours (optionnal)**

1. Horticultural activities in the periurban area of Nantes: sheltered vegetables, organic fruit production and marketing, ornamental nursery and garden center, urban landscape  
2. Horticulture chain in the Saumur area: substrate production, ornamental nursery, processed vegetables, aromatic and medicinal plants

## Topics and subtopics

**1. Contribution of innovative technologies to new developments in horticulture**

Sensors (pre-harvest; post-harvest); Precision horticulture; Energy management / solutions – Processing – Automation; Greenhouse techniques; Substrates, soil-less culture; Netting technology – Robotics.

**2. Consumer-driven sustainable supply chains management**

Sensory studies; Nutritional studies; Food safety; Quality traits / food; Quality management; Control systems (e.g. Globalgap); Non destructive methods; Cut flowers; Consumer behaviour; House of quality.

**3. Conception and assessment of innovating horticultural systems, including organic horticulture**

Integrated horticulture; Organic horticulture; Integrated pest management / crop protection; Residues; New pests and diseases; Production techniques; Intercropping; Life cycle analysis and other methods; Crop nutrition and irrigation; Plant breeding for sustainable horticulture; Farm economics and management.

**4. Horticulture and biodiversity: contribution to its loss, conservation or increase?**

Genomics; Genetic resources; Auxiliaries and antagonists; Pests, diseases; Breeding; Variety testing; Plant genebank management.

**5. From molecular processes to plant population functioning: towards integrative biology in horticulture**

Omics; Ecophysiology; Modeling; Systems biology; Resource efficiency forecasting systems.

**6. Landscaping and urban horticulture**

Green spaces and urban limits; Urban horticulture production in urban areas; Social horticulture and human issues; Impact of landscaping and urban horticulture on tourism activities

