



**38TH INTERNATIONAL
CARROT CONFERENCE**
BAKERSFIELD | CALIFORNIA

CONFERENCE AGENDA

Sunday, March 19, 2017

- 8:00 - 5:00 AM Carrot Specialty Crop Research Initiative Grant Meeting
5:30 - 6:30 PM Registration
6:30 - 10:00 PM **Reception**

Monday, March 20, 2017

- 7:00 **Registration**
8:10 Welcome and opening comments - *Joe Nunez*
8:20 Welcoming comments by - *Bakersfield Mayor Karen Goh*
8:40 Agriculture in Kern County - *Beatris Espericueta Sanders, Kern County Farm Bureau*
9:00 Carrot production in California - *Joe Nunez, UC Cooperative Extension*

PLANT PATHOLOGY SESSION

Moderator — D. Corey Noyes, Michigan State University

- 9:20 Selecting carrots with increased resistance to cavity spot. *M. R. McDonald, K. Vander Kooi, and P.W. Simon,*
9:40 Distribution of *Xanthomonas hortorum* pv. *carotae* in Commercial Carrot Seed Lots. *Jeremiah Dung*
10:00 **Break**— *View posters; presenters will be at posters to answer questions*
10:20 Pythium diseases of carrots, *Joe Nunez*
10:40 Carrot viruses in the UK - an agronomic challenge! *Howard Hinds*
11:00 Understanding the ecology and epidemiology of *Pythium violae* causing cavity spot on carrot. *Kathryn Hales*
11:20 Pest management in California fresh carrot from 1995 to 2015. *Jim Farrar*
11:40 Evaluation of Flea Beetle Phenology and Damage to Carrot Production in California. *Joe Nunez and David Haviland*
12:00 PM **Lunch**

NEMATOLOGY SESSION

Moderator—Mary Ruth Mc Donald, University of Guelph

- 1:30 Managing root-knot nematodes in organic carrot production – an overview of California studies. *A. Ploeg, J.O. Becker, and J. Nunez,*
- 1:50 Evaluation of new nematicides for control of nematodes in carrots, in Ontario, Canada. *K. Vander Kooij, D. Van Dyk, and M. R. McDonald*
- 2:10 New nematicides provide effective protection against root-knot nematodes. *J. Ole Becker, Antoon Ploeg, and Joe Nunez*
- 2:30 Root-knot variability in response to carrot resistance. Philip A. Roberts, William C. Matthews, Philipp W. Simon and Tra T. Duong
- 2:50 Effects of a commercial soil amendment on plant parasitic nematodes, *Amanda Hodson*
- 3:10 **Break**

CARROT PRODUCTION SESSION

Moderator— Jim Farrar, UC Davis

- 3:40 Effects of biotic and abiotic stress on carotenoid content in carrot. *Geoffriau Emmanuel, Perrin Florent, Dubois-Laurent Cécile, Huet Sébastien, Suel Anita, Le Clerc Valérie, Briard Mathilde, Peltier Didier*
- 4:00 Cover crops effects on nitrogen and weeds in MI processing carrots. *D. Corey Noyes, Zachary D. Hayden, Haddish Melakeberhan, Ben Werling, and D.C. Brainard*
- 4:20 **Adjourn**

BANQUET DINNER

- 5:30 Doors open –No Host Bar
- 6:00 **Dinner served**

Tuesday, March 21, 2017

BREEDING AND VARIETY EVALUATION—SESSION I

Moderator—Phil Simon, USDA/ARS University of Wisconsin

- 9:00 The Search for Salinity Tolerance in Diverse Carrot Germplasm. *Adam Bolton and Phil Simon*
- 9:20 Characterization of a genomic region under selection in cultivated carrot (*Daucus carota* subsp. *sativus*) reveals a candidate domestication gene. *Alicja Macko Podgórn, Gabriela Machaj, Katarzyna Stelmach, Douglas Senalik, Ewa Grzebelus, Alicja Macko-Podgórn, Gabriela Machaj, Katarzyna Stelmach, Massimo Iorizzo, Philipp W. Simon, Dariusz Grzebelus, Alicja Macko-Podgórn, Gabriela Machaj and Katarzyna Stelmach*

- 9:40 New carrot germplasm from Spain and its use in breeding, genetic, and taxonomic studies. *David M. Spooner, Philipp W. Simon, and Fernando Martínez-Flores*
- 10:00 The influence of organic and conventional production environments on breeding for carrot top size. *Charlene Grahm, Erin Silva, Philip Simon*
- 10:20 **Break** - View posters; presenters will be at posters to answer questions.

BREEDING AND VARIETY EVALUATION—SESSION II

Moderator—Emmanuel Geoffriau, University of Angers, France

- 10:50 Elicitation of anthocyanins in hairy root cultures of black carrots. *Shih-Ti Chen, Gregorio Barba Espin, Trine Bundgaard Andersen, Renate Müller, Henrik Lütken and Bjarne Jørnsgård*
- 11:10 Phenotypic, Genotypic, and Freedom to Operate Variation in US Carrot Cultivars. *Claire Luby, Julie Dawson and Irwin Goldman*,
- 11:30 Genetic Analysis of Carrot Root Shape and Top Size Measured by Image Analysis. *Sarah Turner, Nathan Miller, Edgar Spalding and Phil Simon*
- 12:00 **Lunch**

BREEDING AND VARIETY EVALUATION—SESSION III

Moderator— David Spooner, USDA/ARS University of Wisconsin

- 1:30 Marker Assisted Recurrent selection (MARS) for development of nutritionally rich, nematode resistant Carrot (*Daucus carota* L.) suitable to tropical region. *Sarvamangala S. Cholin, Chaitra A. Poleshi, Manikanta D. S. and Jagadeesha R.C.*
- 1:50 Utilizing 2D Imaging to Map Root System Architecture QTL in Carrot (*Daucus carota* L.) *Shelby Ellison and Philipp Simon*
- 2:10 Sources of Genetic Variation for Early Plant Growth in Diverse Carrot Germplasm. *Adam Bolton and Phil Simon*
- 2:30 Deploying *Meloidogyne incognita* Nematode Resistance in Carrot. *Phil Simon, Joe Nunez, William Matthews and Phil Roberts*
- 2:50 Marker development for genes of the carrot terpene biosynthesis. *Thomas Nothnagel, Holger Budahn, Detlef Ulrich, Jens Keilwagen, Thomas Berner, Heike Lehnert and Frank Dunemann*
- 3:10 **Planning for the 39th International Carrot Conference and other Items**
- 3:30 **Adjourn**

BANQUET DINNER

- 5:30 Doors open – No Host Bar
- 6:00 **Dinner served**

Wednesday, March 22, 2017

FIELD TOUR

- 8:30 AM Buses leave DoubleTree Hotel to go on field tour
- 9:00 Buses arrive at Kern County UC Cooperative Extension Research Farm in Shafter
 - Carrot Variety Trial
 - Carrot Nematode Resistant Variety Trial
 - Carrot Nematicide Trial
 - High Tech Agricultural Machinery Showcase & Demonstration Presented by Booth Machinery and IH/Case
- 12:00 **Lunch**
- 2:00 Buses Return to hotel (time approximate)