

California Walnut Board

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CALIFORNIA WALNUT BOARD

RESEARCH COMMITTEE MEETING MINUTES March 9, 2010

The CWB Research Committee met on Tuesday, March 9, 2010, at the California Farm Bureau Federation. Chairperson Jerry Moore called the meeting to order at 9:41 a.m. Ms. Steindorf called the roll and a quorum was established. The following committee members were present:

Jerry Moore, Chairperson	William Tos
Robert Driver, Vice-Chairperson	David Keyawa
Pete Turner	

Committee members Jerry Siebert and Bruce Beard were absent. Others in attendance included: David Ramos, CWB Research Director; Bruce Lampinen, Extension Pomologist, UC Davis; PRAC members Steve Welter, Rick Buchner, Dan Kluepfel, Janine Hasey and Joe Grant; Debbie Wray of USDA; and CWB staff members Dennis Balint and Dana Steindorf.

The first agenda item was the approval of the minutes from the November 17, 2009 meeting. Mr. Tos made a motion to approve the minutes, Mr. Keyawa seconded and the motion carried unanimously.

Chairperson Moore asked Dr. Ramos to introduce the next agenda item, PRAC Working Group Updates and Discussion. Dr. Ramos stated that at the November 17, 2009 meeting, the Committee discussed: creating a budget for the working groups; the interaction of PRAC with the Research Committee in terms of a joint meeting; development of operational guidelines for PRAC; assignment of at least one Research Committee member to each PRAC working group; and the possibility of rotation of PRAC members and/or working group chairs. Dr. Welter commented that his working group meeting was very productive; they defined objectives and talked about the future direction of the working group. He does believe that there should be a term limit or a process that allows for change. Chairperson Moore stated that he has seen too many instances where the committee or working group members are just getting oriented to the process and they are removed due to term limits. Mr. Driver commented that he would like to see committees made up of members who are productive and when they become unproductive, they should be removed; he is opposed to term limits.

A discussion ensued about the long-term, "visionary" goals of the Research Committee and the structure and membership of PRAC. The Committee agreed that there is an unlimited talent pool from which to draw researchers and that the Committee needs to look outside the normal channels for objective reviews of their program.

Chairperson Moore asked if the Committee was ready to make assignments of Committee members to the PRAC working groups. These members would attend the working group meetings that interest them and report back to the Committee along with the working group chair. Mr. Tos and Mr. Driver

expressed interest in the entomology working group, with Mr. Tos agreeing to be the liaison to report back to the Committee. Chairperson Moore and Mr. Keyawa agreed to attend the orchard management working group meetings, with Mr. Keyawa as the liaison. After further discussion, the chairs of the genetic improvement and plant pathology working group, Janine Hasey and Dan Kluepfel respectively, agreed to continue to have joint meetings as there is a lot of cross over in the two disciplines. Mr. Driver, Mr. Tos and Mr. Keyawa agreed to attend the joint genetic improvement and plant pathology meetings with Mr. Driver acting as the liaison.

Dr. Ramos mentioned that at the meeting in November there was a discussion about the working group chairs needing some funds to provide lunch at their meetings. The Committee suggested that \$2,500 should cover the cost of three to four working group meetings per year and it will come from the Research Director's budget.

The Committee then discussed the schedule for the coming year and the need for a joint PRAC/Research Committee meeting. The Committee agreed that the joint meeting to review criteria once per year should occur after the working group meetings; the actual date is irrelevant.

Chairperson Moore asked Dr. Kluepfel to present the next agenda item, Status of Research Projects approved on November 17, 2009 for the Special Crop Research Initiative (SCRI) Grant Program. Dr. Kluepfel stated they were not successful on the first two rounds of the submission process for the grant, however, he and his team are preparing for the next submission for the Federal SCRI grant and the CSREES NRI (USDA) grant in March.

Dr. Ramos commented that the Research Committee pre-approved four of the proposals for the 2009/2010 budget year at their meeting on November 17, 2009 as part of the SCRI submission. He stated that Wes Hackett is part of the clonal propagation program and receives a consulting fee from the Board for his efforts. Mr. Hackett will be retiring after this year. Fortunately, John Preece, a former student of Mr. Hackett's, has come on board and will be filling Mr. Hackett's role.

