

National Agricultural Research, Extension, Education and Economics Advisory Board

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National Agricultural Research, Extension, Education and Economics (NAREEE) Advisory Board's – Citrus Disease Research & Development Advisory Committee (CDRDAC) Minutes

Tuesday, June 19, 2012, 8:00 a.m. – 4:00 p.m. PST.

Committee Members Present: Tom Jerkins (Chair), Dr. Etienne Rabe (Vice-Chair), Ricke A. Kress, Donald Roark, Paul Heller, Dr. Jacqueline Burns, and Dr. John da Graca.

Committee Members Absent: Victor Story Jr., Joe Davis Jr., and Dr. Tim Paine (resigned from committee on June 18, 2012 via email).

NAREEE Board Staff: Rob Burk (Executive Director), Shirley Morgan-Jordan (Program Support Coordinator)

Others Present: Dr. Tom Turpen (Citrus Research Development Foundation), Dr. Tom Bewick (USDA-National Institute of Food and Agriculture [NIFA]), Dr. Gail Wisler (USDA-Agricultural Research Service [ARS]), Dr. Prakash Hebbar (USDA-Animal and Plant Health Inspection Service [APHIS]), and Jean-Mari Peltier (NAREEE).



Note: The Committee participated on a tour of the National Clonal Germplasm Repository for Citrus and Dates, the California Citrus Clonal Protection Program (the state citrus certification program), the citrus variety collection, the University of California Riverside citrus breeding program, and the Citrus Research Board diagnostic lab on Monday June 18, 2012 from 1:00 PM to 5:00 PM (PST) prior to the meeting.

I. Welcoming Comments

- Tom Jerkins (Chair) welcomed the group to the meeting.
- **A motion was made to accept the minutes from the previous meeting of the CDRDAC by Ricke Kress.**
- **Second: Paul Heller**
- **Discussion: Committee members edited the minutes to remove the words “conference call” from the header/title, and corrected the spelling of one of the speaker’s surnames.**

- **Minutes passed**

II. USDA-ARS Citrus Research Overview by Dr. Gail Wisler, National Program Leader, USDA-ARS.

A power point is available from the REE Advisory Board Office upon request.

Dr. Gail Wisler provided an overview of USDA ARS structure and function of citrus related programs. Dr. Wisler provided the group with an outline of all of the current research activities related to citrus disease. She reviewed the work of the Citrus Health Response Program's (CHRP) Science and Technology Council (STC). Dr. Wisler discussed the new approach ARS has taken to guiding their research. The agency first determines what outcomes are desired, and then research is prioritized and organized to attempt to meet the required outcomes. Dr. Wisler provided the example of the following outcomes:

1. Keep citrus groves with Huanglongbing (HLB) productive.
2. Slow/stop the spread of HLB.
3. Citrus groves free of HLB.

Dr. Jacqueline Burns questioned budget reports provided by Dr. Wisler. Dr. Burns noted that there were increases in the budgets of certain laboratories, and she questioned whether those were attributed to the closings of other laboratories. Dr. Wisler indicated that some transition of funds/activities from the lab in Winterhaven, FL to Fort Pierce, FL had occurred.

Tom Jerkins questioned if ARS was able to tease out all of their budget allocations/research related to citrus greening which lead to a discussion on how the ARS budget is handled.

Ricke Kress adamantly stressed that replanting groves and protecting those replanting was still a huge challenge. He noted that there is no money available, outside of growers own funds, available to grow new trees, and he clarified that this is a major gap.

Tom Jerkins noted that a new concept was provided in the presentation which suggested that the disease appeared latent in the field for 4-6 years. Ricke Kress indicated that this was in disagreement with their findings. He stated that symptoms were present in as little as 12 months, or in 24-36 months with older trees. Mr. Kress also noted that in hindsight the better grove managers would say that symptoms of the disease were present in 2005. Mr. Jerkins restated that point that a disease with a 1 year latency period is much different than one with 4-6 year latency. Dr. Tom Turpen also stated that industry funded research also identified a shorter latency period and that it was well established. Dr. Tom Bewick indicated that in states like Texas and California that 12 months was still too long.

Dr. Tom Turpen indicated that he felt the outcomes should focus on slowing the spread of HLB, and that he didn't think it was useful to identify specific regions with each outcome identified by ARS. Paul Heller echoed the comment and indicated that all of the regions were headed in the same direction, and that all of the regions were in the same situation but at different time points.

Dr. Etienne Rabe questioned who the members of the CHRP STC were. Dr. Gail Wisler provided information on those members. Dr. Rabe also questioned how the CDRDAC fits in with the CHRP STC. Dr. Tom Turpen reviewed the history of the CHRP STC in more detail. Dr. Wisler outlined the reasons for the establishment of the CHRP STC. A discussion on the topic ensued.

