

Section Vine and Berry Fruits

# 7<sup>th</sup> International Symposium



on  
Kiwifruit

# Programme



**Faenza, ITALY**  
12-17 September  
2010



FAENZA FAIR - SALA ZANELLI  
Via Risorgimento 3 - 48018 Faenza  
(Ravenna), ITALY



**Sunday, September 12<sup>th</sup>**

- 17.30**            **Opening ceremony**  
**18.15 - 19.00**   **Opening Lecture: Ferguson R.** - Kiwifruit: the evolution  
of a crop  
**19.00**            **Welcome Reception**

**Monday, September 13<sup>th</sup>**

- 8.00**            **Registration**  
**8.15 - 8.45**     **Opening remarks**

**SESSION 1**

**Economy, diffusion of the culture**

*Statistics, Market, Consumer evaluation*

**Chairman: J. M. Fournier**

- 08.45 - 09.30**   **Desmond O'Rourke** - Dealing with Changing World  
Markets for Kiwifruit  
**09.30 - 09.45**   **Trentini L.** - The kiwifruit industry situation in Italy  
**9.45 - 10.00**    **Mohseni A. and Azizi A.** - The Situation of Kiwifruit  
Orchards in Iran  
**10.00 - 10.15**   **Rosin C., Bengé J., Moller H., Greer G., Hunt L.,  
Manhire J., MacLeod C., Saunders C., Fairweather J.,  
Bragg C. and Campbell H.** - Linking Sustainable Practice  
and Diversity of Orchardists in the New Zealand Kiwifruit  
Sector  
**10.15 - 10.30**   **Simonetto P. and Lamb C. R.C.** Potential for kiwifruit  
Cultivation in Southern Brazil  
**10.30 - 10.50**   **Coffee break and poster mounting**

**SESSION 2**

**Breeding and Physiological and molecular aspects**

*Molecular genetics, Genetic maps, Genetic traits of interest  
Breeding strategies and objectives*

**Chairman: G. Cipriani**

- 10.50 - 11.20**   **Huang H.** - Wild genetic resources of Actinidia,  
introgression breeding and cultivar improvement

- 11.20 - 11.35**     **Granger A.R.** - Plant & Food Research New Zealand  
Kiwifruit Breeding Programme
- 11.35 - 11.50**     **McNeilage M.A., Fraser L.G., Tsang G.K., Datson  
P.M., De Silva H.N., Crowhurst R.N. and Ferguson  
A.R.** - Molecular Genetics and Genomics and Kiwifruit  
Breeding”
- 11.50 - 12.05**     **Li X.W., Li J.Q. and Soejarto D.D.** - Progress in the  
Phylogeny and Taxonomy of Actinidia during the Past  
Decade
- 12.05 - 12.20**     **Kataoka I.** - Diversity of Natural Actinidia Resources in  
Japan
- 12.20 - 12.35**     **Popowski E., Dunn J., O’Neill S., Lee W. and Gea L.** -  
Genetic Gains in an *A. deliciosa* Breeding Population
- 12.35 - 12.50**     **Beatson R.A., Alspach P.A., Currie A.J. and White A.** -  
Genetic Parameters for Fruit Traits of Interspecific  
Actinidia Hybrids
- 12.50 - 13.05**     **Wu Y.J., Xie M., Long Q.J., Yan B., Chen J.W., Zhang  
H.Q., Xu H.X., Song G.H. and Fang B.** - The research on  
*Actinidia eriantha* Benth. in South China”.
- 13.05 - 14.45**     **Lunch and poster viewing**

**Chairman: M.A. McNeilage**

- 14.45 - 15.15**     **Jiang Z.** - Red-fleshed Kiwifruit Cultivar Development  
and its Commercial Potential in China
- 15.15 - 15.30**     **Montefiori M., Espley R.V., Stevenson D.D., Cooney  
J.M., Datson P.M., Saiz A., Atkinson R.G., McGhie T.,  
Hellens R.P. and Allan A.C.** - Why Some Kiwifruit Have  
Red Flesh
- 15.30 - 15.45**     **Wang Y., Yang H., Yang J., Man Y., Zhang L., Jiang  
Z., Qin R. and Huang H.** - Isolation and expression of  
anthocyanin pathway related genes in Actinidia
- 15.45 - 16.00**     **Wang Z.** - Stability of Red Flesh Color in Kiwifruit: From  
Breeding to Postharvest
- 16.00 - 16.30**     **Coffee break and poster viewing**

