

X Simposio Internacional de Mango

Del 3 al 7 de junio, 2013, Bávaro, Punta Cana, República Dominicana

X International Mango Symposium

June 3 to 7, 2013, Bávaro, Punta Cana, Dominican Republic

El Mango: Oportunidades y Desafíos en el Siglo 21
Mango: Opportunities and Challenges in the 21st Century

Programa General / Resúmenes **General Program / Abstracts**



Comité Organizador / Organizing Committee

Ing. Luís Ramón Rodríguez

*Ministro de Agricultura
Ministerio de Agricultura*

Ing. Juan José Espinal

*Director Ejecutivo
Centro para el Desarrollo Agropecuario y Forestal (CEDAF)*

Ing. Rafael Leger

*Presidente PROMANGO
Clúster del Mango Dominicano (PROMANGO)*

Ing. Juan Chávez

*Director Ejecutivo
Consejo Nacional de Investigaciones Agropecuarias y Forestales (CONIAF)*

Ing. Rafael Pérez Duvergé

*Director Ejecutivo
Instituto Dominicano de Investigaciones Agropecuarias y Forestales (IDIAF)*

Sr. Jozef Van Assche

*Director Ejecutivo
Sociedad Internacional de Ciencias Hortícolas (ISHS)*

Instituciones Auspiciadoras / Sponsoring Institutions

Ing. Luís Ramón Rodríguez

*Ministro de Agricultura
Ministerio de Agricultura*

Ing. Juan José Espinal

*Director Ejecutivo
Centro para el Desarrollo Agropecuario y Forestal
(CEDAF)*

Ing. Rafael Leger

*Presidente PROMANGO
Clúster del Mango Dominicano (PROMANGO)*

Ing. Juan Chávez

*Director Ejecutivo
Consejo Nacional de Investigaciones
Agropecuarias y Forestales
(CONIAF)*

Ing. Rafael Pérez Duvergé

*Director Ejecutivo
Instituto Dominicano de Investigaciones
Agropecuarias y Forestales
(IDIAF)*

Sr. Jozef Van Assche

*Director Ejecutivo
Sociedad Internacional de Ciencias Hortícolas
(ISHS)*

Lic. José Ramón Peralta F.

*Ministro Administrativo de la Presidencia
Ministerio Administrativo de la Presidencia*

Lic. Ligia Amada Melo de Cardona

*Ministra de Educación Superior,
Ciencia y Tecnología
Ministerio de Educación Superior,
Ciencia y Tecnología (MESCyT)*

Lic. Miguel Enrique Marrero

*Representante
Organismo Internacional Regional
de Sanidad Agropecuaria (OIRSA)*

Ing. Osmar C. Benítez

*Vicepresidente Ejecutivo
Junta Agroempresarial Dominicana (JAD)*

Lic. Andrés van der Horst Álvarez

*Director Ejecutivo
Consejo Nacional de Competitividad (CNC)*

Dr. Gero Vaagt

*Representante
Organización de las Naciones Unidas
para la Alimentación y la Agricultura (FAO)*

Lic. Escipión J. Oliveira Gómez

*Director Ejecutivo Adjunto
Caribbean Export Development Agency
Union Europea*

Comité Científico / Scientific Committee

Dr. Víctor Galán Saúco

*Director Comité Científico Internacional
Presidente del Grupo de Trabajo de Mangos Sociedad Internacional de Ciencias Hortícolas
ISHS
Profesor de Investigación del Instituto Canario de investigaciones Agrarias
ICIA*

Ing. José Richard Ortiz

*Coordinador Comité Científico Local
Instituto Dominicano de Investigaciones Agropecuarias y Forestales
IDIAF*

