

WELCOMING COMMENTS

- 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 Kooij, 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.](#)** *David Haviland*
- 12:00 PM **Lunch!**

NEMATODOLOGY SESSION

Moderator—Mary Ruth Mc Donald, University of Guelph

- 1:30 **Managing root-knot nematodes in organic carrot production – an overview of California studies.**
Antoon 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**

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-Podgórní, Gabriela Machaj, Katarzyna Stelmach, Douglas Senalik, Ewa Grzebelus, Alicja Macko-Podgórní, Gabriela Machaj, Katarzyna Stelmach, Massimo Iorizzo, Philipp W. Simon, Dariusz Grzebelus, Alicja Macko-Podgórní, 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 Grahn, 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 **Population Structure in domesticated Carrot (*Daucus carota*) from USDA NPGS, Historic and Modern Cultivars.**
S. Ellison, K. Corak, C. Luby, I. Goldman, P. Simon and J. Dawson.
- 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**