

## Walnut Marketing Board

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# WALNUT MARKETING BOARD

## RESEARCH COMMITTEE MEETING MINUTES APRIL 5, 2007

The WMB Research Committee met on Thursday, April 5, 2007, at the Walnut Marketing Board office. Chairperson Earl Lindauer called the meeting to order at 10:10 a.m. Ms. Steindorf called the roll and a quorum was established. The following committee members were present:

Earl Lindauer, Chair	Donald Norene
Brent Barton	Shirley Sietsema
Joe Conant	Pete Turner
Walter Deardorff	Bill Waggershauser
Jerry Moore	Steve Wulfert

Committee member Robert Driver was absent. Others in attendance included: David Ramos, WMB Research Director; Bruce Lampinen, Extension Pomologist UC Davis; Duane Lindsay, CWC Technical Support; walnut growers Bill Tos and Bill Carriere; and WMB staff members Dennis Balint and Dana Steindorf. Ms. Shereen Marino of USDA/AMS participated via telephone. Researchers Chuck Leslie, Gale McGranahan, Abhaya Dandekar, Malli Aradhya and Jan Dvorak joined the meeting in progress.

The first agenda item was the approval of the minutes from the February 13, 2007 meeting. Mr. Turner made the motion to approve the minutes, Mr. Moore seconded and the motion carried unanimously.

Dr. Ramos stated that the minutes of the February 13, 2007 meeting reflect a discrepancy in the amount requested for the consulting contracts versus what was actually approved at the meeting. The budget figure approved was \$26,000, however, the amount requested was \$26,200. Ms. Steindorf mentioned that the total budget figure in the minutes reflects the dollar amount for the consultants as was discussed during the meeting (\$26,000). Ms. Marino stated that the budget figure for the consulting contracts can easily be resubmitted to USDA for approval. Mr. Deardorff made a motion to approve the consulting contracts at \$26,200 (\$200 more than previously submitted for approval). Mr. Norene seconded the motion and it carried unanimously.

Chairperson Lindauer asked Dr. Ramos to present the next agenda item, Revised Research Project: Using Aerosol Pheromone Puffers for Areawide Suppression of Codling Moth in Walnuts. Dr. Ramos stated that there was considerable concern raised by the entomology group on our decision not to fund Nick Mills' project. He distributed an e-mail that Carolyn Pickel had sent him expressing their concerns (copy attached). The farm advisors really rely on Nick Mills' research because the information is extended to growers through farm advisors. The project has been withdrawn for additional consideration this year, but will be resubmitted during the next round of proposals beginning in the fall.

A discussion ensued about the role of PRAC and the communications problems between the two committees. Dr. Ramos indicated that PRAC is an agenda item up for discussion later in the meeting. He would like to see more Committee interaction with PRAC, especially with the Entomology Working Group. Also, the Committee discussed the merits of Nick Mills' proposal and the confusion about the project conclusions that resulted in the Committee electing to not fund him this year.

Dr. Ramos presented the next agenda item, Revised Research Proposal: Walnut Production and Quality as Influenced by Orchard and within Tree Canopy Environment. Dr. Ramos commented that the Committee voted at the last meeting to not fund this project, though the vote was evenly split with five members for the project and five against. Dr. Ramos distributed a revised research proposal from Bruce Lampinen (copy attached) and asked the Committee to reconsider the merits of this project. The project's focus is on the effects of light, temperature and water status in terms of how the canopy manages its resources. Growers can then use that information to better manage canopies through pruning. The Committee discussed the various aspects of the project and postponed the funding decision on Dr. Lampinen's project until later in the meeting.

Mr. Wagershauser asked how much money the Committee has remaining from the original \$650,000 budget. Ms. Marino stated that, with the seventeen projects approved at the last meeting and the additional \$200 for research consulting contracts, there is \$154,756 remaining.

Chairperson Lindauer asked Dr. Ramos to introduce the next agenda item, New Research Proposal: Walnut Genomics. Dr. Ramos distributed copies of the revised proposal (copy attached). He introduced three of the researchers on the project who joined the meeting in order to present the proposal and answer any questions, Dr. Dandekar, Jan Dvorak and Malli Aradhya. Dr. Ramos commented that Gale McGranahan and Chuck Leslie were also in attendance because the primary impact of the genomics project is to facilitate the breeding program.

