



# Management Committee Meeting

**COST Action no. FA1204**

**Venue Berlin, September 15, 2015  
from 16:00 to 19:00**

# AGENDA

1. Welcome to participants
2. Adoption of agenda
3. Update from the Action Chair
  - a. Status of Action
  - b. Action budget status
4. Update from the STSM Coordinator about STSM status and new applications
5. Follow-up of MoU objectives
  - a. Progress report of working groups by WG leaders
  - b. Database COST FA1204
6. Scientific planning (Scientific strategy and activities)
  - a. Steering Committee Meeting and workshop in Netherland (Wageningen UR -Greenhouse Horticulture – Bleiswijk 18<sup>th</sup>-19<sup>th</sup> April 2016)
  - b. 2nd Training School "Root to shoot communication" in Netherland (Wageningen UR Greenhouse Horticulture 19<sup>th</sup>-21<sup>st</sup> April 2016).
  - c. Final Dissemination Conference in Croatia (Pula 19<sup>th</sup>-21<sup>st</sup> September 2016)
  - a. Book and Final Action Dissemination (FAD)
7. Summary of MC decisions
8. Closing

# Timetable

Activity	2015		2016	
	1-5	6-12	1-5	6-9
SG-MC/WG meetings	Antalya		Wageningen - Bleiswijk	
MC/WG meetings		Berlin		
STSMs	X	X	X	X
Training School			Wageningen	
Website and dissemination	X	X	X	X
Final Conference				Pula
Final Book				X

## **b. Action budget status**

Financial Period: CGA-FA1204-3

From 2015/06/01 to 2016/09/30

YFR deadline date, Tuesday 29 November 2016

A. COST Networking Tools	EUR
(1) MEETINGS	<b>115.000,00</b>
Annual Conf Berlin (DE) MC Meeting+WG Meeting 3days	<b>48.000,00</b>
Workshop/WGSG - University of Groningen (NL) 2 days	<b>19.000,00</b>
Final Conference Pula - Croatia 3 days	<b>48.000,00</b>
(2) TRAINING SCHOOL (NL) 3 days	<b>15.000,00</b>
(3) SHORT-TERM SCIENTIFIC MISSIONS	<b>15.000,00</b>
(4) DISSEMINATION	<b>2.000,00</b>
(5) OERSA	<b>1406,09</b>
B. TOTAL SCIENCE EXPENDITURE (sum of (1) to (5))	<b>148.406,09</b>
C. FSAC (15% of B.)	<b>22.260,91</b>
D. TOTAL EXPENDITURE (B+C)	<b>170.667,00</b>

Allocated Action budget by COST Association: 170 667.00 EUR

## **a. Status of Action (MoU Objectives and Deliverables) extracted by the 30 months Monitoring Report submitted to COST**

MoU objective	Achieved Yes/Partially/No	Evidence of (partial) achievement including hyperlink to enable assessment of the achievement. Justification if full achievement is not forseen
<b>1) to list the current genetic variability existing in each vegetable species as well as the current breeding programs in COST and no-COST countries</b>	Partially	Enhancement of the knowledge on current genetic variability existing in each vegetable species and interesting germplasm for developing new rootstocks and ongoing breeding programs. Current genetic variability has been listed during the Meetings and in particular during the meeting in Antalya, Turkey (see book of abstracts, meeting reports and power point presentations in COST Action Website). Moreover, round tables with stakeholder (breeding companies, and nurseries) have been organized during the Murcia and Antalya meeting in order to improve the network and to understand the needs of specific rootstock breeding programs. Questionnaires have been submitted to stakeholders for meeting the above goals (see questionnaires in COST Action Website). Finally, the WG is summarizing the knowledge on germplasm and breeding program for developing new rootstocks in two chapters of the COST Book on vegetable grafting (chapter 2 -Genetic resources for vegetable rootstock breeding; chapter 3 - Rootstock breeding: current practices and future technologies and breeding goals).
<b>2) to define major physiological and genetic determinants of root and shoot development and compatibility of rootstock-scion</b>	Partially	Improvement of the knowledge about rootstock-scion interaction responsible for the success of rootstock-scion compatibility. Scion-rootstock interaction has been presented during all COST Meetings and especially during the meeting in Jerusalem, Israel (see book of abstracts, meeting reports and power point presentations in COST Action Website). Moreover, round tables with stakeholder (breeding companies, and nurseries) have been organized during the Murcia and Antalya meeting in order to improve the network and to understand the scion-rootstock interaction. Questionnaires have been submitted to stakeholders for meeting the above goals (see questionnaires in COST Action Website). Finally, the WG is summarizing the knowledge on scion-rootstock interaction and grafting compatibility in two chapters of the COST Book on vegetable grafting (chapter 4 - Rootstock-scion signalling: rootstock-mediated key factors for scion performance; chapter 5 - Physiological and molecular mechanisms underlying graft compatibility).

