

COST ACTION FA1204 FINAL CONFERENCE

Vegetable Grafting to Improve Yield and Fruit Quality under Biotic and Abiotic Stress Conditions

19 – 21 September 2016, Pula, Croatia

Conference Venue

Park Plaza Histria, Verudela 17, Pula, Croatia

PROGRAMME



Programme

18 September, Sunday

All day Arrivals

19 September, Monday

08:00 – 09:00 Registration

09:00 – 09:30 Official opening

09:30 – 11:00 **Session 1: WG 1 Oral presentations**

Chairs: Andrew J. Thompson and Halit Yetisir

09:30 – 09:45 Vegetable rootstock breeding: genetic variation and selection strategies
Thompson A.J., Bebeli P.J., Gisbert C., Belén Picó M., Yetisir H.

09:45 – 10:00 Screening of various gourd genotypes and watermelon cultivars for alkalinity tolerance under different pH levels
Ulas F., Yetisir H., Ulas A.

10:00 – 10:15 A new pepper rootstock to overcome salt stress
Penella C., Gisbert R., López-Serrano L., San Bautista A., López-Galarza S., Calatayud A.

10:15 – 10:30 Interspecific hybridization and hybrid seed yield of *Solanum Melongena* and *Solanum Aethiopicum* Lines for rootstock breeding
Saribas S., Balkaya A., Kandemir D., Secim A.

10:30 – 10:45 Citron: a promising rootstock for watermelon grafting
Belén Picó M., Pérez-de-Castro A., Cebolla-Cornejo J., Roselló S., Sorribas F., Gisbert C.

10:45 – 11:00 Breeding of rootstocks appropriate for cucumber grafting
Velkov N., Rodeva R., Markova D., Yankova V., Masheva S.

11:00 – 11:30 Coffee break

11:30 – 13:00 **Session 2: WG 2 Oral presentations**

Chairs: Jan Henk Venema and Ian C. Dodd

11:30 – 11:45 Rootstock – scion signaling: factors that mediate scion performance and graft compatibility
Venema J.H., Pina A., Dodd I.C.

11:45 – 12:00 Hormonal and nutritional responses regulate rootstock-mediated vigour under low-potassium nutrition in tomato
Martínez-Andújar C., Albacete A., Martínez-Pérez A., Pérez-Alfocea F.

12:00 – 12:15 Evaluating the role of root-to-shoot jasmonate signalling
de Ollas C., Arbona V., Gomez-Cadenas A., Dodd I.C.



- 12:15 – 12:30 Proteome analysis of grafted melon response to drought stress
Vítámvás P., Kosová K., Smirnova T., Prášil I.T.
- 12:30 – 12:45 Changes in the xylem sap metabolite profiles induced by the rootstock genotype in tomato
Albacete A., Martínez-Andújar C., Pérez-Alfocea F.
- 12:45 – 13:00 Early detection of graft incompatibility in an apricot intraspecific population
Irisarri P., Errea P., Pina A.
- 13:00 – 14:30 Lunch
- 14:30 – 16:00** **Session III: WG 3 Oral presentations**
Chairs: Dietmar Schwarz and Roni Cohen
- 14:30 – 14:45 Physiological wilting of grafted melons: A phenomenon related to genetic material, rootstock-scion interaction and high temperatures
Cohen R., Edelstein M., Freeman S., Omari N., Pivonia S., Koren A., Soteriou G., Papayiannis L., Kyriacou M., Schwarz D.
- 14:45 – 15:00 Crop management affects success of grafted beans against plant parasitic nematodes
Costa S.R., Mourão I., Rodrigues J.R., Moura M.L., Brito L.M.
- 15:00 – 15:15 Cutting grafting method (RPSG) provides better stand establishment and nutrient uptake rate in salt-stressed cucumber seedlings
Balliu A., Sallaku G.
- 15:15 – 15:30 Effect of grafting on photosynthetic activity during dehydration and rehydration of tomato plants
Georgieva K., Mihailova G., Balacheva E., Rodeva R.
- 15:30 – 15:45 Grafting onto different rootstock genotypes alleviates salt stress in aubergine plants by activating antioxidative enzyme defense system
Talhouni M., Sönmez K., Ellialtıođlu Ş.Ş., Kuşvuran S.
- 15:45 – 16:00 Population dynamics of *Bemisia tabaci* (Gennadius) and tomato leaf anatomy as affected by rootstock
Žanić K., Dumičić G., Mandušić M., Vuletin Selak G., Jukić Špika M., Urlić B., Bočina I., Goreta Ban S.
- 16:00 – 16:30 Coffee break