Mr. Grant gave a brief update on the Orchard Management working group. He stated that the group has not met in some time, however, there are several high objective proposals to be presented to the Committee today including canopy architecture, PFA and irrigation scheduling. Ms. Hasey commented on the Genetic Improvement working group. She indicated that the walnut genomics analysis project continues and there will be a discussion later about the RNAi-based crown gall resistant rootstock.

Dr. Ramos asked Chairperson Moore to skip ahead to agenda item 7, Commercialization of an RNAi-based Crown Gall Resistant Paradox Rootstock: Potential and Next Steps. Dr. Ramos stated that right now there are lines of crown gall resistant Paradox rootstocks available for commercial use. There is also a codling moth resistant Chandler on the shelf. The question is, does the industry want to move forward with the commercialization of the transgenic rootstocks? Dr. Ramos stated that Abhaya Dandekar is working on a project that will study whether or not the transgenic material moves from the rootstock into the fruit through the graft union.

A discussion ensued about the image of GMOs in the market place and possible trade barriers, and the group agreed that there needs to be market research conducted before moving forward. Mr. Balint stated that such market research would probably cost around \$125,000. The Committee agreed that Mr. Balint should talk to the marketing research firm. Mr. Balint stated that the work can be done, but they need to see if other tree crops would partner with us and **determine where the funds will come from**. The Committee also agreed that Dr. Dandekar needs to accelerate his research on the graft union, because the results of that research will determine the viability of commercialization of the rootstock.

Mr. Tos made a motion to charge Dr. Ramos with discussing the acceleration of the research on the graft union with Dr. Dandekar. Dr. Ramos will request a new proposal from Dr. Dandekar to be presented to the Research Committee. The Committee will hold off on any marketing research until the results of Dr. Dandekar's research is available, however, they will include a line item for market research in the 2010/2011 budget in the event it is needed. Mr. Keyawa seconded the motion and it carried unanimously.

Chairperson Moore moved on to the next agenda item, Farm Advisors. Dr. Ramos stated that the Committee discussed in November ways to support farm advisors with projects in their counties. As an example, he distributed a copy of a project plan from the Almond Board that was put together by the almond workgroup chair, Joe Connell. The projects in the almond model are bundled together and the money is distributed to each advisor's county account. The farm advisors are very satisfied with their arrangement with the Almond Board and would like to pursue the same with the CWB. The Committee agreed to discuss including a line item in the 2010/2011 budget for a farm advisor support proposal later in the meeting.

Chairperson Moore moved on to the next agenda item, Review and Decisions of FY 2009/2010 Research Proposals. The Committee reviewed each project and the recommendations of Dr. Ramos. The following decisions were made:

***Budget
Request:***

ENTOMOLOGY

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|-----------|---|------------------|--------|
| 1. | Why Puffers Work: Determining the Effects of Residual Releases on Control of Codling Moth – 10 CWB 1 | | |
| | Welter | (Renewal 1 of 1) | 59,558 |

The Committee approved this project at the budget amount requested.

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| 2. | Pheromone-based Codling Moth and Navel Orangeworm Management in Walnuts – 10 CWB 2 | | |
| | Pickel/Grant | (Renewal 1 of 3) | 35,000 |

The Committee approved this project at the budget amount requested.

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| 3. | Selective Pesticides and Biological Control in Walnut Pest Management – 08 WMB 4 | | |
| | Mills | (Continuing 3 of 3) | 21,350 |

The Committee approved this project at the budget amount requested.

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| 4. | Circumventing Ovididal Deficiencies of Sulfuryl Fluoride during Postharvest Fumigations – 10 CWB 3 | | |
| | Walse | (Renewal 1 of 2) | 16,125 |

The Committee did not approve this project; it was referred to the CWB Grades & Standards Committee for consideration as a post-harvest proposal.

ORCHARD MANAGEMENT

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| 5. | Walnut Orchard Management: Pilot Projects, Field Testing, Adaptive Research and Problem Solving by CE Farm Advisors and Specialists – 92 WMB 1 | | |
| | Lampinen | (Ongoing with review) | 41,429 |

The Committee approved this project at the budget amount requested.

