

PROGRAMME

Sunday 16 September

19.30 Welcoming reception at Hotel Goya

Monday 17 September

9.00 Registration

9.15 Invited lecture: **FRUIT BREEDING IN SPAIN**. Chair: M.L. Badenes

Fruit breeding in Spain. G. Llácer 18

10.00 Coffee break

10.30 Opening ceremony

11.00 Oral Session: **BREEDING PROGRAMMES AND STRATEGIES**. Chair: S. Sansavini

11.00 “Fast breeding” in apple: a strategy to accelerate introgression of new traits into
elite germplasm. R. Volz*, E. Rokkering, P. Austin, T. Lawrence, N. De Silva and
V.G. Bus 20

11.15 Review of Pome Fruit Breeding in Europe; what strategies for the near future?
Yves Lespinasse 21

11.30 Towards a strategy for phenotyping architectural traits in mature F₁ hybrids of an
apple progeny. V. Segura, J.J. Kelner, P.E. Lauri and E. Costes* 22

11.45 Selection efficiency in apple breeding. M. Kellerhals*, M. Spuhler, A. Patocchi and J.
Frey 23

12.00 Apricot variety development in California’s San Joaquin Valley. C.A. Ledbetter* 24

12.15 Apricot and peach breeding programs from the IVIA. J. Martínez-Calvo, A. Font,
G. Llácer and M.L. Badenes* 25

12.30 Penta and Tardona: two new extra-late flowering self-compatible almond
cultivars. F. Dicenta *, E. Ortega, P. Martínez-Gómez, R. Sánchez-Pérez, M. Gambín
and J. Egea 26

12.45 New Polish winter cultivars of apple. Andrzej A. Przybyla, Małgorzata Kantorowicz-
Bąk, Kazimierz Tomala 27

13.00 Lunch

14.30 Poster session

16.30 - 17.15 – 18.00 Field visits

16.30 Concurrent meetings

16.30 Cultivar development. Y. Lespinasse Room A

16.30 European Rosaceae genome initiative. P. Arús Main Room

17.15 RosIGI. S. Gardiner Main Room

17.00 Small fruits. E. van de Weg Room B

18.00 Standardized Phenotyping in Rosaceae. C. Peace Main Room

18.00 Creation of an international working group on genetic engineering of apple and
pear. M. Malnoy Room B

18.30 Departure for Aljafería Castle

Tuesday 18 September

9.00 Oral Session: GERMPLASM AND BREEDING. Chair: G. Llácer	
Invited lecture: Progress in evaluating <i>Malus sieversii</i> for disease-resistance and horticultural traits. P.L. Forsline, H.S. Aldwinckle, G.M. Volk, C.M. Richards, W. Janisiewicz and G. Fazio*	29
9.45 Establishment of a core collection to optimise the conservation of cherimoya (<i>Annona cherimola</i> Mill.) genetic resources using SSR information. P. Escribano*, M.A. Viruel and J.I. Hormaza	30
10.00 Cisgenesis is a promising approach for fast, acceptable and safe breeding of pip fruit. H.J. Schouten, J.M. Soriano, S.G. Joshi, A.J. Korststee, F.A. Krens, J.G. Schaart, K. van der Linden, A.C. Allan, R.P. Hellens, R.V. Espley, E. Jacobsen	31
10.15 Evaluation and use of pear genetic resources in a new interregional cooperative breeding programme focused on disease resistance and fruit quality. M. Lateur*, R. Stiévenard, A. Rondia, M. Lascoste and I. Villette	32
10.30 Fruit and berry gene banks- for research, breeding or public entertainment? H. Nybom* and L. Garkava-Gustavson	33
10.45 Screening and field evaluation of dwarf Persian walnut genotypes. R. Rezaee, K. Vahdati*, V. Grigoorian and M. Valizadeh	34
11.00 Coffee break	
11.30 Oral Session: PHYSIOLOGY. Chair: H. Nybom	
11.30 QTL analysis for leaf gas exchange in an apple progeny grown under atmospheric constraints. J.L. Regnard*, V. Segura, N. Merveille, C.E. Durel and E. Costes	36
11.45 Self-incompatibility in Japanese apricot (<i>Prunus mume</i>). R. Tao	38
12.00 Characterization of S alleles and establishment of incompatibility groups in <i>Eriobotrya japonica</i> Lindl. L. Carrera*, J. Sanzol, M. Herrero and J.I. Hormaza	39
12.15 Transmission of flowering date in 'Orange Red' apricot cultivar. J.A. Campoy, D. Ruiz, J. Egea and P. Martínez-Gómez	40
12.30 Genotype-temperature interaction during the progamic phase in sweet cherry. A. Hedhly*, J.I. Hormaza and M. Herrero	41
13.00 Lunch	
14.30 Oral Session: RESISTANCE BREEDING. Chair: C. Pozzi	
Invited lecture: Resistance to root knot nematodes in <i>Prunus</i> : characterization of sources, marker-assisted selection and cloning strategy for the <i>Ma</i> gene from myrobalan plum. D. Esmenjaud	43
15.15 Biochemical and Genetical aspects involved in waterlogging tolerance in <i>Prunus</i> rootstocks. M.L. Amador, S. Sancho and M.J. Rubio-Cabetas*	44
15.30 Towards an understanding of the inheritance of hypersensitivity resistance against sharka virus in European plum (<i>Prunus domestica</i> L.): generation of interspecific hybrids with lower ploidy levels. M. Neumüller*, W. Hartmann and D. Treutter	45
15.45 Genetic mapping of QTLs involved in <i>plum pox virus</i> (PPV) resistance in the apricot 'Stark Early Orange' using different PPV strains and environmental	