- 16:30 – 17:30** **Poster session (I, II, III)**
- 1a Selection of low temperature tolerant *Cucurbita* spp. hybrid rootstocks for cucumber (*Cucumis sativus* L.)
Karaağaç O., Dođru S.M., Kar H., Yetiřir H.
- 1b Contribution of grafting to nitrogen use efficiency among different solanum species
Ulas A., Yetisir H., Ulas F., Doganci E.
- 2a Mechanisms associated with tolerance of grafted bell pepper rootstock to low root zone temperature
Aidoo M.K., Sherman T., Fait A., Rachmilevitch S., Lazarovitch N.
- 2b The hypocotyls morphology of promising salt tolerant winter squash and pumpkin rootstock lines and grafting compatibility, survival rates with grafted cucumber
Yıldız S., Balkaya A.
- 2c Antioxidant responses to arsenic stress in grafted melon plants
Stazi S.R., Allevato E., Marabottini R., Rita Paolacci A., Ciaffi M., D'Annibale A., Giuffrida F., Leonardi C.
- 2d Effects of rootstock type and grafting-healing duration on un-rooted grafted cuttings for eggplant transplant production and shipping
Sabatino L., Iapichino G., D'Anna F.
- 3a Host reaction of bean cultivars to the root knot nematode *Meloidogyne javanica*
Pires D., Costa S., Mourão I., Almeida M.T.
- 3b Effect of tomato grafting on virus infections
Petrov N., Dikova B., Balacheva E., Stoyanova Z., Rodeva R.
- 3c Melon growth, yield and resistance against soil borne diseases as affected by grafting under un-controlled greenhouse conditions
Al-Abed A., Naser Z., Qaryouti M.
- 3d Bell Pepper Response to Low Root Zone Temperature
Aidoo M.K., Sherman T., Fait A., Lazarovitch N., Rachmilevitch S.
- 3e Effect of partial root-zone irrigation on grafted tomato mineral content and fruit quality
Urlić B., Dumićić G., Runjić M., Vuletin Selak G., Jukić Špika M., Mandušić M., Žanić K.
- 18:00 – 21:00 Social event and networking (<http://www.pulacitytour.com/hr/>)



20 September, Tuesday

09:00 – 10:30

Session IV: WG 4 Oral presentations

Chairs: Cherubino Leonardi and Carmina Gisbert

09:00 – 09:15

How herbaceous grafting influences vegetable quality

Gisbert C., Kyriacou M., Oztekin G.B., Mourão I., Roupheal Y., Leonardi C.

09:15 – 09:30

Scion/rootstock combinations influence yield and metabolic profile of tomato fruits (*Lycopersicon esculentum* Mill.)

Kacijan Maršić N., Šircelj H., Mikulič Petkovšek M.

09:30 – 09:45

Rootstock effect on grafted green bean yield and fruit quality

Mourão I., Moura M.L., Costa S.R., Rodrigues J.R., Brito L.M., Ferreira M.E., Coutinho J.

09:45 – 10:00

Effects of *Cucurbita* hybrid rootstocks on quality of three fruit vegetables grown under moderate saline conditions

Stefanoni W., Roupheal Y., Cardarelli M., Barbetti B., Colla G.

