



## 28<sup>th</sup> International Horticultural Congress | August 22–27, 2010

### SYMPOSIUM

#### S10 | HORTICULTURE FOR DEVELOPMENT

Website: [http://www.ihc2010.org/symposia.asp?page=hort\\_devel](http://www.ihc2010.org/symposia.asp?page=hort_devel)

#### WELCOME

In the context of the world food crisis and of planet-wide environmental concerns, horticulture can bring a decisive contribution to the growth of internal and external markets in developing countries. Horticultural crops generate high economic returns per unit of land, per drop of water and hour of labor. The value-addition to horticultural crops generates employment in the associated agri-businesses and further down the commodity chain from the producer to the consumer to a greater degree than any other agricultural crop. Thus horticulture production has a comparative advantage where farm size is small. Currently, horticulture production in developing countries is progressing by 12% per year.

Horticulture is unique in that it directly addresses poverty and food security issues in both urban and rural areas of the developing world. The IHC2010 Symposium on Horticulture for Development will show how a strengthened horticulture sector can have a positive impact on all United Nations Millennium Development Goals. We hope to see you in Lisbon (Portugal) in August 2010.

*Kahane R., Wasilwa L. and Correia M.  
Conveners IHC2010 Horticulture for Development Symposium*

#### SCIENTIFIC COMMITTEE

##### CONVENERS

Rémi Kahane, GlobalHort, Tanzania  
Lusike Wasilwa, Kenyan Agricultural Research Institute, Kenya  
Manuel Correia, Portuguese Institute for Development Assistance, Portugal

##### SCIENTIFIC COMMITTEE

Isabel Alvarez, Research and Technology Development Service, FAO, Italy  
Errol Hewett, Institute of Food, Nutrition and Human Health, New Zealand  
Anna Maria D'Onghia, IAM Mediterranean Institute of Agriculture Bari, Italy  
Jethro Green, Caribbean Farmers' Association Network, West Indies  
Abdelhaq Hanafi, Univ. Hassan II Agadir, Morocco  
Jackie Hughes, World Vegetable Center, Taiwan  
Stephen Mbithi, Fresh Produce Exporters Association of Kenya-Horticulture Council of Africa, Kenya  
Romaine Ramanarivo, Univ. Antananarivo, Madagascar  
Jan Siemonsma, Plant Resources of Tropical Africa, The Netherlands  
Julian Smith, Central Science Laboratory, UK

#### PROGRAM

##### Monday, 23 August

10.30-12.30h R5A

##### Session 1

##### International Programs and Initiatives

**Chairperson:** Rémi Nono-Womdim (Italy)

Inv. Speaker | The Pacific Agribusiness Research for Development Initiative (PARDI): A Novel Approach to Horticultural Development in the Pacific

*Underhill, S. J. R.; Stringer, R.; Bryceson, K.; Prasad, B. C.; Shearer, D. | S10.001*

Oral | Small and Medium-Scale Public-Private Partnership in Horticulture for Development

*Keatinge, J. D.; Easdown, W. J.; Hughes, J. D. | S10.002*

Oral | Horticulture CRSP, a Long Term Commitment by USAID to Address Poverty and Hunger of the Rural Poor

*Voss, R. E.; Mitcham, E. J.; Reid, M. S.; Bell, M. A. | S10.003*

Oral | Crops for the Future: A New International Organization Facilitating the Development of Neglected and under-Utilized Crops

*Hermann, M. | S10.004*

SP | Lessons Learned from the First All Africa Horticulture Congress

*Wasilwa, L.; Kahane, R. | S10.006*

Oral | 2nd All Africa Horticulture Congress, Nelspruit, South Africa

*Soundy, P.; Du Toit, E. S.; Bower, J. P.; Hannweg, K. | S10.005*

SP | Urban Horticulture in Africa: Lessons, Challenges, Opportunities

*Remi, K. |*

## **Monday, 23 August**

13.30-15.00h R5A

### **Session 2**

#### **Case Studies of Research for Development Projects I**

**Chairperson:** Manuel Correia (Portugal)

Inv. Speaker | World Importance, Marketing and Trading of Vegetables

*Silva Dias, J. C. | S10.007*

Oral | An Ecologically Intensive Approach for the Design of Sustainable Horticultural Systems in the Tropics