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<b>3) to determine the current status of knowledge about rootstock-mediated crop improvement so as to mitigate the impact of biotic, abiotic and combined stresses, thus improving resource use efficiency</b>	Partially	<p>Enhancement of the knowledge about the rootstock mediated improvements of (a)biotic stress resistance in grafted plants. Mitigation of biotic and abiotic stresses in grafted plants has been presented during all COST Meetings and especially during the meeting in Jerusalem, Israel (see book of abstracts, meeting report in COST Action Website). A protocol controlling pathogens for producing high quality grafted plants in nursery has been presented (see presentation in COST Action Website). Moreover, round tables with stakeholder (breeding companies, and nurseries) have been organized during the meetings in order to improve the network and to understand the most critical stress factors to be addressed through rootstock breeding programs. Questionnaires have been submitted to WG participants on the use of grafted plants in each country to cope with environmental stresses (see questionnaires in COST Action Website). Finally, the WG is summarizing the knowledge in one chapter of the COST Book on vegetable grafting (chapter 6 - Rootstock-mediated resistance to environmental stresses).</p>
<b>4) to list the effects of rootstocks on fruit quality in order to define strategies for a better understanding and exploitation of the signalling processes involved</b>	Partially	<p>Improvement of the knowledge about the influence of rootstock on nutritional quality. Effects of rootstocks on fruit quality and shelf life have been presented during all COST Meetings and especially during the meeting in Antalya, Turkey (see book of abstracts, and meeting reports in COST Action Website). During the meetings, nutraceutical value and aroma compounds of fruits have been emphasized especially in melon and watermelon. Moreover, round tables with stakeholder (breeding companies, and nurseries) have been organized during the Murcia and Antalya meeting in order to improve the network and to understand the most critical quality aspects to be addressed through rootstock breeding programs. Questionnaires have been submitted to WG participants for gathering information concerning the most important quality aspects influenced by grafting (see questionnaires in COST Action Website). Finally, the WG is summarizing the knowledge in one chapter of the COST Book on vegetable grafting (chapter 7 - Fruit quality).</p>

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<b>5) to create an international database with the information generated by the COST Action</b>	Partially	The final structures of database has been designed in its final version in May 2015. The Editorial board started to collect information by all WG and their Members and encode them in the database. First outputs will be presented in Berlin at the Annual Conference (Sept. 2015) (see database structure in COST Action Website)
<b>6) to define classical and biotechnological breeding strategies to prepare the generation of new rootstocks improving desirable traits in crop varieties of selected species</b>	Partially	Classical and biotechnological breeding strategies are being reported in chapter 3 – ‘Rootstock breeding: current practices and future technologies and breeding goals’ of the COST book. Additional information has been presented during COST Meetings (see book of abstracts in COST Action Website).
<b>7) to transfer available knowledge into the practice</b>	Partially	The transfer knowledge is an on going dissemination activity promoted especially through meetings, training schools and STSMs. During the COST Action, the following events have been organized to promote the transfer of available knowledge on vegetable grafting: 5 meetings with the participation of all the stakeholders involved (see book of abstracts and conference reports in COST Action Website), a training school on vegetable grafting in Catania (Italy) with 15 participants (see training school report in COST Action Website), and 14 STSMs (see report STSMs in COST Action Website). Moreover, two dissemination events have been carried out to promote interaction with scientists from COST Action FA1105 ‘Biogreenhouse’ (presentation at the 2nd International Symposium on Organic Greenhouse held in Avignon from 28 to 31 Oct. 2013 - <a href="https://www.amiando.com/OGH_Symposium2013.html">https://www.amiando.com/OGH_Symposium2013.html</a> ) and with scientists from China and other East Asian Countries (presentation at 1st International Symposium on Vegetable Grafting - ISVG2014 held in Wuhan, Hubei Province (China) from March 17, to 21, 2014 - <a href="http://www.ishs.org/ishs-book/1086">http://www.ishs.org/ishs-book/1086</a> ). An EPSON Newsletter (N° 32 / September 2013 <a href="http://www.epsoweb.org/newsletter/newsletter-september-2013">http://www.epsoweb.org/newsletter/newsletter-september-2013</a> ), a brochure ( <a href="http://www.vegetablegrafting.unitus.it/ife/trifold_brochure_cost_2014_final.pdf">http://www.vegetablegrafting.unitus.it/ife/trifold_brochure_cost_2014_final.pdf</a> ) have been prepared and distributed during the dissemination events and meetings, and a promotional video.

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MoU objective	Achieved Yes/Partially/ No	Evidence of (partial) achievement including hyperlink to enable assessment of the achievement. Justification if full achievement is not forseen
<b>8) to use all the information collected to identify particular topics which could be used to develop new research projects</b>	YES	<p>The COST Action permitted to identify research topics and to prepare the following research proposals: ENPI-CBCMED proposal; FACCE-ERA-NET proposal; other bilateral research proposals.</p> <p>During last H2020 call for proposals SC2 SFS-5-2015 a Consortium of organisations mainly composed by COST Action members (12 out of 20) presented a full proposal after having passed the first step of selection.</p>



## **a. Status of Action (MoU Objectives and Deliverables) extracted by the 30 months Monitoring Report submitted to COST**