10:00 – 10:15

Preventing entry of pharmaceuticals (carbamazepine) into the food chain by using grafted plants

Edelstein M., Ben-Hur M., Ju-Young Y., Bernstein N., Nasser A., Baumkoler F., Gerstl Z.

10:15 – 10:30

Grafting as a tool to enhance tomato fruit quality

Aktas H., Schwarz D.

10:30 – 11:00

Poster session (IV)

4a

Simultaneous determination of heavy metals (Cr, Ni, As, Cd, Pb, Hg) in Pachino cherry tomatoes grafting on different rootstock

Cincotta F., Verzera A., Condurso C., Bua G.D., Annuario G., Dugo G., Paratore A.

4b

Yield and quality of grafted mini watermelon [*Citrullus lanatus* (Thunb) Matsum & Nakai] cultivars

Soteriou G.A., Kyriacou M.C.

4c

The implications of grafting for watermelon and melon fruit quality

Kyriacou M.C., Soteriou G.A.

4d

Technological features and elements of economic efficiency regarding the semi-automatic grafting of vegetables

Bogoescu M., Vintila M.

4e

Grafting influences the fate of arsenic in melon plants

Allevato E., Marabottini R., Stazi S.R., Giuffrida F., Leonardi C.

11:00 – 11:30

Coffee break

- 11:30 – 13:00** **Session V: Round table - (*connection of science and industry*)**
**Chairs: Jan Henk Venema, Francisco Pèrez Alfocea, and
Smiljana Goreta Ban**
- 11:30 – 11:45 Grafted vegetable transplants and viral threats: effective solution or
emerging complication
Koren A., Klein E.
- 11:45 – 12:00 Our international grafting venture: current challenges and future
opportunity
Causarano G.
- 12:00 – 12:30 *Discussion on practical implementation and transfer of knowledge*
- 12:30 – 13:00 *Presentations of current projects, plans for future research and
networking*
- 13:00 – 14:30 *Lunch*
- 14:30 – 16:00** **Session VI: STSMs – Achievements and outcomes**
Chair: Dimitrios Savvas
- 14:30 – 14:45 Contribution of Short Term Scientific Missions to the scientific
objectives of COST FA1204
Savvas D.
- 14:45 – 15:00 Alleviating aluminium toxicity and adverse effects of low pH in
vegetables by grafting onto suitable rootstocks
*Rouphael Y., Colla G., Cardarelli M., Bitterlich M., Porras M.E., Kläring
H.P., Schwarz D.*
- 15:00 – 15:15 Interactions of grafting and shading in a greenhouse pepper crop
*Sabatino L., Ropokis A., Bernabei G., Ntatsi G., D'Anna F., Katsoulas
N., Savvas D.*
- 15:15 – 15:30 Response of some cucurbit genotypes to salinity stress
*Topalova E., Bóhm V., Tüzel Y., Öztekin G.B., Velkov N., Petkova V.,
Kappel N.*
- 15:30 – 15:45 Is cadmium tolerance root- or shoot-controlled in grafting pea plants?
Sanoubar R., Orsini F., Gianquinto G., Dodd I.
- 15:45 – 16:00 The COST Action FA1204 database: A simple and effective tool for
vegetable growers and the scientific community
Celli T., Rouphael Y., Ntatsi G., Fiorillo A., Colla G.
- 16:00 – 16:30 *Coffee break*
- 16:30 – 17:30** **Conclusions and closing**
Book presentation
Closing remarks
- 18:00 – 22:00 Social event and networking
<http://www.histriaaromatica.hr/index.php?ln=EN>



19-21 September 2016, Pula, Croatia

21 September, Wednesday

All day technical visit

09:00 – 20:00

Leaving Pula

Visit to vegetable nursery – owner Ivan Dušan

Visit to IPTPO vinery: <http://www.iptpo.hr/>

Visit to cabbage processing facility

<http://www.ciburiproduct.hr/>

Networking at Agroturizam „Ograde”

<http://agroturizam-ograde.hr/>