Ing. Segundo Nova

*Instituto Dominicano de Investigaciones Agropecuarias y Forestales
IDIAF*

Ing. Carlos Jiménez

Ministerio Agricultura

Lic. Janina Segura

*Centro para el Desarrollo Agropecuario y Forestal, Inc
CEDAF*

Comités de Trabajo / Work Committee

Programa General

Ing. Gonzalo Morales

CEDAF

Ing. José Richard Ortiz

IDIAF

Gira Técnica

Ing. Santiago Rivas

CEDAF

Ing. Candida Batista

IDIAF

Registro/Alojamiento

Lic. Grace Zowe

Mónica Peña

CEDAF

Finanzas

Lic. Ana Julia Correa

CEDAF

Lic. Dinorah Rodríguez

CEDAF

Lic. Mary de la Cruz

CEDAF

Transporte

Ing. Santiago Rivas

CEDAF

Relaciones Públicas, Protocolo y Prensa

Lic. Gisela Taveras

PROMANGO

Lic. Alexandra Gómez

OIRSA

Wilfredo Polanco

Ministerio de Agricultura

Publicaciones

Ing. Gonzalo Morales

CEDAF

Manuel Berroa

CEDAF

Interpretación

Arq. Elías Tejeda

CEDAF

Informática/Audiovisuales

Lic. Randolph Robles

CEDAF

Lic. Anderson Ruiz

IDIAF

Ing. Melvin Mejía

IDIAF

Arq. Francisco Alberto Santos

IDIAF

Contents/Contenido

» Sunday June 2, 2013 / Domingo 2 de Junio 2013

- 02:30 PM - Registration open / Inicio de Registro

» Day 1 - Monday June 3, 2013 / Día 1 - Lunes 3 de Junio 2013

- 09:00AM - Opening Ceremony / Inauguración

- 10:30AM - Monday June 3, 2013

Conference / Conferencia: **Proyecto piloto de rastreabilidad en Mango** Pag. 16
Teófilo Suriel y Carlos Kupervaser

- 11:15AM - Intervenciones Especiales

- 12:00 M - Lunch / Almuerzo

Session 1: World Production

- 02:00PM - Monday June 3, 2013

Session 1: World Production / Keynote 1-01 Pag. 17

Climate change and its probable impact on mango production and cultivation

F. Normand, P-É Lauri and J-M Legave

- 02:40PM - Monday June 3, 2013

Session 1: World Production / Keynote 1-02 Pag. 18

Mango cultivars with potential for commercial development

Richard J. Campbell

- 03:20PM - Coffee Break / Receso

- 03:40PM - Monday June 3, 2013

Session 1: World Production / SI-01 Pag. 19

Opportunities for world mango producers in the North American markets

Ernesto Gallo

- 04:00PM - Monday June 3, 2013

Session 1: World Production / SI-02 Pag. 20

National Mango Board's consumer research

R. Ward, M. Peele and L. Ortega

- 04:20PM - Monday June 3, 2013

Session 1: World Production / SI-03 Pag. 21

Fruit flies harmful to mango in Haiti: host plant range and population fluctuations

D. Jean-Pierre, S. Quilici, A. Ratnadass, R. Scutt and J-F Vayssières

- 04:40 PM - Poster Session / Sesión de Pósters (Contents/Contenido Pag. 12)

- 06:00PM - Welcome Cocktail/Coctel de Bienvenida

» **Day 2 - Tuesday June 4, 2013 / Día 2 - Martes 4 de Junio 2013**

Session 2: Genetics, breeding and biotechnology

08:20AM - Tuesday June 4, 2013

Session 2: Genetics, breeding and biotechnology / Keynote 2-01 Pag. 22

Improvement of mango tree architecture and vigor

Ian S. E. Bally and Natalie L. Dillon

09:00AM - Tuesday June 4, 2013

Session 2: Genetics, breeding and biotechnology / Keynote 2-02 Pag. 23

Strategies of breeding and production management of mango (*Mangifera indica* L.) on focus to the dynamic of market

Pinto, A.C.Q. Eng. Agr. Dr. Vis. Prof. and Silva, G.J.N., Eng. Agr. M.Sc.

09:40AM - Coffee Break /Receso

10:00AM - Tuesday June 4, 2013

Session 2: Genetics, breeding and biotechnology / S2-01 Pag. 24

AFLP and microsatellites genetic divergence analyzes among 103 mango accessions

Carlos Antonio Fernandes Santos and Francisco Pinheiro Lima Neto

10:20AM - Tuesday June 4, 2013

Session 2: Genetics, breeding and biotechnology / S2-02 Pag. 25

Molecular characterization of the Banilejo mango (*Mangifera indica* L.) by AFLP analysis

José R. Nuñez, Ineko Hodai, Guarina Del Monte y Atharva Veda Rosa

10:40AM - Tuesday June 4, 2013

Session 2: Genetics, breeding and biotechnology / S2-03 Pag. 26

The Australian mango fruit genomics initiative

Natalie L. Dillon, David J. Innes, Ian S.E. Bally, Heather E. Smyth, Carole L Wright, Kathy Grice and Ralf G. Dietzgen

11:00AM - Tuesday June 4, 2013

Session 2: Genetics, breeding and biotechnology / S2-04 Pag. 27

Cloning and expression of flowering related genes in two mango varieties

Vyavhare Sayali N, Chaudhary Rakesh S., Bal Krishna, Joshi Shweta S., Subramaniam V. R. and Sane P. V.