conditions; comparison with <i>P. davidiana</i>. P. Lambert*, J.M. Audergon, A. Bachellez, V. Decroocq, F. Dicenta, M. Foulongne, I. Karayannis, T. Pascal, J.L. Poëssel, V. Restier, M. Rubio and V. Shurdi-Levraud.....	46
16.00 Identification of cultivable bacteria from in vitro cultures of apple. H. Flachowsky and M.V. Hanke*	48
16.15 Saturation sequencing, characterisation and mapping of NBS-containing R genes in apple (<i>Malus x domestica</i> Borkh.). J. Mafofo*, M.M. van Dyk, A. Masiko, D.J.G. Rees	49
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17.00 HiDRAS: an integrated European project adopting a pedigree-based approach to investigate apple fruit quality traits. L. Gianfranceschi*, F. Dunemann, K. Evans, C. Gessler, W. Guerra, M. Komjanc, M. Lateur, F. Laurens, M. Kellerhals, C. Ryder, S. Sansavini, K. Tomala, E. van de Weg, and E. Zurawicz	51
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Wednesday 19 September. Field visit

Orchard in La Almunia

Nursery in Calatayud

Monasterio de Piedra

Thursday 20 September

9.00 Oral Session. **FRUIT QUALITY**. Chair: T. den Nijs

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14.30 Oral Session: **MARKERS AND BREEDING**. Chair: P. Arús

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15.15 Nutritional enhancement in apple: identification of QTLs for antioxidants and their stability over different production years.	M.W. Davey* and W. Keulemans	85
15.30 Reference genetic linkage maps for European and Japanese pears.	T. Yamamoto*, S. Terakami, T. Kimura, Y. Sawamura, N. Takada, T. Hirabayashi, T. Imai and C. Nishitani	86
15.45 The ongoing peach genomics and functional genomics effort in Italy.	C. Pozzi*, A. Vecchietti, B. Lazzari, C. Ortugno, F. Barale, G. De Bellis, C. Consolandi, A. Severgnini and F. Salamini.....	87
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17.45 Identification and validation of QTLs linked to fire blight resistance in <i>Malus</i> and their applicability in marker-assisted selection.	M.A. Khan*, C.E. Durel, B. Duffy, D. Drouet, M. Kellerhals, C. Gessler and A. Patocchi	97
18.00 Genes differentially expressed during interactions of resistant and susceptible apple cultivars with the <i>Erwinia amylovora</i> .	M. Malnoy*, A. Baldo, C. Carlisle, J.M. Celton, E.E. Borejsza-Wysocka, J.L. Norelli, R.E. Farrell, C.L. Bassett, S. Gardiner and H.S. Aldwinckle.....	98
18.15 Business meeting and closing of Symposium		
21.30 Farewell dinner		

