

RENOIR CONFERENCE ROOM

DEGAS CONFERENCE ROOM

Wednesday, September 19, 2018

15:00 – 17:00 Registration, poster mounting

Welcome session

17:00 – 18:00 Opening Ceremony

18:00 – 19:00 **Philipp W. Simon** (USDA-ARS; Department of Horticulture, University of Wisconsin-Madison, USA)
Carrot genome and beyond

19:00 Welcome Reception in Czeczotka's Palace

Thursday, September 20, 2018

Plenary Session 1: *Current issues in carrot and other Apiaceae*

Chair: Mathilde Briard (Agrocampus-Ouest, France)

9:00 – 9:45 **Michaela Hundertmark-Bertaud** (Vilmorin-Mikado Seed Pathologist, France)
Physiologist Vigour tests show little evidence for predictivity of carrot stand establishment in field trials

9:45 – 10:15 **Matthew Nelson** (Royal Botanic Gardens, Kew, UK)
Searching for new genetic and adaptive diversity for carrot improvement

10:15 – 10:45 **Taro Takagi** (Vilmorin-Mikado Carrot Breeder, Japan)
Carrot breeding approach for health benefits

10:45 – 11:15 **Irwin Goldman** (Department of Horticulture, University of Wisconsin-Madison, USA)
The University of Wisconsin-Madison carrot breeding and genetics program: 69 cycles of breeding for improved quality, productivity, and accessibility in processing carrot

11:15 – 12:00 Coffee break

Thursday, September 20, 2018Technical Session 1: *Food Chain and Logistics*

Chair: Agnieszka Sękara (University of Agriculture in Krakow, Poland)

12:00 – 12:30 Keynote lecture 1: **Maciej Józwicki** (Marwit, Poland)
*Sustainable production of carrots from the field to the product*12:30 – 13:00 Keynote lecture 2: **Birte Tschentke** (Bayer Crop Science, Germany)
*How Food Chain Partnership supports high quality produce – with carrot examples from Western Europe*13:00 – 13:30 **Sato Takashi** (Itoen, Japan)
*About variety `朱衣 (shu-i)` used for ITO EN, LTD vegetable drink in Japan*13:15 – 13:30 **Alicja Macko-Podgórn** (University of Agriculture in Krakow, Poland)
*A genome-wide association study reveals a candidate gene associated with the carrot root shape*13:30 – 13:45 **Wilfried Chevalier** (IRHS, Agrocampus Ouest, INRA, Université Angers, France)
*A focus on the implication of genotype by environment interaction on carotenoid accumulation*13:45 – 14:00 **Marek Szklarczyk** (University of Agriculture in Krakow, Poland)
Identification of genetic factors responsible for the control of CMS in carrots

13:30 – 15:30 Lunch

Thursday, September 20, 2018Technical Session 2: *Crop protection*

Chair: Jacek Nawrocki (University of Agriculture in Krakow, Poland)

15:30 – 16:00 Keynote lecture 1: **Albert Schirring** (Bayer Crop Science, Germany)
*Sustainable carrot production challenges and opportunities along the implementation of the EU Agro – Food policy*16:00 – 16:30 Keynote lecture 2: **Miroslaw Korzeniowski** (Bayer Crop Science, Poland) *Sustainable carrot protection, Polish good practices example*16:30 – 16:45 **François Vileneuve** (Centre opérationnel de Lanxade, France)
*Studies on the biology of Bactericera trigonica in the South-West of France and presence of Candidatus*16:45 – 17:00 **Julie Gombert** (FNAMS, France)
Candidatus Liberibacter solanacearum in Apiaceae and Solanaceae seed crops: the prevalence in France17:00 – 17:15 **Florian Boulisset** (AGRAUXINE, France)
*Trichoderma atroviride I-1237 as a consistent biocontrol solution to manage Pythium spp. damages on carrot: R&D characterisation and field approaches*17:15 – 17:30 **Maria Pobożniak** (University of Agriculture in Krakow, Poland)
Susceptibility of new and F1 hybrids carrot varieties to attack by hawthorn-aphid (Dysaphis crataegi Kalt.)

19:30 Gala Dinner in Stara Zajezdnia (The Old Depot)

Thursday, September 20, 2018Scientific Session 1: *Genetics and genomics*

Chair: Rafal Baranski (University of Agriculture in Krakow, Poland)

12:00 – 12:30 Keynote lecture 1: **Massimo Iorizzo** (NCSU, USA)
*Recent advance in carrot genomics*12:30 – 13:00 Keynote lecture 2: **Frank Dunemann** (Julius Kühn-Institut, Germany)
*Genomics-assisted analysis of natural substances in carrots*13:00 – 13:15 **Silvia Bruznican** (EV – ILVO, Belgium)
*Asymmetric protoplast fusion of celeriac and related Apiaceae species*13:15 – 13:30 **Alicja Macko-Podgórn** (University of Agriculture in Krakow, Poland)
*A genome-wide association study reveals a candidate gene associated with the carrot root shape*13:30 – 13:45 **Wilfried Chevalier** (IRHS, Agrocampus Ouest, INRA, Université Angers, France)
*A focus on the implication of genotype by environment interaction on carotenoid accumulation*13:45 – 14:00 **Marek Szklarczyk** (University of Agriculture in Krakow, Poland)
*Identification of genetic factors responsible for the control of CMS in carrots***Thursday, September 20, 2018**Scientific Session 2: *Phylogeny, diversity and domestication*

