

## **Combined 62<sup>nd</sup> Conference of Soil-borne Plant Pathogens and 48<sup>th</sup> California Nematology Workshop 2016.**

A combined meeting of plant pathologists and nematologists took place at the Kearney Agricultural Research and Extension Center in Parlier, CA, on March 22-24, 2016. This meeting was organized by the committee chair Tim Paulitz (USDA-ARS, Washington State University) and the local arrangement committee (Westphal, UCR, Michailides, UCD, Gerik, USDA-ARS) led by Andreas Westphal. In its first portion, the meeting catered to regional pest control advisors, farm advisors, nurserymen and chemical industry representatives. The second portion was aimed at soil-borne disease workers mostly working at the West Coast of the US but also international participants. Both of the meeting portions totaled of near to 90 participants.

On March 22, the meeting was initiated by a morning of updates on nematode management in times of novel chemistries available for nematode management while reduced emissions of soil fumigants improve the environmental stewardship. Challenges and limitations in the development of nematode-resistant and tolerant rootstocks were discussed. Displacement of aflatoxin-producing fungi by non-toxicogenic fungi illustrated the success of biological control of aflatoxins for the first time on a tree crop. Topics of these presentations became more lively in the afternoon field tour. This tour high-lighted walnut germplasm screening nurseries for nematode susceptibility. Westphal reported on breeding strategies and challenges when attempting germplasm selections for long term improvements of production conditions. Michailides (UC Davis) presented his displacement study in a pistachio orchard to further illustrate the success of biological control. Browne presented on the strategy of anaerobic soil disinfestation (ASD) for mitigating replant problems of almond. First developed in the Netherlands and Japan, this technique has potential for implementation in perennial crops where it provides some relief of the replant problem. A visit to an irrigation and Biochar (pyrolyzed organic material) amendment study in onions presented by Dong Wang (USDA-ARS, Parlier) was focused on the current topics of water demands and carbon sequestration. About 80 people enjoyed this farm tour with interspersed reports by Chuck Boldwyn (Kearney Agric. Res. & Ext. Center) on projects such as “dry on the vine (DOV) raisin grapes”, in field lysometer work on this untypically windy and chilly but sunny spring day. The nematology workgroup met for its annual meeting right after the field tour. After introductions and brief reports from University nematologists, industry topics were discussed.

On March 23, the meeting for research reports was opened by Roberts Curtis (California Almond Board, ABC). Curtis high-lighted current almond industry successes and challenges. Under the severe drought in California, special attention is given to irrigation issues. The commodity board has launched several initiatives to foster environmental stewardship of this leading California nut crop industry. Presentations by Mike Stanghellini (TriCal) and Mark Mazzola (USDA-ARS) contrasted chemical and biological soil-borne disease management. These presentations set the stage for 27 reports on soil-borne systems ranging from intensive agricultural systems to stewardship in native environments. Notably 15 of these presentations had some nematode component illustrating the un-diminished importance and interest in these soil-dwelling parasites.

The meetings lively discussions are also a sounding board for budding researchers in the area of problem-solving research in soil-borne diseases. This year, the conference could support one student with \$500 from the Martin Stoner Memorial Stipend funds. Two more travel awards were given on behalf of Bayer Crop Sciences who graciously offered this support. The meeting was made possible by the numerous contributions of volunteers and enthusiastic support by support staff. Gracious sponsorship by Bayer Crop Science, Certis, DuPont and TriCal helped to defray the costs of the meeting. Last but not least, the support by the Kearney Agric. Res. & Ext. Center is greatly appreciated.

The CSPP Steering Committee proposed to hold the meeting in 2017 at Davis on March 28-30.

Submitted by A. Westphal, April 13, 2016