*Ratnadass, A.; Deberdt, P.; Fernandes, P.; Grechi, I.; Rhino, B.; Ryckewaert, P.; Malézieux, E. | S10.008*

Oral | Fruit and Honey Litchi Production: Activity with Positive Externalities

*Ramananarivo, Andrianarisoa, B. | S10.009*

Oral | Towards Market Orientation of Underutilised Horticultural Crops: Experiences with Rural Initiatives in India

*Daniel, J. N.; Bhosale, B.; Ksheerasagar, D.; Relan, A.; Sapate, M. | S10.010*

SP | Value Chain Interventions Enhances Commercialization and Consumption of Traditional African Vegetables in Rachuonyo and Busia Districts, Kenya

*Kaguongo, W.; Low, J.; Ruminju, J.; Karanja, N. N.; Njenga, M.; Ortmann, G.; Edilegnaw, W. | S10.011*

SP | Role of Horticulture in Agriculture Development and Food Security in Jamaica

*Benkeblia, N. | S10.012*

SP | The Horticulture in Colombia (South America): Current State, Goals and Challenges for 2010-2020

*Miranda, D.; Fischer, G. | S10.013*

Oral | Integrating Traditional Agriculture, Environmental Resources and Market to Support the Marginal Rural Territories. a Case of Study Developed in the Island of Alicudi (Messina)

*Valentini, P.; Aprile, S.; Zizzo, G. | S10.033*

## **Monday, 23 August**

16.30-18.00h R5A

### **Session 3**

#### **Case Studies of Research for Development Projects II**

**Chairperson:** Lusike Wasilwa (Kenya)

Farmers' Experiences on Low-Pressure Drip Irrigation for Vegetable Production in Southeast Asia and the Pacific

*Palada, M. C.; Mercado, A. C.; Roberts, M.; Ella, V. B.; Reyes, M. R.; Susila, A. B.; Ha, D. T.; Wu, D. L.; Bhattarai, M. | S10.014*

Oral | Experiences in Linking Smallholder Vegetable Farmers to the Emerging Institutional Market in the Philippines

*Batt, P. J.; Concepcion, S. B.; Murray-Prior, R. B. | S10.015*

Oral | Cost of Production Analysis of Horticulturists in Ubatuba, Sao Paulo State, Brazil

*Turco, P. H. N.; Oliveira, M. D. M.; Moreira, S. R.; Castro, C. E. F.; Onatini, M. N.; Souza, M. C. M.; Marchiori, A. C.; Santos, J. C.; Silva Junior, L. C. | S10.016*

Oral | Vegetable Production for Improving Livelihoods in the Tsunami-Affected Areas of Aceh, Indonesia

*Bhattarai, M.; Ferizal, M.; Fitriana, N.; Luther, G.; Mariyono, J. | S10.017*

Oral | Towards Market Orientation of Underutilised Horticultural Crops: Experiences with Rural Initiatives in India

*Nallathamby, D.; J.; Bhosale, B.; Ksheerasagar, D.; Relan, A.; Chauhan, M.; Sapate, M. | S10.010*

## **Tuesday, 24 August**

10.30-12.30h R5A

### **Session 4**

## Capacity Building and Knowledge Management

**Chairperson:** Enoch Achigan-Daku (Kenya)

Inv. Speaker | Incorporating Value Chain Research into Horticultural Study Programmes in Developing Countries

*Hofmann, S.; Wenz, K. | S10.018*

Oral | "Aurora Tropical": A Proposal of Ecological and Urban Horticulture, the Case of One Secondary School in Cabudare City of Venezuela

*Gomez, C. E.; Gonzalez-Casamayor, P.; Peroza-Carrasco, D.; Lopez, M.; Ramirez-Guerrero, H. O. | S10.019*

Oral | Training Engineering in the Capacity Building of Urban Horticulture: Case of Market Gardening Crops in Gabon

*Nondah, T. | S10.020*

Oral | Developing Good Agricultural Practice Systems for Dragon Fruit Farmers and Exporters in Vietnam: An Holistic Approach to Quality System Capacity Development for a Vietnamese Research Institute

