

Commission

## Molecular Biology and *In Vitro* Culture



Newsletter n 5 – January 2012

### The CMMV organization

*Working Groups* **Pag. 2**

*Recently appointed WG Chairs* **Pag. 3**

### Symposia in 2012

*II International Symposium on Biotechnology of  
Fruit Species (BiotechFruit2012)  
Nelson, New Zealand, 25-29 March* **Pag. 4**

*I International Symposium in Biotechnology  
and Other Omics in Vegetable Science  
Antalya, Turkey, 29 April-2 May (co-sponsorship)* **Pag. 6**

### Symposia... under construction

*Summary of Symposia 2013-2015* **Pag. 7**

*Symposia in 2013* **Pag. 8**

*A look at the 2011 Symposia* **Pag. 11**

*New Acta Horticulturae from CMMV Symposia* **Pag. 14**

## **The CMMV organization**

**Chairman:** Dr. Maurizio Lambardi  
CNR-IVALSA, 50019 Florence,  
Italy (lambardi@ivalsa.cnr.it)

**Vice-Chair:** Dr. Bart Panis  
Katholieke Universiteit Leuven,  
Belgium (bart.panis@biw.kuleuven.be)



## **Working Groups**

### **Biotechnology of Horticultural Species**

Chair: Prof. Magda-Viola Hanke  
Baz, Institute for Fruit Breeding  
Pillnitzer Platz 3 , 01326 Dresden,  
Germany (v.hanke@bafz.de)

### **In Vitro Culture**

Chair: Prof. Danny Geelen  
Plant Production, Faculty of Bioscience  
Engineering , Ghent University,  
9000 Ghent, Belgium  
(Danny.Geelen@UGent.be)

### **Non-Conventional Conservation of Genetic Resources of Hortic. Crops**

Chair: Dr. Bart Panis  
Katholieke Universiteit Leuven,  
Kasteelpark Arenberg 13,  
3001 Leuven, Belgium  
(bart.panis@biw.kuleuven.be)

### **Genetically Modified Plants**

Chair: Dr. Adri Veale  
University of Pretoria, Faculty of  
Natural and Agric. Science, Pretoria,  
South Africa (adri.veale@up.ac.za)

### **Molecular Markers**

Chair: Dr. Nahla V. Bassil  
National Clone Germplasm Repository,  
33447 Peoria Road Corvallis,  
OR 97331-23521, USA  
(Nahla.Bassil@ars.usda.gov)

### **Quality Management in Plant Propagation**

Chair: Dr. Margherita Beruto  
Regional Institute for Floriculture  
(IRF), Via Carducci 12,  
18038 Sanremo (Imperia), Italy  
(beruto@regflor.it)

### **Reproductive Biology in Fruit Trees**

Chair: Prof. Silviero Sansavini  
Università degli Studi di Bologna,  
Dipartimento di Colture Arboree,  
Facoltà di Agraria, 40126 Bologna, Italy  
(silviero.sansavini@unibo.it)



**New Working  
Group →**

## Recently appointed WG Chairs



### **Margherita Beruto, Working Group "Quality Management in Plant Propagation"**

Margherita Beruto achieved her Ph.D. title in 1997 at Ghent University (Belgium) by defending a thesis on agar and gel characteristics with special reference to micropropagation systems of *Ranunculus asiaticus* L. From 1987 to 2009 she was Researcher in charge of the Tissue Culture service at the Regional Institute for Floriculture (IRF) in Sanremo (Italy). During this period she performed industry-oriented applied research, focused on micropropagation protocols for ornamental plants. The studies on Ranunculaceae family have been her most prominent research topics. Since 2009 she is the Director of the IRF where she leads a research team working on acquisition and transfer of innovation to support the floriculture industry. The work is based on interdisciplinary approach to acquire knowledge for the achievement of new product and new production systems, with particular attention to energy saving strategies and sustainable production. Related services are provided to the productive world. She is Associate Editor of the international journal *Plant Cell Tissue & Organ Culture*.