11:20AM - Tuesday June 4, 2013

Session 2: Genetics, breeding and biotechnology / S2-05 Pag. 28

Creating genomic infrastructure for mango breeding

Yuval Cohen, Mor Rubinstein, Michal Sharabi, Ada Rozen, Ravit Eshed, Miri Benita, Mazal Ish-Shalom, David Saada, Amir Sherman and Ron Ophir

11:40AM - Tuesday June 4, 2013

Session 2: Genetics, breeding and biotechnology / S2-06 Pag. 29

The Israeli mango breeding program and its new cultivars

Yuval Cohen, Uri lavi, Eli tomer, David Saada, Reuven Dor, Michael Noy and Ami Keynan

12:00 M - Lunch / Almuerzo

- 02:00PM - Tuesday June 4, 2013**
Session 2: Genetics, breeding and biotechnology / S2-07 Pag. 30
Three cycles of evaluation among monoembryonic mango progenies in the São Francisco River Valley, Brazil
Francisco Pinheiro Lima Neto, Carlos Antônio Fernandes Santos and Hilçana Ylka Gonçalves de Albuquerque
- 02:20PM - Tuesday June 4, 2013**
Session 2: Genetics, breeding and biotechnology / S2-08 Pag. 31
Mango breeding in South Africa: challenges and future prospects
C. F. Human, S. Willemse and A.D. Sippel
- 02:40PM - Tuesday June 4, 2013**
Session 2: Genetics, breeding and biotechnology / S2-09 Pag. 32
Three cycles of evaluation among 'Haden' x 'Tommy Atkins' mango progenies in the São Francisco River Valley, Brazil
Francisco Pinheiro Lima Neto, Carlos Antônio Fernandes Santos and Hilçana Ylka Gonçalves de Albuquerque
- 03:00PM - Tuesday June 4, 2013**
Session 2: Genetics, breeding and biotechnology / S2-10 Pag. 33
Biodiversity in mango varieties of West Bengal, India: status and prospects for its utilization
S.K.Mitra, B.Ghosh, V.D.Shiera, S.K.Dutta Ray and S.Mitra
- 03:20PM - Tuesday June 4, 2013**
Session 2: Genetics, breeding and biotechnology / S2-11 Pag. 34
Evaluation of indigenous (naati) mango varieties and conservation through diversity parks
M.R. Dinesh, C. Vasugi, K.V. Ravishankar and C. Lavanya
- 03:40PM - Coffee Break/Receso**
- 04:00PM - Tuesday June 4, 2013**
Session 2: Genetics, breeding and biotechnology / S2-12 Pag. 35
Characterization of *Mangifera indica* accessions based on Brazilian adapted UPOV descriptors
Ierla Carla Nunes dos Santos Ribeiro, Carlos Antonio Fernandes Santos and Francisco Pinheiro Lima Neto
- 04:20PM - Tuesday June 4, 2013**
Session 2: Genetics, breeding and biotechnology / S2-13 Pag. 36
Phenotypic divergence among *Mangifera indica* based on agro-morphological descriptors
Ierla Carla Nunes dos Santos Ribeiro, Carlos Antonio Fernandes Santos and Francisco Pinheiro Lima Neto
- 04:40PM - Tuesday June 4, 2013**
Session 2: Genetics, breeding and biotechnology / S2-14 Pag. 37
Characterization of the Banilejo mango (*Mangifera indica* L.) for the commercial exploitation in the Dominican Republic
Cándida M. Batista, Daysi Martich and Danna de la Rosa

