

Combined 61st Conference on Soilborne Plant Pathogens and 47th California Nematology Workshop 2015

This conference was held at the University of California, Riverside on March 24th-26th, 2015. Under the leadership of Tim Paulitz (USDA-ARS at WSU) and the local organizers Ole Becker and Antoon Ploeg, it was attended by 92 participants from the US, UK, Australia, Canada and Japan.

On the first day a field trip featured the Agricultural Operations (AgOps) with several UCR researchers presenting their mission-oriented projects. Historically the roots of UC Riverside go back to 1907 when the California State Legislature established the Citrus Experiment Station to investigate agricultural issues facing Southern California. Almost half a century later it became part of the University of California. Although commercial citrus production today has moved predominately into the southern part of the San Joachin Valley, California's Central Valley, citrus research is still an important component at UCR's 420-acre station. AgOps director and Cooperative Extension Specialist Peggy Mauck and Museum Scientist Tracy Kahn led the participants through parts of UCR's Citrus Variety Collection, the world's premier citrus germplasm collection that includes trees of more than 1000 different citrus types. Participants had ample opportunity to taste fruits of some of the newer varieties as well as some exotic ones. For those with an intellectual taste for nematodes, the abundance of citrus nematodes in the orchards was discussed. Virologist Georgios Vidalakis introduced the participants to another UCR gem, the Citrus Clonal Protection Program (CCPP) that under his leadership provides researchers and citrus nurseries with stocks of stable, disease-tested citrus fruit and rootstock varieties. Plant Pathologist Jim Adaskaveg and his assistants Helga Förster and Wei Hao showcased a citrus field trial that evaluated various new fungicides against *Phytophthora* spp. Peggy Mauck addressed fungal disease issues in Avocados. In addition to citrus, more than 50 other crops and horticultural plants are grown on the station. Cooperative Extension Specialists Jim Baird and Donald Merhaut represented UCR's turf and landscape research, respectively. Their emphasis on California's drought and irrigation issues was underscored by the field day's sunny, warm conditions. Nematology graduate student Arsenio Ndeve discussed his cowpea breeding research concerning root knot nematodes and *Macrophomina phaseolina* under the guidance of Phillip Roberts.

In the afternoon, attendees were given the choice between a docent-guided tour of UCR's fabulous Botanical Gardens or participation in the California Nematology Workgroup meeting. This group is typically comprised of UC, CDFA, USDA, industry and commodity personnel who share a common interest in nematodes. As always, guests were welcomed. Adler Dillman and Andreas Westphal introduced themselves as new members of the Department of Nematology at UCR. They are stepping into the shoes of emeriti Edward Platzer and Michael McKenry. This was followed by short presentations of other participants who provided an overview of their research and extension programs.

In the evening participants enjoyed a well-attended social, marked by camaraderie, good food and refreshments.

The second day began with a symposium featuring two invited, prominent presenters. Jim Cook, emeritus professor of Plant Pathology and former Dean of Washington State University's College of Agricultural, Human, and Natural Resource Sciences, presented an overview of his more than 4 decades of research on soilborne diseases in wheat. Philip Roberts, Professor and Chair of UCR's Department of Nematology, addressed issues related to nematode/fungal interactions, in particular root knot nematodes and Fusarium wilt diseases. The rest of the day and the following morning were devoted to short research presentations with plenty of time for discussion that are a hallmark of these meetings. In total we had 29 oral presentations; more than 1/3 addressed nematode-related topics (see list below).

We were able to award three \$500 Martin Stoner Memorial Stipends to participating students. As in past years, the success of our meeting and low registration fee can be attributed to enthusiastic volunteers and generous donations by our industry sponsors Valent BioSciences, ADAMA, DuPont Crop Protection, Certis, Syngenta, Gowan, Bayer Crop Science as well as UCR's College of Natural and Agricultural Sciences and the University of California's Division of Agricultural and Natural Resources.

The CSPP Steering Committee decided to hold next year's meeting on March 22-24, 2016 at the UC Kearney Research and Extension Center in Reedley, CA.

Adendum: Presentations with nematode-related topics

Resisting root-knot nematodes and Fusarium wilt: A Complex of Interactions. Phillip A. Roberts, Dept. Nematology, University of California, Riverside

Pathogen species change in dominance when rain-fed cropping systems are altered: Fusarium crown rot complex and root-lesion nematodes. Richard Smiley, Oregon State University, Columbia Basin Agricultural Research Center, Pendleton, OR.

The new APS initiative: Phytobiome Project. Timothy C. Paulitz, USDA-ARS, Pullman, WA.

Rates of decline of sugarbeet cyst nematode in northern California. Becky Westerdahl, Dept. Entomology and Nematology, University of California, Davis, CA.

Nematode suppressive soil and the fungus *Dactylella oviparasitica*. James Borneman¹ and J. Ole Becker², ¹Dept. Plant Pathology and Microbiology, and ²Department of Nematology, University of California, Riverside, CA.

New sources of resistance to defeat root-knot nematodes in the southeastern Africa cowpea germplasm. Arsenio D. Ndeve, William C. Matthews, Jansen R. P. Santos,

Rogério M. Chiulele, Bao Lam Huynh, Maria Munoz-Amatriain, Savannah St Clair, Steve Wanamaker, Timothy J. Close & Philip A. Roberts. Dept. Nematology and Dept. Botany and Plant Sciences, University of California, Riverside, CA, and Dept. of Crop Production, Eduardo Mondlane University, Maputo, Mozambique.

Nimitz, a new non-fumigant contact nematicide. Donald Lester, ADAMA, Raleigh, NC.

Southern California field trials with new nematicides in vegetable crops. Antoon Ploeg, Dept. Nematology, University of California, Riverside, CA.

Anguina pacifica: A galling problem in coastal California turf. J. Ole Becker¹, Marco Schiavon², Andrea Feo², and Jim Baird². ¹Dept. Nematology and ²Dept. Botany and Plant Sciences, University of California, Riverside, CA.

Increasing the soil mobility of immobile pesticides. Danielle Norton, Vive Crop Protection, Toronto, Canada.

Implementing Sunn hemp as a cover crop in Central Europe. Andreas Westphal, Dept. Nematology, UCR/UC Kearney Agricultural Research and Extension Center, Reedley, CA.

PCR is an essential tool for managing nematodes in semi-arid rain-fed wheat. Richard W. Smiley, Oregon State University, Columbia Basin Agricultural Research Center, Pendleton, OR.



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