

Summary of Activities

The UCANR Nematology Workgroup met in Davis, CA on the afternoon and evening of March 24, 2008, the day preceding the 40th Annual California Nematology Workshop. The meeting was attended by approximately 25 individuals, including many of the Nematology faculty, staff and students from both UC Davis and UC Riverside, extension specialists from both campuses and UC Kearney, farm advisors, representatives from CDFA, diagnostic services, and the California Association of Nurserymen. The chairs of both departments of nematology attended and participated actively in the workgroup discussions. We were honored by the attendance and counsel of a senior emeritus faculty, Seymour Van Gundy.

After self-introductions of all attendees, a discussion was held on the past, present and future of the Nematology Workgroup. The Nematology Workgroup was formed following the formalization of the workgroup process. It traditionally has met the day before the California Nematology Workshop that has been held on a rotating basis for 40 years between the Davis and Riverside campuses, and the Kearney Agricultural Center. The Workshop serves as a means of disseminating current knowledge on Nematology to all clientele in California. Two highly successful research and extension projects, “The Lesion Nematode Project”, and “The Ring Nematode Project” were funded through the workgroup granting process. Workgroup members from both campuses and several counties participated actively in both projects. These projects have greatly expanded our knowledge and understanding of the biology, ecology and management of these two important groups of nematodes in California. Workgroup members unanimously voted to continue the Nematology Workgroup even if additional funding was not available for the coming year.

The next portion of the meeting was dedicated to reports by individual PIs, grouped by subject matter area. We discussed current activities in Nematology in California in the areas of: Entomopathogenic Nematodes; Biodiversity, Evolution and Systematics of Nematodes; Nematodes and Soil Ecology; Diagnostics and Regulatory Nematology; and Management of Plant Parasitic Nematodes in Agriculture.

In addition, the group discussed current program areas and the gaps that anticipated retirements would leave in areas of research, formal instruction, and extension. We discussed, for each department, new directions and priorities in the areas of nematode biology and genomics, ecology, systematics, and diagnostics, and management. The withdrawal of nematicides, with the subsequent need to focus research on cropping systems design for nematode management, reinforces the need for expanding nematology research and extension efforts in California. Particularly apparent was the need for more activity in applied nematode management and outreach in the north and central part of the state. The creation of a nematology extension specialist position affiliated with the UC Davis department but located at UC Kearney, was determined to be a high priority.

The subject of Workgroup endorsement of research proposals was discussed. It was decided that requests for endorsement should be directed to the Workgroup Chair. If only a single request was made for a particular RFP, and the proposal was in an area that

Workgroup members were in general agreement on as beneficial to nematology, based on prior discussions at Workgroup meetings, the Chair could provide an endorsement without additional consultation. If the Chair was seeking an endorsement for a proposal, the request should go to the previous Workgroup Chair. If more than one endorsement request were received for a particular RFP, the Chair should seek advice from a subcommittee composed of members from both Nematology Departments. The agreed upon procedure would be open for discussion again at subsequent Workgroup Meetings.

Ole Becker was elected Workgroup Chair and agreed to continue his service as UCANR Nematology webmaster. Ole demonstrated features of the ANR website, including the Nematology home page, the statewide calendar, and UC Delivers. He explained how information could be disseminated via UC Delivers, demonstrated an article he had created, and encouraged other Workgroup members to contribute to this effort.

The workgroup dinner was attended by almost all of the participants and discussions continued. Planning for the 2009 ANR Nematology Workgroup meeting, in conjunction with the 41st Annual California Nematology Workshop, was discussed. Based on our rotation of meeting sites to provide exposure to the broadest possible range of clientele, the Workgroup Meeting will be hosted by the Riverside campus in Southern California in late March of 2009, followed the next day by the 41st Annual California Nematology Workshop.

The 40th Annual California Nematology Workshop held on March 25, 2008, focused on the theme "Farming Without Fumigants". Speakers and topics presented were: Dr. Randy Segawa: "Regulations to Reduce Volatile Organic Compound Emissions from Fumigants", Mr. Peter Howard: "Economic Effects of Regulations to Reduce VOC Emissions from Pesticides: The Case of Fumigants", Dr. Greg Browne: "Replant Problems of Prunus Species in California -- Challenges and Opportunities", Dr. Antoon Ploeg: "Using Brassicas as Biological Soil Fumigants", Dr. Inga Zasada: "Factors to Consider When Using Organic Amendments to Manage Plant-Parasitic Nematodes", Dr. Andy Walker: "Breeding Nematode Resistant Grape Rootstocks", Dr. Valerie Williamson: "Resistance-breaking Root-knot Nematodes on Tomato", Dr. Mike McKenry: "Promising Nematode Resistance in Several New Walnut Rootstocks", Dr. Ed Lewis: "Exploring the Strengths and Limitations of Beneficial Insect-Parasitic Nematodes in California Agriculture", and Dr. Becky Westerdahl: "Farming Without Fumigants" - Myth or Reality?. A poster session was held featuring more than 30 posters presented during the previous year by Workgroup members at professional meetings.

Accomplishments

1. All nematology personnel were updated on current activities in California regarding Entomopathogenic Nematodes; Biodiversity, Evolution and Systematics of Nematodes; Nematodes and Soil Ecology; Diagnostics and Regulatory Nematology; and Management of Plant Parasitic Nematodes in Agriculture.

2. The Statewide Master Plan for Nematology was revisited and programmatic gaps associated with anticipated retirements were reviewed in areas of research, formal instruction, and extension. For both UC Nematology departments, new directions and priorities in the areas of nematode biology and genomics, ecology, systematics and diagnostics, and management were discussed. Particularly apparent was the need for more activity in applied nematode management and outreach in the north and central part of the state. The creation of a nematology extension specialist position affiliated with the UC Davis department but located at UC Kearney, was determined to be a high priority.

3. The 40th Annual California Nematology Workshop held the day after the Workgroup meeting was its usual outreach success. Attended by around 100 industry and extension personnel and growers, the Workshop provided information on existing and emerging nematode problems throughout the state, new approaches in nematode management, both chemical and biological, and perspectives on nematode management from the standpoint of research, industry and diagnostic laboratories. A poster session provided opportunities for individual discussions on research activities and directions.

Outcomes and Impacts

1. Important program planning activities were accomplished. These lay the groundwork for more detailed program planning during 2009.

2. New information on nematode management and pest management strategies was delivered to attendees of the 40th Annual California Nematology Workshop.

3. The ANR Nematology website is kept current and provides access to current advice and information.

4. Research activities are reported in detail in peer-reviewed journal articles and in annual Experiment Station project reports of individual researchers. A full listing of peer-reviewed journal articles is provided in the AES reports.