**Chairman: M. Antunes**

- 16.30 - 17.00**     **Testolin R.** - Parent Selection in Kiwifruit Breeding: from the Combining Ability to the Genome-Wide Analysis of Marker-Trait Association
- 17.00 - 17.15**     **Pei C.J., Liu S.B., Xiang Y.P. and Zhang J.X.** - Breeding of a Seedless Variety 'Xiangji' (*Actinidia deliciosa*) and the Ecological Cultivation Techniques
- 17.15 - 17.30**     **Zhong C., Wang S., Huang H. and Jiang Z.** - 'Jinyan': a Novel Storage-Tolerant Yellow-fleshed Kiwifruit Cultivar
- 17.30 - 17.45**     **Taglienti A., Ritota M., Cozzolino S., Cafiero C., Sequi P., Valentini M. and Conte M.** - MRI Analysis of New Varieties of Kiwifruit developed with Genetic Improvement
- 17.45 - 18.00**     **Yifei Liu, Dawei Li and Hongwen Huang** - Cytotype variation in the natural populations of *Actinidia chinensis* complex in China
- 18.00 - 19.00**     **Poster viewing**
- 20.00**             **Social event**

**Tuesday, September 14<sup>th</sup>**

**SESSION 3**

**Cultural Management**

*Dormancy, Propagation, Training systems and pruning, Pollination, Plant nutrition, Water management, Growth regulators*

**Chairman: Wang Z.**

- 08.15 - 08.45**     **Patterson Kevin** - Optimising Kiwifruit Vine Performance for High Productivity and Superior Fruit Taste
- 08.45 - 09.15**     **Xiloyannis C., Montanaro G. and Dichio B.** - Sustainable orchard management, fruit quality and carbon footprint
- 09.15 - 09.30**     **Gago J., Martínez-Núñez L., Gallego V and Landín M.** - Modelling in Vitro Culture Propagation of Kiwifruit Using Artificial Intelligence (AI)

- 09.30 - 09.45** **Di Tommaso G., Piaggese A and Mills R.** - Budbreak: safe and efficient solution from NZ experience on Hort16A (Zespri Gold) and Hayward
- 09.45 - 10.00** **Azizi A. and Khazaipool Y.** - Necessity to Change the Cultivation Systems for Improving Pollination in Kiwi Orchards in Iran
- 10.00 - 10.15** **Peng J., Xiao W., Huang D., Xiao R. and Wang Z.** - Effects of Ground Mulching on Soil Condition and Plant Growth in Kiwifruit
- 10.15 - 10.30** **Cai J. and Wang Z.** - Effects of Plant Vigor on Flower and Fruit Development in Kiwifruit
- 10.30 - 10.45** **Nardozza S., Bolding H.L., Richardson A.C., Costa G., MacRae E.A. and Clearwater M.J.** - Genotypic Control of Carbon Accumulation in *Actinidia deliciosa* Genotypes
- 10.45 - 11.00** **Morandi B., Losciale P., Zibordi M., Manfrini L. and Corelli Grappadelli L.** - Leaf Gas Exchanges Affect Water Flows to Kiwifruit Berries During the Day
- 11.00 - 11.15** **Morton A.R. and Wolley D.J.** - Manipulation of Fruit Water and Dry Matter Content During Early and Late Stages of Fruit Development in Kiwifruit
- 11.15 - 11.30** **Ebrahimi Y., Joshari H., Lashteneshaii K. and Homam K.** - Frost Damage on Kiwifruit in Iran
- 11.30 - 11.45** **Thorp T.G. and Barnett A.M.** - Increasing Productivity of Alternate Year Cropping Systems for ZESPRI® GOLD Kiwifruit ('Hort16A')
- 11.45 - 12.00** **Currie M.B., Patterson K.J. and Blattmann P.** - Careful use of girdling and biostimulants is needed to promote high yields of high quality 'Hort16A' kiwifruit without compromising canopy development or fruit quality
- 12.00 - 12.30** **Early lunch**
- 12.30 - 19:30** **Technical visit**

