

# 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

### Round table: connection of science and industry





## Round table COST Action

### Agenda



- Presentations:

Amnon Koren, Hishtil nurseries Ltd. Israel (15 min)

Giovanna Causarano, Centro Seia srl Societa Agricola, Italy (15 min)

Jean-Winoc Hennart, Vilmorin, France (10 min)



## Round table COST Action



## Agenda

- presentation of ongoing grafting projects
- plans for future grafting research or networking projects
- discussion on practical implementation and knowledge transfer
- inventarisation of crop-related rootstock problems



# Tomato & Eggplant rootstock problems



	Problem description:	Suggestion by		
1	Soilless: Control crazy root disease ( <i>Agrobacterium rhizogenes</i> )	Monsanto/De Ruiten/NL	BPK Duffel/B	
2	Soil: Nematodes, wilt causing fungi and oomycetes	Monsanto/De Ruiten/NL		
3	salt stress	Monsanto/De Ruiten/NL		
4	resistance to <i>Pyrenochatea lycopersici</i>	Sakata Japan/F		
5	resistance to <i>Fusarium oxysporum lycopersici</i> r2 (ex3)	Sakata Japan/F		
6	resistance to <i>Fusarium oxysporum radidis lycopersici</i>	Sakata Japan/F		
7	resistance to <i>Verticilium dahliae</i>	Sakata Japan/F		
8	uniformity seeds germination	La Sala Murcia/E		
9	abiotic stress tolerance open fields/passive glasshouses	Syngenta/UK		
10				
11				



# Pepper rootstock problems



	Problem description:				Suggestion by	
<b>1</b>	yield increase by rootstocks				Rijk Zwaan/NL	
<b>2</b>	nematodes				Sakata Japan/F	
<b>3</b>	resistance to <i>Phytophthora capsici</i>				Sakata Japan/F	
<b>4</b>	abiotic stress tolerance open field/passive glasshouses				Syngenta/UK	
<b>5</b>	lack genetic variation (wild accessions)					
<b>6</b>						



# Melon rootstock problems



	Problem description:					Suggestion by
1	resistance to <i>Fusarium oxysporum</i> race 1.2 (F,I,E,Maroc)					Sakata/Japan/F
2	linkage drag: resistances and taste					Sakata Japan/F
3	yield and biotic stress resistance					Bulgaria
4	"sudden death" (graft incompatibility)					Solomov LTD/H
5	improve earliness					Solomov LTD/H
6	too vigorous in 2nd part growth season					KITE zRT/H
7						
8						
9						
10						



# Watermelon rootstock problems



	Problem description:			Suggestion by		
1	resistance to <i>Fusarium</i> wilt			Sakata/Japan/F		
2	chilling tolerance			Sakata/Japan/F		
3	linkage drag resistances - taste			Sakata/Japan/F	Barbo'08 SLU/E	
4	yield and biotic stress resistance			Bulgaria		
5	"sudden death" (graft incompatibility)			Solomov LTD/H		
6	improve earliness			Solomov LTD/H		
7	too vigorous in 2nd part season			KITE zRT/H		
8						
9						
10						
11						



## Cucumber / Courgette rootstock problems



	Problem description:					Suggestion by	
1	variation in grafting success Jan. - July due to weather					BPK Duffel/B	
2	abiotic stress tolerance open field/passive glasshouses					Syngenta/UK	
3	Soilless culture: no improvement yield						
4							
5							





## General rootstock problems

	Problem description:	Suggestion by		
1	knowledge how the rootstock affects scion and fruit quality	Rijk Zwaan/NL		
2	what happens exactly at cut surface scion-rootstock?	Rijk Zwaan NL		
3	Improving yield, stability (=robustness), sustainability	Nunhems NL/I		
4	biomarkers that predict rootstock traits	Monsanto/De Ruiter NL		
5	balance between vigour (veget.) / production (gener.)	Sakata/Japan/F		
6	(in)compatibility problems	Sakata/Japan/F	Barbo'08 SLU/E	
7	resistances to new diseases (viruses)	Unigenia/E		
8	low-temperature tolerance unheated soil production	Latvia		
9	(a)biotic stress resistance (thermal stress, low radiation)	Syngenta/E		
10				
11				
12				
13				
14				
15				

- other rootstock problems?



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- CLOSING