Poster session: (Monday 17, 14,30) (by alphabetic order)

- 001 MOLECULAR MARKERS FOR CLONAL DISCRIMINATION AND SUSTAINABLE UTILIZATION OF PORTUGUESE GRAPEVINE CULTIVARS FOR WINE PRODUCTION. S.C. Cardoso*, P.S. Fevereiro, J.E. Eiras Dias 101
- 002 ECPGR WORKING GROUP ON *Malus* & *Pyrus* GENETIC RESOURCES : A UNIQUE OPPORTUNITY FOR EUROPEAN COLLABORATIONS. Marc Lateur*, Bronislovas Gelvonauskis, Robert Oger, Adriana Antofie, Emma-Jane Ellen, Markus Kellerhals, Enrique Dapena, Stefan Mader, Viola Hanke, Inger Hjalmarsson, Laila Ikase, Jan Blazek, Endrit Kullaj, François Laurens & Lorenzo Maggioni 102
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- 004 RESPONSE OF LOCAL AND SCAB-RESISTANT CULTIVARS TO THE WOOLLY APPLE APHID. M. Miñarro and E. Dapena* 104
- 005 EVALUATION OF THE RESISTANCE TO THE ROSY APPLE APHID USING A GENETIC MARKER. E. Dapena*, M. Miñarro and M.D. Blázquez 105
- 006 *Erwinia amylovora* SUSCEPTIBILITY OF COMMERCIAL APPLE CULTIVARS BASED ON FRUIT, SHOOT AND FLOWER INOCULATIONS. Annemarie Auwerkerken, Kristof Vrancken, Tom Deckers*, Hilde Schoofs* and Johan Keulemans 106
- 007 SCREENING FOR *BOTRYTIS CINerea* RESISTANT APPLE CULTIVARS. Annemarie Auwerkerken, An Van den Putte, Mark Davey and Wannes Keulemans 107
- 008 GENETIC DIVERSITY OF S-RNase GENES IN EUROPEAN WILD APPLE (*Malus sylvestris*) AND OLD BELGIAN APPLE CULTIVARS (*Malus x domestica*). Rozemarijn Dreesen*, Gennaro Fazio, Katrien Luyten, Bartel Vanholme, Lobke Vanwynsberghe, Isabel Roldán-Ruiz and Johan Keulemans 108
- 009 IDENTIFICATION OF 'MARCONA' AND 'DESMAYO LARGUETA' CROSS-COMPATIBLE POLLINIZERS. P.J. Martínez-García, F. Mañas, F. Dicenta, E. Ortega 109
- 010 STUDY OF ORIGIN AND DISPERSION OF THE CULTIVATED ALMOND BY USING NUCLEAR AND CHLOROPLAST DNA MARKERS. M. Zeinalabedini, K. Majourhat, M. Khayam-Nekoui, V. Grigorian, M. Torchi, F. Dicenta, P. Martínez-Gómez 110
- 011 MOLECULAR CHARACTERIZATION OF IRANIAN ALMOND CULTIVARS AND RELATED WILD SPECIES USING AMPLIFIED FRAGMENT-LENGTH POLYMORPHISMS (AFLPs). B. Shiran, K. Sorkheh, V. Rouhi, T.M. Gradzeil and P. Martínez- Gómez 111
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- 013 CHILL AND HEAT REQUIREMENTS FOR BLOOMING IN THE CITA ALMOND CULTIVARS. J.M. Alonso* and R. Socias i Company 113
- 014 PREVIEW OF THE SECOND CLONAL SELECTION FROM THE AUTOCHTHONOUS PEACH POPULATION "AMARILLOS TARDÍOS DE CALANDA" (LATE YELLOW PEACHES OF CALANDA). J.L. Espada, J. Romero and J.M. Alonso 114

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