**Wednesday, September 15<sup>th</sup>**

**SESSION 4**

**Plant protection**

*Pests and diseases, Orchard and environmental protection*

**Chairman: G. M. Balestra**

- 08.30 - 09.00** **Vanneste Joel L., Yu J. and Cornish D.A.** - Recent Advances in the Characterisation and Control of *Pseudomonas syringae* pv *actinidiae* the Causal Agent of Bacterial Canker on Kiwifruit
- 09.00 - 09.15** **Balestra G.M., Renzi M., Ricci L., Taratufolo C., Quattrucci A., Rossetti A. and Mazzaglia A.** - History of kiwifruit bacterial diseases in Italy
- 09.15 - 09.30** **Spinelli F., Donati I., Vanneste J., Costa M., Gardini L. and Costa G.** - Real Time Monitoring of the Pathogenic Interactions between *Pseudomonas syringae* pv *actinidiae* and *Actinidia* species
- 09.30 - 09.45** **Pearson M.N., Chavan R.R., Cohen D. and Blouin A.G.** - Actinidia is a Natural Host to a Wide Range of Plant Viruses
- 09.45 - 10.00** **Prodi A., Splivallo R., Karlovsky P., Pisi A. and Nipoti P.** - Phytohormones in Kiwifruit Plants Affected by Elephantiasis
- 10.00 - 10.15** **Auger J., Pérez I., Esterio M. and Fullerton R.** - Outbreak of a Lethal Wilt Form of Gold Kiwifruit, *Actinidia chinensis* cv. Hort 16A in Chile.
- 10.15 - 10.30** **Wurms K.V., Reglinski T., Taylor J.T, Ah Chee A., Wang M., Friel E.N. and Chynoweth R.** - Post-harvest Volatile Treatments and Pre-harvest Elicitor Applications Reduce Ripe Rot Disease Incidence in 'Hort16A' Kiwifruit
- 10.30 - 10.45** **Osti F. and Di Marco S.** - Further Evidence on the Relationship between Sodium Content in the Soil and Incidence of Wood Decay in Kiwifruit
- 10.45 - 11.15** **Coffee break and poster viewing**

## SESSION 5

### Storage and Fruit quality

*Fruit ripening physiology, Harvesting, Cold storage strategies, Processing, Health attributes, Allergens, Quality assessment*

**Chairman: T. Cooper**

- 11.15 - 11.45**    **Crisosto C., Hasey J., Zegbe J.A., Cantin C. and Crisosto G.** - Is dry matter a reliable quality index for 'Hayward' kiwifruit
- 11.45 - 12.00**    **Thorp T.G., Lallu N., Burdon J., Snelgar W.P., Spinelli R. and Civolani C.** - Fruit Development and Postharvest Performance of 'Hort16A' Kiwifruit (*Actinidia chinensis*) grown in the Lazio and Emilia Romagna Regions of Italy
- 12.00 - 12.15**    **Pancino B., Ferrucci D., Passeri N., Grassi P. and Cassoni G.** - Kiwifruit Quality Standards
- 12.15 - 12.30**    **Burdon J., Lallu N., Pidakala P. and Barnett A.** - Is the 6.2 °Brix Soluble Solids Harvest Index Suitable for 'Hayward' Kiwifruit from High Productivity Orchard Management Systems?
- 12.30 - 12.45**    **Famiani F., Cruz-Castillo J.G., Moscatello S., Proietti S. and Battistelli A.** Relationships between yield and fruit qualitative characteristics in *Actinidia deliciosa* (cv Hayward)
- 12.45 - 13.00**    **Lintel Hekkert S.te, Kamp M. and van den Dungen R.** - Highly Sensitive Ethylene Detector For Online Measurements On Biological Samples
- 13.00 - 14.30**    **Lunch and poster viewing**