*Rankin, M. K.; Campbell, J. M.; Nguyen, H. H.; Nguyen, H. V.; Nguyen, C. M. | S10.021*

Oral | The Value of Knowledge Transfer Partnerships as a Tool for Capacity Building within the Kenyan Horticulture Sector

*Bishop, C.; Bingley, E.; Matthews, H. | S10.022*

SP | Promotion of Positive Business Attitudes among Smallholder Farmers in Ghana: Impacts from the Southern Horticultural Zone

*Gyasi-Boakye, S.; Offei Bonsu, K.; Adu-Dapaah, H.; Osei, M. K.; Owusu-Akyaw, M.; Manu-Aduening, J. | S10.023*

## Tuesday, 24 August

16.30-18.30h R5A

### Session 5

#### Public-Private Partnership for Human Health and Wealth

**Chairperson:** Rémi Kahane (United Republic of Tanzania)

Inv. Speaker | Horticulture: Help for Developing Countries in a World of Rising Grain Prices

*Lumpkin, T. A. | S10.024*

Oral | Improving Urban Markets Supply Chains of Indigenous Leafy Vegetables for Fighting Malnutrition and Poverty Alleviation: A Case Study of Yamoussoukro in Côte d'Ivoire

*Mahyao, A. G.; Kouame, C. N.; Fondio, L.; Agbo, E. P.; N'Zi, J. C. | S10.025*

17.15 - Oral | Unleashing the Potential of Sweetpotato to Combat Poverty and Malnutrition in Sub-Saharan Africa through a Comprehensive Initiative

*Low, J. W. | S10.026*

17.30 - Oral | Recognising and Supporting Local Innovation: An Alternative Approach to Horticulture for Development

*Letty, B. A.; Mudhara, M.; Waters-Bayer, A.; Ngubane, N.; Malinga, M. P.; Shezi, Z. F. | S10.027*

17.45 - Oral | Food Chain Partnership for Sustainable Agriculture with Bharti-Walmart in India

*Walz-Tylla, B. | S10.028*

18.00 - SP | Innovation at a Brazilian Fishing Cooperative - The Successful Case of Coorimbatá

*De Lima, M. G.; Daltro, D. T.; Rocha, R. M. | S10.029*

SP | A Project by Plamsur: Organic Production of Medicinal Plants in African Descendents Community in Southern Brazil

*Barros, I.; Wiest, J. M.; Oliveira, A.; Oliveira, M. B.; Gomes, J. C. | S10.030*

SP | Uninformed Pesticide Use in Jharkhand State, India: A Threat to the Health and Livelihoods of Vegetable Farmers

*Kriesemer, S. K.; Chadha, M. L.; Weinberger, K. M. | S10.031*

SP | Accelerating Horticulture Development in a Heavily Rice Biased Agriculture

*Dimyati, A. | S10.032*

## Monday, 23 August

15.30-16.30h Pav. 2

### Poster Session 1

#### Hortdevelop

Poster | Healthy Affordable Seed Yam (*Dioscorea rotundata*) Production from Vine Cuttings: Application of Natural Auxins from Cabbage Extracts

*Adu-Kwarteng, E.; Otoo, E.; Dzomeku, B. M.; Quain, M. D.; Aubyn, A. | S10.200*

Poster | Horticulture CRSP Immediate Impact Projects Quickly Address Needs in Developing Countries

*Crump, A.; Shapland, P.; Bell, M. A.; Voss, R.; Mitcham, E.; Reid, M. | S10.201*

Poster | Yield and Quality of Some Vegetables Intercropped with Fruit Crops in An Irrigated System in Brazil's Cerrados

*Guimaraes, T. G.; Madeira, N. R.; Celestino, S. M. C.; Castro Jr., V.; Andrade, G. A.; Cohen, K. O. | S10.202*

Poster | Innovative Strategies for Biodiversity Integration and Rural Development in Madagascar

*Beccaro, G. L.; Canterino, S.; Bellone, D.; Giacoma, C.; Bounous, G. | S10.203*

Poster | Onion and Peanut: Differentiation Cultures of Farmers for the Development of the District of Bekily-

Madagascar

*Ramananarivo, R.; Ramananarivo, S.; Rapanoël, D. K.; Andriamanalina, S. I.* | **S10.204**

Poster | Project of Technical Cooperation Brazil-Haiti in Vegetables Production

*Guiducci Filho, E.; Madeira, N. R.; Vilela, F. R.; Melo, W. F.* | **S10.205**

Poster | Integrated Aquaculture - Floating Agriculture: Is It a Valid Strategy to Raise Livelihood?