Session 3: Physiology and reproductive biology

- 05:00PM - Tuesday June 4, 2013**
Session 3: Physiology and reproductive biology / S3-01 Pag. 38
Reproductive type handle states (*Mangifera indica* L) in central area of Venezuela
Pérez Macias, Mercedes; Soto, Enio; Puche, Marelia and Avilan, Luis
- 05:20PM - Tuesday June 4, 2013**
Session 3: Physiology and reproductive biology / S3-02 Pag. 39
Factors affecting 'Maya' and 'Omer' mango cultivars production in Israeli orchards
D. Schneider, R.A. Stern, C. Love and M. Noy
- 05:40PM - Tuesday June 4, 2013**
Session 3: Physiology and reproductive biology / S3-03 Pag. 40
Breakthrough in advancing Alphonso mango production season in lateritic rocky areas of Konkan region through manipulation in PBZ application time
M.M.Burondkar, Shailendra Rajan, K.K. Upreti, M.M. Naik, P.M. Nigade and S. N. Sabale

» Day 3 - Wednesday June 5, 2013 /Día 3 - Miércoles 5 de Junio 2013

- 08:20AM - Wednesday June 5, 2013**
Session 3: Physiology and reproductive biology / S3-04 Pag. 41
Seasonal variations in physiological response of Alphonso mango under Konkan conditions.
M.M.Burondkar, Shailendra Rajan, K. L. Pujari, S. G. Bhave, S. N. Sabale
- 08:40AM - Wednesday June 5, 2013**
Session 3: Physiology and reproductive biology / S3-05 Pag. 42
Hydric stress asociated to beginning of the mango flowering (*Mangifera indica* L) in the central area of Venezuela
Pérez Macias, Mercedes; Soto, Enio; Puche, Marelia; Gutiérrez, Maria and Avilan; Luis.
- 09:00AM - Wednesday June 5, 2013**
Session 3: Physiology and reproductive biology / S3-06 Pag. 43
Mango (*Mangifera indica* L.) response to deficit irrigation at different phenological stages
A.G. Levin, A. Naor, M. Noy, C. Love, Y. Gal and M. Peres
- 09:20AM - Wednesday June 5, 2013**
Session 3: Physiology and reproductive biology / S3-07 Pag. 44
Effect of paclobutrazol soil drenching on flowering of mango cv. Mahajanok
Rathaphol Muengkaew and Peerasak Chairasart
- 09:40AM - Wednesday June 5, 2013**
Session 3: Physiology and reproductive biology / S3-08 Pag. 45
Estudio del comportamiento del mango, cv. Keitt, sobre diferentes portainjertos
Hermoso, J.M. ; Guirado, E. ; González J.; Hormaza, I. and Farré J.M.
- 10:00AM - Coffee Break / Receso**

- 10:20AM - Wednesday June 5, 2013**
Session 3: Physiology and reproductive biology / S3-09 Pag. 46
Mango responses to applications of a biostimulant based on amino acids and nutrients
José Pablo Morales-Payán
- 10:40AM - Wednesday June 5, 2013**
Session 3: Physiology and reproductive biology / S3-10 Pag. 47
Potassium nitrate acts to stimulate and concentrate terminal bud development in Nam Doc Mai terminal shoots induced to flower by soil paclobutrazol treatment
S.A. Oosthuysen, and Bert Desmet
- 11:00AM - Wednesday June 5, 2013**
Session 3: Physiology and reproductive biology / S3-11 Pag. 48
The effect of spray application of potassium nitrate, urea, Wuxal Boron, or various growth regulators or mixes thereof on the fruit retention, fruit size distribution and yield of Tommy Atkins, Kent or Heidi mango
S.A. Oosthuysen
- 11:20AM - Wednesday June 5, 2013**
Session 3: Physiology and reproductive biology / S3-12 Pag. 49
Reproductive biology in mango (*Mangifera indica* L.) in a Mediterranean climate
V. Pérez, J.I. Hormaza and M. Herrero
- 11:40AM - Wednesday June 5, 2013**
Session 3: Physiology and reproductive biology / S3-13 Pag. 50
Effect of methyl jasmonate on red color, qualities and postharvest extending the shelf life of mango fruits cv. Mahajanok
Peerasak Chairprasart and Rattaphol Muengkaew
- 12:00M - Lunch / Almuerzo**