### **Danny Geelen, Working Group "In Vitro Culture"**

Danny Geelen earned his Ph.D. in Plant Biotechnology at Ghent University in 1995 on biochemical characterization of Nod factor biosynthesis in *Azorhizobium* and symbiotic nitrogen fixation in *Sesbania rostrata*. Then he moved to Paris for a post-doctoral training in plant physiology and was involved in functional analysis of chloride channels in *Arabidopsis* in the lab of Helene Barbier-Brygoo and Christophe Maurel. During a second post-doc he contributed to the identification of the membrane trafficking protein syntaxin in stomatal aperture control



and ABA signaling. In 2000 he returned to Ghent to become a group leader working on plant microtubules and plant cytokinesis. Since 2005, Danny Geelen is Professor at Ghent University in the Department of Plant Production of the Faculty Bioscience Engineering. There he leads a team working in the field of *in vitro* biotechnology and has contributed to pioneering studies on the identification and characterization of genetic elements involved in the formation of unreduced gametes. Current research aims at understanding cellular processes that bring about asexual reproduction and regeneration of plants as tools for crop propagation.

## **Symposia in 2012**

### **BiotechFruit 2012**

***Nelson, New Zealand  
25-29 March 2012***

**[www.biotechfruit2012.com](http://www.biotechfruit2012.com)**



The **2<sup>nd</sup> International Symposium on Biotechnology of Fruit Species (BiotechFruit 2012)** will be taking place in March 2012 in New Zealand.

Biotechfruit 2012 will bring together scientists working in both basic and applied fruit-related research, covering topics including plant development in model systems, perennial fruit crop biotechnology and tropical fruit research. The Symposium will also include site visits to working orchards and a research station, and the dinner will be held at New Zealand's World of Wearable Art™ and Classic Cars Museum.

The five day programme will kick off with an opening reception on Sunday 25 March. The session programme is divided into four key topics: genetic resources; developing new fruits for consumers, with a focus on health, taste and convenience; keeping fruit crops sustainable; and the application of biotechnology. Key speakers are confirmed from across Europe and the USA.

For attendees from those countries requiring letters of invitation to organise visas, please contact **[events@plantandfood.co.nz](mailto:events@plantandfood.co.nz)**

The organising committee would like to thank its sponsors for their contribution to BiotechFruit 2012: Illumina, the Australian Genome Research Facility, New Zealand Genomics Limited, Zespri International Limited, Genomnz™ and Roche New Zealand. For more information on sponsorship packages, please visit **[www.biotechfruit2012.com](http://www.biotechfruit2012.com)**

BiotechFruit 2012 has been scheduled to allow participants to also attend the ***IX International Conference on the Plant Hormone Ethylene (Ethylene 2012)*** which will be held in New Zealand's Rotorua region the previous week (19-23 March).

Commission  
**Molecular Biology  
and *In Vitro* Culture**



Sunday 25	Monday 26	Tuesday 27	Wednesday 28	Thursday 29
	<b>Theme: Genetic resources</b>	<b>Theme: Developing new fruit for consumers</b>	<b>Theme: Keeping fruit crops sustainable</b>	<b>Theme: The application of biotechnology</b>
	Genetic diversity <i>Riccardo Velasco, IASMA</i>	Health, taste and convenience	Control of bacterial pathogens	Genomics for molecular breeding
	Genome sequencing <i>Fred Gmitter, University of Florida</i>	Health, taste, and convenience	Control of fungal pathogens	Biotechnology approaches
	Model plants 1	Health, taste and <i>convenience</i>	Control of viral pathogens	Assessing the risk of biotechnology
	Model plants 2 <i>Jim Giovannoni, USDA</i>	Technical visit – Plant & Food Research	Breeding for production traits	Business meeting for the ISHS
Opening reception			Gala Dinner	Closing session

***The hosts: Plant & Food Research***

The Symposium is being hosted by Plant & Food Research, in association with the ISHS. Plant & Food Research is one of the world's largest institutes in the field of integrated horticultural research, with more than 900 staff focused on supporting the plant and marine-based food industries. Plant & Food Research develops elite cultivars, bioprotection practices and sustainable production systems for horticultural crops including kiwifruit, pipfruit, summerfruit, berryfruit, wine grapes, vegetables and arable.

Plant & Food Research is happy to discuss site visits to any of its 15 sites across New Zealand for visiting scientists. More information on the Institute's activities can be found at [www.plantandfood.co.nz](http://www.plantandfood.co.nz)



Commission  
**Molecular Biology  
and *In Vitro* Culture**



***Destination: New Zealand***

Fruit is New Zealand's sixth largest industry, totalling US\$3.4 billion per annum. The sustainable growth of New Zealand's horticultural industry is based on innovation, leading to the direct export of fruit and international licensing of cultivars with novel characteristics that meet the demands of premium markets.