Dr. Ramos introduced Dr. Abhaya Dandekar to make a presentation on the genomics project (copy of presentation attached). Dr. Dandekar explained that the goal of the project is to increase the speed of walnut cultivar development by locating the traits for cultivar improvement. The scientists will conduct genetic mapping, physical mapping and functional mapping. Genetic mapping is the creation of a blueprint to locate useful traits in the walnut germplasm; physical mapping is the creation of a blueprint that locates useful traits on walnut DNA; and functional mapping is the creation of a blueprint that locates genes associated with useful traits based on their expression patterns and function. Some reasons for increasing the speed of walnut cultivar development include keeping ahead of the competition, creating a genetic information resource, building a research infrastructure and attracting federal funding.

Dr. Dandekar anticipates the project will take four years to complete for a total budget of \$590,000. Chairperson Lindauer reminded the Committee that the Board cannot enter into multiple year contracts. The first year funding for the project is \$140,000 for the Board and an additional \$140,000 for BioStar. Mr. Balint asked if there is a way to keep the information from our competitors once we have the markers. Dr. Dvorak stated that there is a balance between sharing information and keeping trade secrets. Dr. Aradhya commented that traditional breeders all over the world have done this in the past by creating a selection index.

Mr. Barton asked how confident the researchers are that they can deliver on their timetable and each line item in the proposal. Dr. Dandekar stated that he is very confident they can complete the project within the timetable. Mr. Barton asked the breeding program researchers, Gale McGranahan and Chuck Leslie, what they see as deliverables from the genomics project. Ms. McGranahan stated that the timing is excellent for this project and the markers will make breeding more predictable. Dr. Dandekar stated that at the end of the four years, the genomics project will have identified thousands of markers on the genome to use in the breeding program.

Mr. Wagershauser made a motion to approve the Walnut Genomics research project for 2007 at \$140,000. Mr. Norene seconded the motion. Mr. Barton stated that he would like to explore further the protection of the vital parts of the data developed in this project. The industry that funds it should have

exclusive rights to it for some period of time. Dr. Dvorak stated that this is an issue that all industries are dealing with, but it should be looked at in a concrete way. Any research that is done is providing information. What we should keep private is the knowledge of markers and their associations to traits.

The Committee called for the question for the motion on the table; the motion carried unanimously.

In order to have Mr. Balint present for the discussion, the Committee moved ahead to agenda item IX, PRAC's Future Role. Dr. Ramos gave a brief history of the development of the Production Research Advisory Council (PRAC). The original intent was to provide reinforcement to the Research Committee in taking a long-term, strategic view of needs and priorities. PRAC's input would feed into the process of the Research Committee's decisions on proposals. The membership of PRAC includes: three Farm Advisors - Rick Buchner, Janine Hasey and Joe Grant; three researchers - Steve Welter, Dan Kluepfel and Jim Thompson; two grower/handlers - Bill Carriere and Jim Frazier; and public member Jerry Siebert serves as chair of the PRAC. PRAC is divided into four working groups: pest management; genetic improvement; orchard management; and post-harvest. The working groups develop recommendations and priorities for each area of research.

Dr. Ramos commented that PRAC is floundering because the PRAC members are not clear about what is expected of them. He expressed his desire to see PRAC continue. The proposal just presented by Dr. Dandekar came about partly because of the efforts of the genetic working group. Each working group of PRAC has come up with useful priorities and strategies. However, the members of PRAC are getting negative feedback from some members of this Committee and are unsure of their future role.

Mr. Balint explained that the development of PRAC came about from a Strategic Planning Meeting of the combined Walnut Marketing Board and California Walnut Commission several years ago. As part of the Strategic Planning process, the members broke out into smaller groups to discuss certain areas of interest. The break-out group for Production and Post-Harvest Research came back with a suggestion to put into place a tool that would provide more information and analysis of strategic thinking in order to provide researchers more direction from the Research Committee. The theory was the Committee, with the input from the Production Research Advisory Council, would be able to go to the Universities with a list of priorities for research projects.

Mr. Balint stated that the members of PRAC were selected to create a balance of disciplines. We wanted this group to have autonomy and be able to think and talk openly amongst themselves. Ultimately, there are several on-going issues that need to be addressed: PRAC is aware that the Research Committee does not support them; there is not enough grower involvement; and PRAC needs a strong chairperson who will give direction, someone like Dr. Ramos. To give input to the Committee is the purpose of PRAC. The only answer he is looking for today is whether or not the Committee wants to continue PRAC or not.