Chair: Massimo Iorizzo (NCSU, USA)

15:30 – 16:00 Keynote lecture 1: **Pablo Cavagnaro** (National Scientific and Technical Research Council (CONICET), Argentina)
*Carrot anthocyanins – nutrition, diversity and genetics*16:00 – 16:30 Keynote lecture 2: **Sheby Ellison** (USDA-ARS, Madison, USA)
*Domestication signatures and epistatic interactions underlying carotenoid accumulation in carrot (Daucus carota L.)*16:30 – 16:45 **Najla Mezghani** (National Gene Bank, Tunisia)
*Biodiversity and conservation of carrot wild relatives in Tunisia -An overview*16:45 – 17:00 **Charlotte Allender** (University of Warwick, UK)
*CarrotDiverse: understanding variation in a wild relative of carrot*17:00 – 17:15 **Jean-Pierre Reduron** (Via Apia, France)
*Phytochemistry of the Daucus carota wild populations in Corsica (France)*17:15 – 17:30 **Johanne Brunet** (USDA-ARS, USA)
Genetic markers to detect introgression of cultivar genes into wild carrot populations

Friday, September 21, 2018

Plenary Session 2: *New challenges, new possibilities*

Chair: Philipp W Simon (USDA-ARS; Department of Horticulture, University of Wisconsin-Madison, USA)

9:00 – 9:45	Emmanuel Geoffriau (Agrocampus-Ouest, IRHS, Angers, France) <i>Carrot quality: progress and challenges for breeding and production</i>	
9:45 – 10:15	Laure Barrot (Vilmorin-Mikado Senior Carrot Breeder, France) <i>Control of <i>Heterodera carotae</i> in soil by a resistant genotype</i>	
10:15 – 10:45	Rafał Baranski (University of Agriculture in Krakow, Poland) <i>Carrot genome editing using CRISPR based systems</i>	
10:45 – 11:15	Ewa Grzebelus (University of Agriculture in Krakow, Poland) <i>Application of protoplast technology to Apiaceae species</i>	

11:15 – 12:00 Coffee break

Friday, September 21, 2018

Technical Session 3: *Cultivation and post-harvest techniques*

Chair: Iwona Domagała-Świątkiewicz (University of Agriculture in Krakow, Poland)

12:00 – 12:30	Keynote lecture 1: Michael Legrand (UNILET, France) <i>Update of herbicides program for carrot in France</i>
12:30 – 13:00	Keynote lecture 2: Emiel Kamminga (Delphy, Netherlands) <i>Strategies for storing carrots</i>
13:00 – 13:15	Vincent Faloya (INRA – Association Carotte de France) <i>DEPHY-Carotte: is it possible to reduce by 50% the pesticide level in cropping systems with carrot as the main crop?</i>
13:15 – 13:30	Alberto Santori (Certis Europe, Netherlands) <i>Sustainability of Southern European carrot production in relation to fumigation practices</i>
13:30 – 13:45	Bakhytbek Amirov (Ministry of Agriculture, Kazakhstan) <i>Carrot production and prospects of breeding research in Kazakhstan</i>
13:45 – 14:00	Abdulrahman Almoshileh (Saudi Arabia) <i>Effect of sowing dates on growth yield and quality of carrot (<i>Daucus carota</i> Linn.) under semi arid conditions</i>

13:45 – 15:45 Lunch

15:45 – 18:00 Poster session

Saturday, September 22, 2018

9:00 – 14:00 Field day

Friday, September 21, 2018

Scientific Session 3: *Resistances to abiotic and biotic stresses*

Chair: Irwin Goldman (Department of Horticulture, University of Wisconsin-Madison, USA)

12:00 – 12:30	Keynote lecture 1: Birgit Arnholdt-Schmitt (University of Evora, Portugal) <i>Predicting plant robustness from respiration traits – novel concepts and tools</i>
12:30 – 13:00	Keynote lecture 2: Mathilde Briard (Université d'Angers, Agrocampus-Ouest, France) <i>Biotic stresses: challenges and research priorities</i>
13:00 – 13:15	Claude Koutouan (Université d'Angers, Agrocampus-Ouest, France) <i>Carrot resistance against <i>Alternaria</i> leaf blight: potential involvement of terpenes and flavones</i>
13:15 – 13:30	Valérie LeClerc (Université d'Angers, Agrocampus-Ouest, France) <i>Resistant carrots to <i>Alternaria dauci</i> or tasty carrots: should we choose?</i>
13:30 – 13:45	Kornelia Kwolek (University of Agriculture in Krakow, Poland) <i>Identification and analysis of genes associated with carrot response to salinity stress</i>

16:00 ISHS Business Meeting