**Chairman: N. Lallu**

- 14.30 - 14.45**    **Remorini D., Tardelli F., Guidi F., Degl'Innocenti E., Massai R. and Agati G.** - A new non-destructive fluorescence method applied to the quality control of kiwifruit
- 14.45 - 15.00**    **Antunes M.D.C., Rodrigues D.A.C., Cavaco A.M. and Miguel M.G.** - Evaluation of Quality Changes during Shelf-life in Minimally Processed Kiwifruit

- 15.00 - 15.15** **Xue M.G., Gui X.W. and Rong F.G.** - Temporal and Spatial Changes of Chlorophyll Fluorescence Characteristics of Kiwifruit (*Actinidia deliciosa* 'Changan 4') stored at Room Temperature
- 15.15 - 15.30** **Botondi R., Russo V. and Mencarelli F.** - Study of anaerobic metabolism of kiwifruits stored in ULO, lo, and regular CA
- 15.30-15.45** **Noferini M., Fiori G., Costa G.** - Innovative non-destructive device for fruit quality assessment

**15.45 - 16.15** **Coffee break and poster viewing**

**Chairman:**

- 16.15 - 16.30** **Cooper T., Sagredo K. and Mansilla A.** - Prevention and prediction of kiwifruit softening
- 16.30 - 16.45** **Lallu N., Burdon J., Billing D., Pidakala P., McDermott K. and Haynes G.** - The Potential Benefits from Storage of 'Hort16A' Kiwifruit in Controlled Atmospheres at High Temperatures
- 16.45 - 17.00** **Wang M.Y., Wohlers M., Chen X. and Marsh K** - Changes in volatile production and sensory quality of *Actinidia arguta* fruit during fruit maturation
- 17.00 - 17.15** **Manríquez D. and Defilippi B.G.** - Could pre-harvest applications of 1-MCP improve postharvest life of Hayward kiwifruit?
- 17.15-17.30** **Sfakiotakis E. and Petkopoulou I.** - Beneficial effects of pre-commercial application of SmartFresh<sup>SM</sup> (1-MCP) on texture preservation and reduced weight losses associated with low ethylene concentration in storage rooms of 'Hayward' kiwifruit

**Round Table/Conclusions**



## GENERAL INFO

### SYMPOSIUM VENUE

#### **FAENZA FAIR – SALA ZANELLI**

Via Risorgimento 3 – 48018 Faenza (Ravenna)

#### IMPORTANT NOTICE:

The opening session of Sunday September 12 will take place at the Comune of Faenza, Salone delle Bandiere, Piazza del Popolo 31

#### **TRAVEL INFORMATION: HOW TO GET TO FAENZA**

##### **By train**

Milan – Bologna – Rimini line, stop at Faenza.

Italian railways call center: 892021

website: [www.trenitalia.it](http://www.trenitalia.it)

##### **By plane**

Closer Airports:

*Forlì Airport “Ridolfi”*

Distance from Faenza: about 20 km

Information desk phone number: +39 0543 474990

Ticket desk phone number: +39 0543 474921

web site: [www.forliairport.com](http://www.forliairport.com)

*Bologna Airport “Marconi”*

Distance from Faenza: about 60 km

Information desk phone number: +39 051 6479615

website : [www.bologna-airport.it](http://www.bologna-airport.it)

*Rimini Airport “Federico Fellini”*

Distance from Faenza: about 70 km

Information desk phone number: +39 0541 715755

website : [www.riminiairport.com](http://www.riminiairport.com)

##### **By car**

From the motorway A14 take the Exit “Faenza”.

##### **Car park**

a large car park is available within the fair district.

**Faenza bus:** Call Center: 199 199 558

**Taxi Faenza** Taxi phone number: + 39 0546 22502

**Official Languages**

English (no facilities for simultaneous translations).