Mr. Wulfert stated that PRAC, in some ways, introduced some redundancy to the role of the walnut farm advisors. He remembers a survey that the farm advisors distributed about five years ago at walnut meetings that asked the growers to rank their priorities and needs in terms of research funding. Mr. Wulfert believes that the farm advisors are very key to the industry; they are the ones in touch with the growers in their area and they provide good input in that regard. As one person on the PRAC committee, Mr. Wulfert feels he cannot represent the whole growing area on behalf of the Research Committee. He encourages others to become involved; however, even though there were some good proposals that came out of the entomology working group, going forward he does not know how much more we will get out of PRAC.

Mr. Balint stated that the strategic planning is a continuing process. He is aware of the survey that Mr. Wulfert mentioned, and as helpful as doing surveys may be, that particular survey resulted in varying priorities. For example, one area of interest was ranked anywhere from number one to number twelve with as little as 3% of growers liking it and as many as 80% liking it. The survey is anything but strategic. PRAC came out of strategic planning and the purpose is long-term planning. Long-term planning is not something you do once and then never again. Mr. Wulfert commented that the entomology working group will continue on even if PRAC does not, because it was a group that formed back in the PMA days.

Dr. Ramos stated that the trouble with the way the working groups are functioning now is that they have very little industry and research committee participation. PRAC is being directed primarily by the researchers and advisors. We are lacking grower involvement in the formulation of the proposals. If we are going to keep the other working groups going, besides entomology which will continue on regardless, we need to get more industry people and research committee members involved. Mr. Wulfert envisions that the individual walnut farm advisors would make sure that their participation included some kind of survey defining the immediate problems and ranking and prioritizing them. The Northern and Southern parts of the valley may have different priorities. Dr. Ramos stated that there should be a direct connection between this group and the farm advisors and researchers so that the research committee is not caught off-guard by what projects are coming.

Mr. Barton and Mr. Norene expressed their support for continuing PRAC, however, they would like to see more input from the grower community. Mr. Wulfert commented that it might be helpful for the Research Committee to have a final look at the proposals that come out of PRAC before they are presented at Bodega Bay.

Dr. Ramos stated that the original plan for PRAC was designed after the Scientific Advisory Council that the California Walnut Commission uses for health research. The SAC has been very successful because the researchers all get together annually for a few days and discuss new and on-going health research. Dr. Ramos doesn't think that approach would work for PRAC because the areas of production and post-harvest research are so diverse. The working groups have had relative success for PRAC.

Mr. Moore made a motion to continue PRAC. Mr. Turner seconded and the motion carried unanimously.

The Committee revisited the revised project from Bruce Lampinen, Walnut Production and Quality as Influenced by Orchard and within Tree Canopy Environment. Mr. Barton made a motion to approve the project at \$14,000. Mr. Norene seconded the motion and it carried unanimously.

The next agenda item was Recommendation to the Board for Research Funding for 2007/2008. After some discussion, the Committee decided to recommend the same budget amount as the current year.

Mr. Norene made a motion to recommend to the Board a Research budget for 2007/2008 of \$650,000. Mr. Barton seconded the motion and it carried unanimously.

Under other business, Dr. Ramos explained that the research proposals are called for in October with a November 1 deadline. The projects sit dormant until Bodega Bay for presentation and then recommendation for approval from the Research Committee in February or March. Dr. Ramos and David Stefani have toyed with the idea of trying to move the timeline up. One possibility is to disassociate the proposals from the reports that are given in Bodega Bay. The proposals could be called for in October, they could be due by November 1, and if we didn't need the proposals to go through Bodega Bay, this Committee could take action in December or early January. At the end of November or early December, the Committee would have to meet in order for the researchers to present their proposals to them.

The Committee decided that they are comfortable with the timeline the way it is. Attending the Bodega Bay conference is helpful since they can hear how on-going projects are progressing and interact with all the researchers.

Mr. Turner mentioned the inventory shortfall. He stated that the estimated yield number of 42.7% (a five-year average) is misrepresenting the actual inventory. He wondered if we could adjust that number in July when a trend is revealed. Chairperson Lindauer suggested that Mr. Turner present his suggestion to the full Board.

The time and place of the next meeting will be left to the discretion of the Chair. There being no further business, the meeting adjourned at 2:15 p.m.