MoU deliverable	Level of progress <sup>1</sup>	Evidence of (partial) delivery achievement including hyperlink to enable assessment of the delivery <sup>1</sup> . Justification if full achievement is not forseen
D1 – Information about the current status of vegetable grafting in Europe compared with other non-COST countries.	<b>75%</b>	The current status of vegetable grafting in COST and non-COST Countries has been addressed during the meetings (see presentation and boot of abstracts in COST website). Moreover, the final overview of vegetable grafting in Europe and other non-COST countries will be reported in chapter 1 of COST Book (reference author Prof. Zhilong Bie from Huazhong Agricultural University, Wuhan, China).
D2 – Information about potentially interesting germplasm for developing new rootstocks.	<b>75%</b>	Potentially interesting germplasm for developing new rootstocks has been identified during the Meetings (see books of abstracts in COST website). Moreover, WG participants are currently drafting the chapter 2 entitled ‘Genetic resources for vegetable rootstock breeding’ where a complete view of germplasm for developing new rootstocks will be reported.
D3 – Information about current rootstock breeding activities.	<b>75%</b>	Current rootstock breeding strategies have been discussed during the Meetings and round tables with stakeholders (see books of abstracts in COST website). Moreover, WG participants are currently drafting the chapter 3 entitled ‘Rootstock breeding: current practices and future technologies and breeding goals’ where a complete presentation of current rootstock breeding programs will be reported.
D4 – Identification of the major physiological and genetic determinants of root and shoot development and compatibility.	<b>75%</b>	Major physiological and genetic determinants of root and shoot development and compatibility have been discussed during the Meetings (see books of abstracts in COST website). Several STSMs have been carried out to elucidate the scion-rootstock interaction (see STSM reports in COST website). Moreover, WG participants are currently writing two chapters (chapter 4 - Rootstock-scion signalling: rootstock-mediated key factors for scion performance; chapter 5 - Physiological and molecular mechanisms underlying graft compatibility) where a complete presentation of the major physiological and genetic determinants of root and shoot development and compatibility will be reported.
D5 – Identification of the main factors limiting vegetable crop productivity.	<b>100%</b>	

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MoU deliverable	Level of progress	Evidence of (partial) delivery achievement including hyperlink to enable assessment of the delivery <sup>1</sup> . Justification if full achievement is not foreseen
D6 – Information about rootstock effects on biotic/abiotic stress resistance and resource use efficiency.	<b>75%</b>	Information about rootstock effects on biotic/abiotic stress resistance and resource use efficiency have been discussed during the Meetings (see books of abstracts in COST website). Several STSMs have been carried out on elucidating effects of rootstocks on (a)biotic stress resistance (see STSM reports in COST website). Moreover, WG participants are currently writing a chapter entitled ‘Rootstock-mediated resistance to environmental stresses’ where a complete description of rootstock mediated improvement of (a)biotic stress tolerance will be reported.
D7 – Information about the rootstock effects on fruit quality with particular emphasis on nutritional quality.	<b>75%</b>	Information about the rootstock effects on fruit quality have been discussed during the Meetings (see books of abstracts in COST website). Several STSMs have been carried out to elucidate the effects of rootstocks on fruit quality (see STSM reports in COST website). Moreover, WG participants are currently writing a chapter entitled ‘Fruit quality’ where a complete description of rootstock effects on fruit quality attributes will be reported.
D8 – Identification of further rootstock breeding strategies to generate new rootstocks and to improve desirable traits in crop varieties of selected species.	<b>50%</b>	Future rootstock breeding strategies have been discussed during the Meetings and round tables with stakeholders (see books of abstracts in COST website). These findings have been used to prepare a H2020 proposal in the frame of the call SC2 SFS-5-2015. Moreover, WG participants are currently writing the chapter 3 entitled ‘Rootstock breeding: current practices and future technologies and breeding goals’ where a complete presentation of rootstock breeding strategies will be reported.
D9 - Creation of a database containing the main information about vegetable grafting, available to the scientific community, private companies, vegetable growers, and other institutions.	<b>50%</b>	The final structures of database has been designed in its final version in May 2015. The Editorial board started to collect information by all WG and their Members and encode them in the database. First outputs will be presented in Berlin at the Annual Conference (Sept. 2015) (see database structure and two STSM reports in COST Action Website)
D10 - Providing opportunities for research groups to develop joint research programmes.	<b>100%</b>	
D11 - Information sharing through workshops and meetings, internet, scientific publications in journals and books	<b>75%</b>	The D11 deliverable will be fully achieved at the end of the COST Action. Three meetings, one training school, several STSMs, scientific publications and a final book are scheduled for the last part of the COST grant period (see COST website).

**Book (Dr Schwarz)**

**Update from the STSM Coordinator  
about STSM status and new  
applications (Prof. Savvas)**

**Next Core group Meeting (2 days) and  
Training school in the Netherland (3  
days) 2016  
(Dr. Venema)**

**Final Conference in Pula, Croatia**  
**(Dr. Smiljana Goreta Ban)**

**Website and database (Dr. Romanelli)**

**Closing**