Ricke Kress questioned Dr. Wisler what she would recommend “in an ideal world” to eliminate HLB. Dr. Wisler indicated that ideally they would remove the Citrus Health Management Areas voluntary status, and conduct an eradication effort of Asian citrus psyllid (ACP). Tom Jerkins indicated that in urban areas that will not happen. Dr. Wisler provided examples of how it could be feasible.

Don Roark indicated that he does not see coordination from all states with the USDA, and clearly identified outcomes.

Dr. Gail Wisler indicated that the originally ARS and APHIS were asked to chair the CHRP STC. At this point it is managed by APHIS, however APHIS is stepping down. Dr. Tom Turpen indicated that the future chair, and management of the group was in question at the moment, but suggestions for leadership are being considered.

III. USDA-APHIS Citrus Health Response Program Overview by Dr. Prakash Hebbar.

A power point is available from the REE Advisory Board Office upon request.

Dr. Prakash Hebbar indicated that the APHIS Plant Protection and Quarantine program (PPQ) had a budget of \$45 million for citrus related research.

Dr. Gail Wisler stressed that all of the related agencies were in this together, and that they were interested to see the recommendations of the committee.

Ricke Kress indicated that black spot disease is considered by Brazil to be more of an issue than HLB, and questioned if it would be the next big issue for the U.S. Dr. Hebbar noted that Brazil has invested significantly in research and development related to citrus disease, and that the group might want to look more closely at the Brazilian Enterprise for Agricultural Research (EMBRAPA) work. He also noted the progress made in the use of a parasitoid wasp *Tamarixia radiata* in Mexico and by PPQ-CPHST (Center for Plant Health Science and Technology) for biological control of ACP, the vector for HLB. Dr. Hebbar noted that better relations/exchange between the U.S. and India needed to occur to be able to identify other potential biocontrol agents of ACP. He also informed that exploration work was underway in China and Pakistan for biocontrol agents.

IV. USDA – NIFA Citrus Research and Educational Program Funding by Dr. Tom Bewick

Dr. Tom Bewick stressed the importance of cooperation of the different USDA mission areas. He noted that NIFA is responsible for providing funding for external research. NIFA acts as a federal partner with the land grant universities. He noted that they have heard from stakeholders related to the idea of how to obtain a single source of funding through NIFA. Dr. Bewick reviewed the two types of funding authorized for distribution by NIFA.

1. Base funding = this is funding through the authority provided by Hatch, McIntire Stennis, Smith Lever, 1890, and 1994 institutions. He noted that these tend to be infrastructure establishing programs. These funds go according to formulas developed from the percentage of agricultural production, and the prevalence of rural communities. Up until World War I approximately 70-80% of funds for land grant universities was provided by these programs. He noted a study from Ohio which indicated that for every Hatch dollar 40 jobs were supported.

A committee member asked if any consideration had been given to using Hatch funds for HLB research. Dr. Bewick indicated that Dr. Kitty Cardwell was responsible for plant pathology and she might be a better person to direct the question to. He did state that 25% of Hatch funds must be distributed as multi state programs.

2. Competitive funding = There are 130 areas allowed by Congress to be funded by NIFA. Dr. Bewick noted that he had worked with the NAREEE Advisory Board previously to put together a single organic request for applications. In competitive funding they cover the gamut of food and agricultural funding, and he noted that over \$500 million dollars in funding was available. He noted some specific reasons why they can not drop everything to fund HLB research. Dr. Bewick discussed the establishment of the Specialty Crop Research Initiative and grant funding. He noted that a request was made for \$100 million in funding of the program, but Congress only provided half that amount.

Dr. Bewick reviewed the grant application and review process.

Dr. Bewick noted that citrus researchers may be able to tap into “Rapid Response” research funds from NIFA to combat black spot disease. He recommended that a multi state application be submitted. He reviewed briefly the reason for the Rapid Response grant program and provided examples of other projects including brown marmorated stink bug, and plum pox. He noted that the best applications will follow up a Rapid Response grant/application with a competitive grant application using the objectives outlined in the Rapid Response proposal.

In relation to broad based invasive species eradication Dr. Bewick related the prevalence of malathion spraying for mosquitoes as an example of how to gain public acceptance of similar programs.

Dr. Bewick noted that by law any comments sent to NIFA must be responded to and he encouraged the committee to send concerns to NIFA for response.

Tom Jerkins questioned what exactly makes a project outstanding. Dr. Bewick reiterated the panel process, and he noted that in the last SCRI process there were \$79 million worth of outstanding and excellent projects submitted but he noted that only \$49 million was available. Dr. Bewick reviewed the importance of a logic model, the need to look at required outcomes, the impact statement and its relation to intended outcomes, and he discussed the importance of the educational and outreach components of the projects.

Don Roark questioned how NIFA tracks longer term projects. Dr. Bewick noted that NIFA required grant recipients to submit annual updates. He noted that NIFA can cut off funding if necessary, but stated that this was not common due to early intervention.