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| 6. | Refining the Relationship between Canopy Light interception and yield in walnut – 09 CWB 1 | | |
| | Lampinen | (Continuing 2 of 2) | 25,123 |

The Committee approved this project at the budget amount requested.

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| 7. | Improving Processing and Energy Efficiencies of Walnut Drying – 09 CWB 5 | | |
| | Pan | (Continuing 2 of 2) | 30,000 |

The Committee did not approve this project.

GENETIC IMPROVEMENT

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| 8. | Walnut Genome Analysis – 07 WMB 8C | | |
| | Dandekar | (Continuing 4 of 4) | 150,000 |

The Committee approved this project at the budget amount requested.

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| 9. | Walnut Improvement Program – 92 WMB 2 | | |
| | Leslie | (Ongoing with review) | 239,188 |

Dr. Ramos stated that Chuck Leslie is overworked and under a great deal of stress due to the workload associated with the loss of Gale McGranahan’s position. He explained that the budget request for the Walnut Improvement Program this year is \$100,000 higher for several reasons including: Chuck’s salary and benefits are higher because of reclassification of his position and increased compensation commensurate with the added responsibility; the breeding program endowment, which in the past has funded about 50% of Chuck’s salary, will provide no payout this year to offset his salary; and field labor, land charges and the cost of orchard establishment/removal and supplies have essentially doubled over the last year. Dr. Ramos presented a solution for handling the unexpected increased costs without jeopardizing other essential walnut research projects this year – shorten the contract period to six months for this project in FY 2009/2010 (\$154,594) and then after the new year begins on September 1, establish a second six month contract for the remaining part of the proposal (\$84,594), which would place it within the FY 2010/2011 budget cycle for funding.

The Committee agreed to fund the first six month period (April 1, 2010 to September 30, 2010) of this project at \$154,594. They will review the second six month contract period (October 1, 2010 to March 31, 2011) after September 1, the beginning of the next marketing year.

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| 10. | Clonal Propagation of Walnut Rootstock Genotypes for Genetic Improvement – 09 CWB 6 | | |
| | Leslie | (Continuing 1 of 4) | 77,500 |

The Committee approved this project at \$65,500 at their meeting on November 17, 2009 as part of the allocation to the SCRI Walnut Rootstock Improvement Project. The Committee agreed to approve a consulting fee of \$15,000 for Wes Hackett in addition to the \$65,500 already approved for the project.

PLANT PATHOLOGY/NEMATODOLOGY

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| 11. | Evaluation of Wild <i>Juglans</i> Species for Crown Gall Resistance – 09 CWB 7 | | |
| | Kluepfel | (Continuing 1 of 4) | 27,000 |

The Committee approved this project at the budget amount requested at their meeting on November 17, 2009 as part of the allocation to the SCRI Walnut Rootstock Improvement Project.

- 12. Methyl Bromide Alternatives – 09 CWB 12**
McKenry (Continuing 1 of 4) 24,000

The Committee approved this project at the budget amount requested at their meeting on November 17, 2009 as part of the allocation to the SCRI Walnut Rootstock Improvement Project.

- 13. Engineering Genetic Resistance in Walnut Rootstock to Lesion Nematode – 10 CWB 4**
Dandekar (New 1 of 4) 59,272

The Committee did not fund this project.

- 14. Characterization of R Genes involved in Resistance to *Cherry Leafroll Virus* in Paradox Hybrids – 10 CWB 5**
Sudarshana/Rowhani (New 1 of 4) 40,642

The Committee agreed to fund this project at the reduced budget amount of \$20,000.

- 15. Genetic Resistance to *Phytophthora Crown and Root Rot of Walnut* – 09 CWB 9**
Browne (Continuing 1 of 4) 18,500

The Committee approved this project at the budget amount requested at their meeting on November 17, 2009 as part of the allocation to the SCRI Walnut Rootstock Improvement Project.

- 16. Movento, A Post-Plant Nematicide – 09 CWB 13**
McKenry (Continuing 2 of 3) 6,500

The Committee agreed to fund the project.