New Zealand is a sub-tropical nation, sitting at the far end of the Pacific Ocean. The country is full of geological wonders – from volcanoes and geothermal lakes to mountains and glaciers. On the coastline, visitors can explore pristine beaches or dramatic surf, whilst the landscape is rustic and unspoilt with rainforests and rolling hills. Biotechfruit 2012 will be held in Nelson, at the top of New Zealand's South Island. The Nelson region has three spectacular national parks, golden sand beaches and crystal clear water, alongside alpine meadows and snowy mountain ranges. For the visitor who enjoys the outdoors, the area offers amazing walks, horse trekking, cycle touring, diving, yachting and fantastic fly fishing destinations.



**More information on [www.newzealand.com](http://www.newzealand.com)**



International Symposium on **Biotechnology and** APRIL 29 - MAY 2, 2012 - ANTALYA TURKEY  
Rixos Downtown Antalya Hotel **Other Omics in Vegetable Science**



**Convener:**  
**Prof. Dr. A. Naci ONUS**  
<http://www.biotech-omics.org/>

**Contact:** Bilkon Tourism and Travel Agency  
Address: Ataturk Bulvari No:148/7  
Kavaklidere 06680 Ankara - Turkey  
Phone : +90 312 466 14 66  
Fax : +90 312 466 14 68  
E-mail : [kongre@bilkonturizm.com](mailto:kongre@bilkonturizm.com)

**Symposia..... under construction**

**Summary of Symposia 2013-2015**

Date	Symposium	Convener	WG
<b>2013</b>			
21-26 April	<b>IX International Symposium on Grapevine Physiology and Biotechnology</b> Santiago, Chile ( <i>CMMV co-sponsorship</i> ) <manpinto@uchile.cl>	Manuel Pinto	BHS
2-7 June	<b>VIII International Symposium on <i>In Vitro</i> Culture and Horticultural Breeding</b> Coimbra, Portugal <jorgecan@ci.uc.pt>	Jorge Canhoto	IVC
-----	<b>III International Symposium on Molecular Markers in Horticulture</b> Trento, Italy <riccardo.velasco@iasma.it>	Roberto Viola & Riccardo Velasco	MM
11-14 August	<b>II International Symposium on Cryopreservation in Horticultural Species</b> Denver, Colorado, USA <David.Ellis@ars.usda.gov>	David Ellis & Maria Jenderek	NCC
October	<b>I International Symposium on <i>In Vivo</i> and <i>In Vitro</i> Plant Propagation</b> Florence, Italy <lambardi@ivalsa.cnr.it>	Maurizio Lambardi & Carmine Damiano	QMPP
<b>2014</b>	<b>International Horticultural Congress, Brisbane, Australia</b>		
<b>2015</b>			
Spring	<b>VI International Symposium on Production and Establishment of Micropropagated Plants</b> Sanremo, Italy <beruto@regflor.it>	Margherita Beruto	QMPP

**Symposia in 2013**

**8<sup>th</sup> International Symposium on *In Vitro* Culture  
and Horticultural Breeding**

***Highlighting in vitro morphogenesis to improve plant breeding***

**Coimbra, Portugal, 2-7 June 2013**

The 8th IVCHB2013 will be held at the Department of Life Sciences, University of Coimbra, Portugal, from 2 to 7 June 2013. The main aim of the Symposium is to bring together specialists and stakeholders interested in different areas of plant tissue culture to exchange ideas and information and to establish new lines of research for the future. Main topics of the symposium will be: plant cloning, plant conservation, somatic embryogenesis, rooting, haploid research, protoplasts, genetic transformation and physiological-biochemical-molecular aspects of *in vitro* culture. A technical tour and several cultural and social events (included a serenade of Fado!) will take place. The Convener of this symposium (Prof. Jorge Canhoto) and his team have the pleasure to invite all the colleagues working in this field to join this meeting which will be held, for the first time, in Portugal. Coimbra ([www.turismodecoimbra.pt](http://www.turismodecoimbra.pt)), is a city in the centre of the country, distant 200 km from Lisbon and 100 km from Oporto, where the main Portuguese airports are located. Trains and buses easily connect these cities to Coimbra. The University of Coimbra ([www.uc.pt/en](http://www.uc.pt/en)), founded in 1290, is the oldest University in Portugal, and one of the oldest in Europe. Coimbra is known as the "city of students" since a large part of its population are students from different regions of Portugal and abroad. More details will be soon available. For more information contact <jorgecan@ci.uc.pt>.