Session 4: Horticultural practices

- 02:00PM - Wednesday June 5, 2013**
Session 4: Horticultural practices / Keynote 4-01 Pag. 51
Advantages and disadvantages of cultivating mangoes (*Mangifera indica* L.) under subtropical conditions and potential of greenhouse cultivation of mango
Galán Saico, V.
- 02:40PM - Wednesday June 5, 2013**
Session 4: Horticultural practices / S4-01 Pag. 52
Answer of four mango cultivars (*Mangifera indica* L.) to the rehabilitation pruning, to the 5 years of carried out in the south of Havana Cuba
Rafael Jiménez, Fressy Pérez, Domingo Rivero, Felina Martínez, José M. Matamoros, David Zamora and Darío G. Saurd

☐ **03:00PM - Wednesday June 5, 2013**

Session 4: Horticultural practices / S4-02

Pag. 53

Use of two forms of the tangential graft without beheading the rootstock in the propagation of the mango (*Mangifera indica* L.) in orchard conditions to the south of the Havana, Cuba

Rafael Jiménez, David Zamora, Fressy Pérez, Narciso N Rodríguez, José M Matamoro, Rubén Tamayo and Domingo Rivero

☐ **03:20PM - Wednesday June 5, 2013**

Session 4: Horticultural practices / S4-03

Pag. 54

Handling of the pruning, for the control of the growth in mango orchards (*Mangifera indica* L.) in the first 7 years of planted, associating tropical fruits of growth under, to the south of the Havana, Cuba

Rafael Jiménez, Fressy Pérez, David Zamora, Hugo M. Oliva, José M. Matamoros and Juan Álvarez

☐ **03:40PM - Wednesday June 5, 2013**

Session 4: Horticultural practices / S4-04

Pag. 55

Reconversión de cultivo tradicional a cultivo de exportación en un escenario de mercados abiertos

César V. Paniagua

☐ **04:00PM - Coffee Break / Receso**

☐ **04:20PM - Wednesday June 5, 2013**

Session 4: Horticultural practices / S4-05

Pag. 56

Standardization of package of practices for cvs. Alphonso, Ratna, Totapuri mangoes under ultra high density planting (UHDP)

Amol U. Chaudhary, Selva Kumar, Bal Krishna, G. Rama Rao and V. R. Balsubrahmanyam

☐ **04:40PM - Wednesday June 5, 2013**

Session 4: Horticultural practices / S4-06

Pag. 57

Integrated mango production in Brazil to enhancing production systems, quality, and safety of fruit

Lopes, P.R.C.; Oliveira, J. E De M; Assis, J. S. De and Oliveira, I.V. De M.

☐ **05:00PM - Mango Working Group - ISHS**

» **Day 4 -Thursday June 6, 2013 / Día 4 - Jueves 6 de Junio 2013**

Session 5: Diseases and Pest control

☐ **08:20AM - Thursday June 6, 2013**

Session 5: Diseases and Pest control / Keynote 5-01

Pag. 58

Características demográficas de *Anastrepha obliqua* (Diptera: Tephritidae), en relación con las plantas de mango en Panamá

C. A. Korytkowki, Sci.Dr.; R. Chang, M.Sc; E. Medianero, M.Sc, PhD, ;C. Campo, I.A., H. Esquivel M.Sc., E. Rodriguez, M.Sc.; D. Emmen, M.Sc., PhD y G.Tapia M.Sc.

- 09:00AM - Thursday June 6, 2013**
Session 5: Diseases and Pest control / Keynote 5-02 Pag. 59
Avances y perspectivas para métodos etológicos y de control biológico clásico probados con moscas de las frutas en la República Dominicana
C.A. Serra
- 09:40AM - Coffee Break / Receso**
- 10:00AM - Thursday June 6, 2013**
Session 5: Diseases and Pest control / S5-01 Pag. 61
Mango malformation disease: etiology, epidemiology and management
S. Freeman, S. Youssef, A.G. Levin and D. Shtienberg
- 10:20AM - Thursday June 6, 2013**
Session 5: Diseases and Pest control / S5-02 Pag. 62
Effect of vapour heat treatment on occurrence of spongy tissue, fruit fly and stem-end- rot in Alphonso mango fruits
M. M. Burondkar, S. K. Godase, R. G. Khandekar, M. S. Joshi, P. M. Haldankar, S. G. Bhave and S.K Lad
- 10:40AM - Thursday June 6, 2013**
Session 5: Diseases and Pest control / S5-03 Pag. 63
Effect of salts of quitosana in the control of *Colletotrichum gloeosporioides* (Penz.) Penz & Sacc. causal agent of the antracnose in mango
Tania Mulkay, Adrián Paumier, Ingrid González, Nilia de la Paz, Oreste López, Antonio Nogueira and Rafael Jiménez
- 11:00AM - Thursday June 6, 2013**
Session 5: Diseases and Pest control / S5-04 Pag. 64
Genetics and biology of the mango Blossom gall midge, *Procontarinia mangiferae*, a pest with highly adaptable life strategies
P. Amouroux¹, H. Delatte², S. Nibouche², J. Chadœuf³ and F. Normand¹
- 11:20AM - Thursday June 6, 2013**
Session 5: Diseases and Pest control / S5-05 Pag. 65
Uso de sistemas de información geográfica (SIG) para georeferenciación de trampas para el monitoreo de la Mosca de la fruta (*Anastrepha obliqua*), en la provincia de Peravia, República Dominicana
Melvin Mejía
- 11:40AM - Thursday June 6, 2013**
Session 5: Diseases and Pest control / S5-06 Pag. 66
Comportamiento de *Colletotrichum Gloeosporioides* Penz., desde la poda hasta la floración y la cosecha en una finca de Villa Fundación
Quisqueya Pérez y Agueda Caro
- 12:00M - Lunch / Almuerzo**