**Standard Audio-visual Set-up in Meeting Rooms**

The session room has a video-projector with PC. The Conference does not provide computers for any speaker. When giving an electronic presentation, speakers must deliver their own USB pen to the Slide Centre.

**Internet**

A wireless access will be provided to the participant and an Internet point will be available during the Conference. Because of security reasons, anyone planning to use the Internet connection must present a copy of their passport on-site.

**Program changes**

The Scientific and Organizing Secretariats reserve the right to change the Conference program for technical and/or scientific reasons.

**Poster session**

Posters will remain displayed throughout the Conference; poster sessions are foreseen also during coffee breaks and lunches

**Badges**

Badges must always be visibly worn during the scientific session, coffee breaks and lunches at Conference site but also during social program and technical visits.

**Certificate of attendance**

Certificates will be given to all registered participants at the Registration Desk on the last day

**Coffee breaks and lunches**

Coffee breaks and lunches will be served free of charge at the Conference to fully registered participants wearing their badges. Accompanying Persons have no access to scientific session nor to coffee breaks and lunches.

Please note that vegetarian dishes will be on daily menu; for other special needs, we will try to serve a great variety of food so that it will be easier for you to get some alternatives in case of special diet restriction.

**Liability**

In registering for the Conference, participants agree that neither the Scientific Committee nor the Organizing Secretariat assumes any liability. Participants should therefore organize their own health and travel insurance.

**Person with special needs**

Every effort has been made to ensure that people with special needs are catered for during the Conference. Should you require any specific assistance, please let us know in advance, with a notation on your registration form, to enable to assist in making your stay in Bologna a pleasant and comfortable one.

**Banks - Currency**

All banks in Italy exchange foreign currency and traveler's cheques. Banks are open from Monday to Friday 8.30 am to 1.30 pm and most of them also open for one hour early in the afternoon. The local currency is € (Euro). There is no restriction on the import of foreign currency into Italy and there are no limits for traveller's cheques. Automatic teller machines and exchange offices are readily available. Most hotels, restaurants and shops accept major credit cards but check first.

**FAENZA**

Of Roman origins, Faenza is a splendid city of art whose fame already shone in the Renaissance period of the production of exquisitely made pottery that was exported all over Europe.

The city we see today was formed over a long arc of historical evolution and enriched over the years by fine architecture with strong Renaissance and Neoclassical features.

Faenza's outstanding architectural attractions are concentrated in the two contiguous main squares: Piazza del Popolo, lined by two spectacular double order porticoed wings, and Piazza della Libertà.

In Faenza you can visit one of the world's most beautiful and complete art collections: the international Ceramic Museum houses pieces from all over the world and from every epoch, from classical amphoras to the works of Chagall and Picasso, and there is a rich section dedicated to Faenza pottery in the golden age of the Renaissance.

Over the years Faenza craftsmen and artists developed and perfected the decoration of hand made pottery, and the 60 workshop currently active - most

of them in the city centre - offer the tourist the chance of unique purchases unavailable elsewhere.

Faenza, at the foot of the first Subapennine hills, enjoys a fine location and evocative agrarian surroundings: vineyards in the hills, cultivated land with traces of the ancient Roman land-division system, and fertile market gardens in the plains.

The weather in Faenza in September is generally warm with occasional showers.

The average temperature is 20-25 °C during the day and 15-18 °C in the evening.

### **Field Trip**

On Tuesday, September 14, after the morning session, participants will leave for a mid-day technical visit to Packing house, orchards and nursery in Faenza area.

Thereafter the tour will lead to Bologna for a visit at the Faculty of Agriculture of the University of Bologna and to the experimental orchard of Bologna University where a visit and a country dinner will be organized.

12,30 Leaving from the Conference centre after the morning session

13,00 Agrintesa Packing house visit (Faenza)

14,30 Departure

15,00 Hayward and Zespri Gold orchard

16,00 Nursery

17,30 Departure

18,30 Visit of the Bologna University Faculty of Agriculture and Experimental farm

20,00 Country dinner in the S. Anna "brolo", Bologna University

21,30 Return to Faenza