**Coimbra, Portugal**



**Convener: Prof. Jorge Canhoto**

**2<sup>nd</sup> International Symposium on Cryopreservation  
in Horticultural Crops**

**Fort Collins (Colorado), USA, 11-14 August 2013**



**Mark your calendars!** All scientists interested in cryobiology or *ex situ* plant preservation are invited to attend this event. The Symposium will include in depth analyses of basic research in the cryobiology of living cells as well as state-of-the-art reports on research and successes with cryopreservation of living cells and ample time for discussions and interaction around poster presentations. Included in the meeting will be a tour of the

seed storage and the plant and animal cryopreservation facilities at the National Center for Genetic Resources Preservation. Anyone working with the long-term preservation of genetic resources collections, laboratories preserving elite varieties or researchers looking at basic physiological, anatomical or physical properties of cryobiology in plants will want to make sure they attend this meeting. Fort Collins, the hosting city, is situated in the foothills of the majestic Rocky Mountains and is easily accessed by hourly shuttles from the Denver International Airport. The city is the home of Colorado State University, an Annual Flower Trial Garden, weekly farmers markets and the National Center for Genetic Resources Preservation, one of the largest genebanks in the world with extensive cryopreservation research and facilities for both plants and animals. A conference pre-tour is planned to Rocky Mountain National Park to view the spectacular 4,000+ meter peaks of the rocky mountains, cross the great divide via the highest continuous highway in the U.S. and see elk herds in their native habitat (with any luck!). A post-meeting white water rafting tour is planned in the pristine Poudre Canyon. The meeting will offer a brewery tour of local microbreweries (all offer non-alcoholic beverages as well). For those who want to spend some extra time for a vacation, with a main street said to be one of the inspirations for Main Street in Disneyland, Fort Collins offers extensive shopping opportunities and the area is rich for fishing, hiking, mountain climbing and spectacular scenic opportunities.



***We look forward to seeing you all in  
Fort Collins!***

**Dave Ellis, the Convener**



**Conveners:**  
**Maurizio Lambardi  
&  
Carmine Damiano**

## **A look at the 2011 Symposia**

### **II International Symposium on Genetically Modified Organisms in Horticulture - GMO2011**

***White River, South Africa, 11-15 September 2011***



IVCHB2011  
Belgium

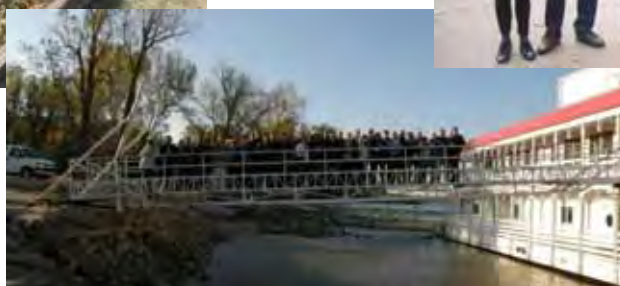


Ghent,  
Sept 18<sup>th</sup>-22<sup>nd</sup>, 2011

7<sup>th</sup> International Symposium on  
*In Vitro* Culture and Horticultural Breeding:  
"Biotechnological advances in *In Vitro* Horticultural Breeding"



Commission  
**Molecular Biology  
and *In Vitro* Culture**



## **New Acta Horticulturae from CMMV Symposia**



Acta Horticulturae 908

### **I International Symposium on Cryopreservation in Horticultural Species**

Convenes: B. Panis & R. Swennen

Editors: B. Panis & P. Lynch

Publication date: 30 September 2011

ISBN 978-90-66054-70-7

ISSN 0567-7572

Number of articles: 65

Leuven, Belgium

ISHS Acta Horticulturae 892

### **II International Symposium on Citrus Biotechnology**

Conveners: A. Gentile & E. Tribulato

Editors: A. Gentile & S. La Malfa

Publication date: 31 March 2011

ISBN 978-90-66057-43-2

ISSN 0567-7572

Number of articles: 48

Catania, Italy

*(CMMV co-sponsorship)*