Session 6: Postharvest physiology and technology

- 02:00PM - Thursday June 6, 2013**
Session 6: Postharvest physiology and technology / S6-01 Pag. 67
Comparative post-harvest study of two mango cultivars growing in Venezuela
Angel Guadarrama y Angela Sarmiento
- 02:20PM - Thursday June 6, 2013**
Session 6: Postharvest physiology and technology / S6-02 Pag. 68
Effect of modified atmosphere storage extending the shelf life of mango fruits cv. Nam Dok Mai Sri Tong
Nuchanat Phakdee and Peerasak Chairasart
- 02:40PM - Thursday June 6, 2013**
Session 6: Postharvest physiology and technology / S6-03 Pag. 69
Quality attributes of mango fruit (var. Haden, Kent, Palmer and Keitt) stored at ambient and transit temperatures
M. Abu, N. S. Olympio and J. O. Darko
- 03:00PM - Thursday June 6, 2013**
Session 6: Postharvest physiology and technology / S6-04 Pag. 70
Use of the reflectance spectra as a non-destructive indicator of quality, i.e. color, and maturity, i.e. pigment content, of mango fruit
Thibault Nordey, Mathieu Léchaudel, Jacques Joas, and Michel Génard
- 03:20PM - Thursday June 6, 2013**
Session 6: Postharvest physiology and technology / S6-05 Pag. 71
Changes in the oxidative status of mango in response to temperature. impact on quality
Mathieu Léchaudel, F  licie Lopez-Lauri, and Jacques Joas
- 03:40PM - Coffee Break / Receso - Poster Session / Sesi  n de P  sters**

Session 7: Postharvest pathology

- 04:20PM - Thursday June 6, 2013**
Session 7: Postharvest pathology / S7-01 Pag. 72
Prospecting yeasts isolates for biological control agents of postharvest diseases in mango.
A.P.C. de Castro; C.A. Pereira e C.D. da Paz C.A.T. Gava
- 04:40PM - Thursday June 6, 2013**
Session 7: Postharvest pathology / S7-02 Pag. 73
Defining optimal dose of a biocontrol agent to postharvest fruit rot in mangoes caused by *Lasiodiplodiae theobromae* and *Botryosphaeria dothidea*
C.A. Pereira; A.P.C. de Castro; C. D. da Paz and C.A.T. Gava

Session 8: Fruit processing and commercialization

□ **05:00PM - Thursday June 6, 2013**

Session 8: Fruit processing and commercialization / Keynote 8-01 Pag. 74

Postharvest handling of mango under a globally recognized management system for food safety and quality

Reginaldo Báez Sañudo

□ **05:40PM - Thursday June 6, 2013**

Session 8: Fruit processing and commercialization / S8-01 Pag. 75

Haitian mango growers access high value export markets

Junior Paul and James Chapman

□ **06:00PM Closing Ceremony Technical Prest./Ceremonia de Clausura Prest. Técnicas**