*Pantanella, E.; Cardarelli, M.; Colla, G.; Danieli, P. P.; MacNiven, A.* | **S10.206**

Poster | Horticulture Production in North-Western Himalayan Region under Changing Climatic Scenario-A Case Study

*Bhardwaj, S. K.; Verma, K. S.; Sharma, S. D.* | **S10.207**

Poster | Evaluation of Sustainability of Horticultural Activities for Natural Resources Conservation in the Wetlands of the Lake Victoria Basin

*Maithya, J. K.; Kariuki, W.; Njoroge, J. B. M.* | **S10.208**

Poster | Baby Salad Leaves as Emerging Industry: A Promising Technique for No-Polluted and Healthy Vegetables with Developmental Goals

*Ahmed, H. M. I.* | **S10.209**

Poster | Non-Conventional Edible Plants: Agrobiodiversity Valorisation at a Small Family Agriculture Unity

*Barros, I.; Kinupp, V. F.; Bohrer, S.; Silva, M. A.* | **S10.210**

Poster | Onion and Peanut: Differentiation Cultures of Farmers for the Development of the District of Bekily-Madagascar

*Ramananarivo, R.; Randrianasolo, H.; Ramananarivo, S.; Dabat, M. H.; Andrianarisoa, B.* | **S10.211**

## **Tuesday, 24 August**

15.30-16.30h Pav. 2

### **Poster Session 2**

#### **Hortdevelop**

Poster | Small Farm Horticulture and the Agricultural Transformation in Africa: The Case of Cameroon

*Parrot, L.; de Bon, H.; Malézieux, E.; Ganry, J.; Sotamenou, J.* | **S10.212**

Poster | Sweetpotato Product Development in Ghana: Towards Alleviation of Nutritional Deficiencies in Women and Children

*Adu-Kwarteng, E.; Sakyi-Dawson, E.; Asafu-Agyei, J.; Baafi, E.; Dapaah, H.* | **S10.213**

Poster | The Role of Human Factor in the Innovation of Apricot Production- Empirical Study in a Disadvantage Area of East-Central European Country

*Demeter, D.; Nyéki, J.; Szabó, Z.* | **S10.215**

Poster | Market Gardening Reduces Poverty: Evidence from Libreville, Gabon

*Nondah, T.* | **S10.216**

Poster | Developing Egyptian Export Markets and Marketers

*Behe, B. K.; Fernandez, R. T.; Samy, M. M.* | **S10.217**

Poster | The Role of Quality Management of Traditional Horticultural Products in Rural Development in Hungary

*Ferencz, A.; Berde, C.; Levai, P.; Notari, M.; Czeglédi, M.* | **S10.218**

Poster | The Role of Sales Management of Traditional Horticultural Products in Rural Development in Hungary

*Ferencz, A.; Berde, C.; Levai, P.; Notari, M.; Czeglédi, M.* | **S10.219**

Poster | Sustainable Food Production for the 21st Century – VertiCrop™ High Density Vertical Growing

*Bayley, J. E.; Frediani, K.; Yu, M.* | **S10.220**

Poster | Restoration of Peanut Seed Bank in Louga District (Senegal)

*Berruti, A.; Ndiaye, F.; Sylla, A.; Diop, T. A.; Bianciotto, V.; Ricci, P.* | **S10.221**

Poster | An Innovative Approach for a Sustainable Agriculture in Developing Countries: The Slow Food International Presidia

*Peano, C.; Milano, S.; Sottile, F.* | **S10.222**

Poster | A Validation of Determinants of the Market Success of Fruit Product Innovations

*Rakowska, J.; Bakker, T.* | **S10.223**

Poster | Management and Technological Alternatives to Promote Productivity in The Mexican Agricultural Sector

*Longar-Blanco, M. P.* | **S10.224**