- 17. Epidemiology and Management of Walnut Blight – 03 WMB 7**
Adaskaveg (Continuing 3 of 3) 51,000

The Committee funded this project at a reduced level of \$47,000.

- 18. Walnut Blight Control Investigations – 09 CWB 14**
Buchner (Continuing 2 of 2) 11,158

The Committee funded this project at the amount requested.

- 19. Studies on Thousand Cankers of Walnut in California – 10 CWB 6**
Bostock (New 1 of 2) 26,244

The Committee did not fund this project.

- 20. The Impact of Walnut Twig Beetle and Thousand Cankers Disease on Paradox Rootstock: Significance to Commercial Walnut Production in California – 10 CWB 7**
Flint (New 1 of 2) 25,146

The Committee did not fund this project.

Mr. Driver made a motion to approve the following projects at the budget amounts requested unless otherwise noted: #1, 2, 3, 5, 6, 8, 9 (at \$154,594), 10, 11, 12, 14 (at \$20,000), 15, 16, 17 (at \$47,000), and 18. Also included in the approvals are consulting contracts for Chuck Leslie (\$4,200 for six months), Bill Olson (\$3,150 for six months) and Wes Hackett (\$12,000). Projects #10, 11, 12 and 15 were also approved in an earlier motion on November 17, 2009. After some discussion, the Committee agreed to increase Wes Hackett's contract by \$3,000, bringing his total consulting contract amount to \$15,000. Mr. Driver amended his motion to reflect the change. The total budget amount of all projects and consulting contracts approved by the Committee for 2009/2010 came to \$721,712. Mr. Keyawa seconded the motion and it carried unanimously.

The next agenda item was Recommendation to the Board for Research Funding for 2010/2011. The Committee discussed several projects and expenditures that will continue next year, including support for PRAC meetings (\$2,500), farm advisor support (\$20,000), the graft union project from Dr. Dandekar (\$25,000 est.), funding for the blackline project (\$20,000), carryover and additional funding for the breeding program. They also mentioned several that will be ending including the genome project (\$150,000) and Wes Hackett's consulting agreement (\$15,000). The Committee agreed that the expenditures for next year will be significantly higher next year even with the projects that will be ending. Mr. Tos commented that with the growth in crop sizes equaling a growth in assessments, the industry is poised to support a Production Research budget of \$1,000,000. Mr. Tos made a motion to recommend to the Board a Production Research budget for 2010/2011 of \$1,042,000. Mr. Turner seconded the motion and it carried unanimously.

Under other business, Mr. Balint mentioned the Walnut Research Conference in Bodega Bay and wanted to know how the invitation list is developed. He noticed at the meeting in January, there were certain industry members included and others not. Dr. Ramos stated that the invitation list includes all the researchers and farm advisors who work with walnuts, the Research Committee members, PRAC members, and California Walnut Board and Commission members if they want to attend or are interested in a PRAC working group or crackout meeting. Dr. Ramos agreed that there needs to be more formal rules for the guest list for the Walnut Research Conference. He will discuss it with Dr. Kluepfel, the incoming chair of the working group for the conference. Mr. Balint also commented that the costs for the banquet that the California Walnut Board hosts at Bodega Bay have gotten too high. He would like to have more input into the invitation list and banquet menu selection in order to control costs. The Committee agreed that having farm advisors at the conference is very important and there should be a stipend built into the farm advisor support proposal for next year.

Also under other business, Chairperson Moore commented that it appears that Committee member Bruce Beard is not interested in serving on the committee as he has not attended any meetings. Mr. Turner stated that he knows Mr. Beard and will contact him to determine his level of interest.

The time and place of the next meeting will be at the discretion of staff and the Committee chair. Mr. Balint suggested that the research priority list (criteria) be sent out prior to the Fall CWB Board meeting, and if there are changes necessary to the criteria, the group (Committee and PRAC) can reconvene, possibly in Bodega Bay during the Walnut Research Conference. The Committee can hold a teleconference meeting to discuss the breeding program's six month contract for next year after the September board meeting, or the committee can meet the same day immediately following the September meeting.

An executive session was not necessary. Hearing no further business, Chairperson Moore adjourned the meeting at 4:31 p.m.