» **Day 5 - Friday June 7, 2013 / Día 5 - Viernes 7 de junio 2013**

□ **06:00AM Field Day - Día de Campo**

Poster Session Contents / Contenido Sesión de Póster

□ **04:40PM - Monday June 3, 2013 / Lunes 3 de Junio 2013**

Poster Session 2: Genetics, breeding and biotechnology

□ **P2-01**

Poster Session 2: Genetics, breeding and biotechnology / P2-01 Pag. 76

Alternativas de variedades mango para sistemas de producción de la zona central de Venezuela o para exportación

Enio Soto; Luis Avilán; Emaldi Unai; Mercedes Perez; Margot Rodriguez y José Ruiz

□ **P2-02**

Poster Session 2: Genetics, breeding and biotechnology / P2-02 Pag. 77

Characterization of Ubá mango accessions from Zona da Mata, Minas Gerais state, Brazil

Girlaine Pereira Oliveira; Dalmo Lopes de Siqueira; Danielle Fabíola Pereira da Silva; Luiz Carlos Chamhum Salomão

Poster Session 3: Physiology and reproductive biology

□ **P3-01**

Poster Session 3: Physiology and reproductive biology / P3-01 Pag. 78

Establecimiento del ciclo fenológico de floración del mango en Venezuela: fecha de inicio, intensidad y duración de la floración

Enio Soto

□ **P3-02**

Poster Session 3: Physiology and reproductive biology / P3-02 Pag. 79

Estudios comparativos de ciclos fenológicos en 12 cultivares de mango mantenidos en la Región Central de Venezuela

Enio Soto; Mercedes Perez y Luis Avilán

- P3-03**
Poster Session 3: Physiology and reproductive biology / P3-03 Pag. 80
Evolución del contenido de nutrientes en hoja de mango *Mangifera indica*, cv Osteen.
Medina, D.; Gómez, R.; Guirado, E. ; Hermoso, J.M. y Sarmiento, D.
- P3-04**
Poster Session 3: Physiology and reproductive biology / P3-04 Pag. 81
Extraction and quantification of carotenoids in ‘Cogshall’ mango fruit
Rémy Rosalie and Emmanuelle Vulcain
- P3-05**
Poster Session 3: Physiology and reproductive biology / P3-05 Pag. 82
Paclobotrazol and tip pruning on the management of mango ‘Palmer’ in Brazilian semiarid
M. B. Oliveira, M. C. T. Pereira, G. P. Mizobutsi, V. M. Maia, J. F. Silva, J. A. A. Oliveira, I. J. S. Costa, S. Nietsche and M. A. C. Mouco
- P3-06**
Poster Session 3: Physiology and reproductive biology / P3-06 Pag. 83
Mango crop production features under organic compost cultivation in the semiarid region, Brazil
D.J. Silva; M.A.C. Mouco; C.A.T. Gava; V. Giongo and J.R. Silva
- P3-07**
Poster Session 3: Physiology and reproductive biology / P3-07 Pag. 84
Effect of foliar application of micronutrients (Zinc Sulphate and Boric Acid) on quality characters of mango variety Langra
Malik Fiaz Hussain Ferdosi, Amer Farooq & F.M. Tahir
- P3-08**
Poster Session 3: Physiology and reproductive biology / P3-08 Pag. 85
Influence of an amino acid formulation on fruit retention of ‘Edward’ mango
José Pablo Morales-Payán
- P3-09**
Poster Session 3: Physiology and reproductive biology / P3-09 Pag. 86
Growth of ‘Parvin’ mango in nursery as affected by a soil-applied biostimulant
José Pablo Morales-Payán

Poster Session 4: Horticultural practices

- P4-01**
Poster Session 4: Horticultural practices / P4-01 Pag. 87
A review of the current Haitian production of mangoes and horticulture practices to increase production and decrease postharvest losses
Brian Flanagan
- P4-02**
Poster Session 4: Horticultural practices / P4-02 Pag. 88
Evaluación del efecto de diferentes fechas de poda de flor en el mango cv. Kent.
Guirado, E. ; Hermoso, J.M.; González J.; Hormaza, I. and Farré J.M.