Dr. Prakash Hebbar questioned whether there was a move to more adequately consult the industry on the importance/value of specific outcomes. Dr. Bewick noted that NIFA wants there

to be clear scientist and industry interaction and he noted that simply receiving a letter of support from the industry of note is not enough.

Dr. Prakash Hebbar questioned whether seed money for programs could be supplied through NIFA. Dr. Bewick indicated that NIFA can not fund construction (i.e. bricks and mortar). He noted that planning studies are fundable, as are pilot studies.

Don Roark questioned the success of professional grant writers. Dr. Bewick indicated that some applicants had contracted with professional grant writers, but that their success was seemingly no different than others.

Dr. Prakash Hebbar was interested to know if NIFA maintained a database of grant applicants. He also stated that this information if on file could simplify the application process and reduce the repetition created when an applicant applies consecutive times. Dr. Bewick indicated that applicants have typically had a 13% success rate on initial application. He noted that on subsequent applications/resubmissions, following the advice of the review panels that the grant applicant success rate raised to 50%. He indicated that the better applicants clearly outline how they have responded to the comments of the panels. Dr. Bewick noted that all applications are considered. Dr. Hebbar referred to the APHIS PPQ Farm Bill program and stressed that after the process was reviewed the main thrust of APHIS efforts moving forward was on the simplification and transparency of the process and also effective stakeholder input. He noted that the credentials of returning applicants and information on their background was already clearly established and on file. He alluded to the need to have NIFA consider simplification of the application process. Dr. Bewick noted that applications were limited to 26 pages, and he noted that there was nothing like the PPQ program in the world.

Dr. John da Graca questioned if NIFA had any input on the funding of research through marketing funds (a.k.a. Block grants). Dr. Bewick indicated that they have had some input on the review process.

Dr. Gail Wisler discussed the concept of base funding and competitive funding and related it to the internal research programs (i.e. ARS) and external funding programs (i.e. NIFA). She noted that there is an expectation for base funding of internal research programs to be long term. She related the difficulty in obtaining funding for infrastructure development to maintain plant breeding research capacity at universities, and that as a result this research often falls to ARS. Dr. Wisler referred to NIFA competitively funded projects as more short-term programs by comparison.

Jean-Mari Peltier discussed a concept forwarded previously by the NAREEE Advisory Board related to the concept of public-private cooperative funding initiatives. Dr. Bewick indicated that he did not believe that funding authority existed for such programs. Ms. Peltier indicated that NAREEE had been informed by the USDA REE Deputy Under Secretary that this funding authority did exist. Dr. Bewick noted that special grants are allowed as “earmarks” but Congress has resisted using that authority recently. He gave an example of research on Pierce’s disease as a successful program that was funded through special grants.

Dr. Tom Turpen noted that ARS Cooperative Research and Development Agreements (CRADAs) can work but that barriers exist to their establishment and effectiveness. He noted the limited ability to tackle large amounts of projects.

V. Report Development

Rob Burk led a discussion on the development of the annual report of the committee. Dr. Etienne Rabe provided content for inclusion in the report. The group finalized the outline for the report and distributed the work load amongst the members and other advisors. Some points that came up in the discussion of the report outline:

- when outlining the challenges to the industry, the topic of invasive species and disease being brought in from Mexico should be highlighted;
- additional states such as Louisiana should be included in report, following the model provided by APHIS;
- abandoned citrus grove acreage and organic production challenges should be included in the discussion;
- members of the committee requested that the “psyllid map” be included in the report;
- Dr. Turpen noted that the committee should not lose the point of how quick HLB infection impacts an area, using Florida as a model;
- Paul Heller noted that they should note the areas currently in quarantine;
- a discussion occurred related the estimating the gap in funding/research and developing an estimate of the potential national impact;
- Tom Jerkins indicated that the cost to the industry, including multipliers, should be included in the report and he noted that this information was already available;
- Ricke Kress questioned what would happen next if prices go down;
- Dr. Burns led a discussion about Brazil;
- Don Roark noted that the amount of funds spent on research from state by state assessments was measurable and should be included in the report, also noting that this was not a sustainable trend;
- committee members questioned if there was enough capacity to have “buds ready”;
- some members felt that they should look to the outcome groups from CHRP for guidance; and
- Ricke Kress stressed that the point needed to be made strongly **that 7 years has gone by and to date there is no solution!**

Rob Burk indicated that he would send reminders to the committee members, if necessary, to outline who was responsible for which portions of the report.

Note: Following the meeting on June 22, 2012 Tom Jerkins (CDRDAC Chair) contacted Rob Burk and indicated that he felt it was appropriate if he lead the effort to originate the draft report as opposed to the REE Advisory Board Office. He developed a template and was circulating the draft for review to key advisors. Following the circulation of the template he was going to have the REE Advisory Board office circulate the document for further review by the full committee.

The meeting adjourned at 3:50 p.m.

Tom Jerkins

Rob Burk

Chair

Executive Director

APPROVAL BY COMMITTEE:

Date

Initials
Chair

Initials
Executive Director