- P4-03**
Poster Session 4: Horticultural practices / P4-03 Pag. 89
Recovery pruning in mango cultivars at Guanare municipality, Portuguesa State
Añez Q., Miguel y Gonzalez, Oswaldo
- P4-04**
Poster Session 4: Horticultural practices / P4-04 Pag. 90
Stock of total organic carbon and total nitrogen in irrigated mango cultivation in the Brazilian semi-arid
V. Giongo; T.J. F.da Cunha; A.M.S. Mendes, D.J. Silv, M. da S. Santana and S. da S. Brandão
- P4-05**
Poster Session 4: Horticultural practices / P4-05 Pag. 91
Técnicas de manejo del mango, cv. Osteen, en invernadero en el sur de España
Gómez, R.; Guirado, E. ; Hermoso, J.M. ; Sarmiento, D. y Medina, D.
- P4-06**
Poster Session 4: Horticultural practices / P4-06 Pag. 92
Green manures in mango 'Kent' orchard
M. A. do C. Mouco, D. J. Silva, V. Giongo and Alessandra Mendes
- P4-07**
Poster Session 4: Horticultural practices / P4-07 Pag. 93
Propagation, grafting and improvement of mango in the U.S. Virgin Islands
Dilip Nandwani, Vanessa Forbes, Louis Petersen, Troy King and Raymond Petersen

Poster Session 5: Diseases and Pest control

- P5-01**
Poster Session 5: Diseases and Pest control / P5-01 Pag. 94
An investigation into the status and control of mango blossom malformation in South Africa
M.H. Schoeman & F.A. Botha
- P5-02**
Poster Session 5: Diseases and Pest control / P5-02 Pag. 95
Antimicrobial effect of chitosan incorporating lactoperoxidase system against mango pathogens
Marie-Noëlle Ducamp-Collin, Mohamed Cisse and Gerard Loiseau
- P5-03**
Poster Session 5: Diseases and Pest control / P5-03 Pag. 96
Diagnóstico y diversidad de los aislados de Fusarium causantes de la malformación del mango en España
M. Crespo, F.M. Cazorla, J.M. Hermoso, E. Guirado, J.Gonzalez, D. Sarmiento, S. Freeman, E. Arrebola, J. A. Torés y A. de Vicente.
- P5-04**
Poster Session 5: Diseases and Pest control / P5-04 Pag. 97
Effect of calcium and magnesium silicate under pests management and yield in mango tree cultivar Palmer
J. S. Costa, M. C. T. Pereira, G. P. Mizobutsi, V. M. Maia, J. F. Silva, J. A. A. Oliveira, M. B. Oliveira, S. Nietsche and G. H. Korndorfer

- **P5-05**
Poster Session 5: Diseases and Pest control / P5-05 Pag. 98
Evaluación de un fungicida y tres extractos orgánicos en el control de Antracnosis (*Colletotrichum gloeosporioides* Penz.) en la poscosecha en mangos de producción convencional y orgánica
Quisqueya Pérez y Alex Oliver
- **P5-06**
Poster Session 5: Diseases and Pest control / P5-06 Pag. 99
Infografía de enfermedades del cultivo del mango (*Mangifera indica* L) en la República Dominicana
Quisqueya Pérez y Águeda Caro
- **P5-07**
Poster Session 5: Diseases and Pest control / P5-07 Pag. 100
Diseminación de síntomas de la enfermedad de Escoba de bruja en mango (*Mangifera indica*) en la República Dominicana
C. M. Batista, M. Pellerano, J.L. González, J. de D. Moya, S. García y C. A. Serra

Poster Session 6: Postharvest physiology and technology

- **P6-01**
Poster Session 6: Postharvest physiology and technology / P6-01 Pag. 101
Ripening and quality of hot water treated mango cv. 'Tommy Atkins' after refrigerated transit period plus seven days under marketing conditions
Joston Simão de Assis, Ana Claudia dos santos and Rosejane Pereira da Silva
- **P6-02**
Poster Session 6: Postharvest physiology and technology / P6-02 Pag. 102
Suitability of South African mango cultivars for agro-processing
S. Willemsse, K. de Jager, C. Human, T. Malindi and A.D. Sippel
- **P6-03**
Poster Session 6: Postharvest physiology and technology / P6-06 Pag. 103
Traceability pilot project in mango
Teófilo Suriel

Poster Session 7: Postharvest pathology

- **P7-01**
Poster Session 7: Postharvest pathology / P7-01 Pag. 104
Estudio de la descomposición interna de la pulpa y su correlación con los niveles nutricionales foliares (N y Ca) de la planta
Sarmiento, D., Navarro, J., Westendorp, N., Ruiz, V. y Guirado, E.