California Walnut Board
101 Parkshore Drive, Suite 250
Folsom, CA 95630-4726
(916) 932-7070
(916) 932-7071 Fax
info@walnuts.org
An Equal Opportunity Employer and Provider

CALIFORNIA WALNUT BOARD

RESEARCH COMMITTEE
MEETING MINUTES
March 12, 2014

The CWB Research Committee held a meeting on Wednesday, March 12, 2014, at the California Farm Bureau Federation in Sacramento, CA. Chairperson Jerry Moore called the committee meeting to order at 9:33 a.m. Ms. Hull called the roll and a quorum was established. The following committee members were present:

Jerry Moore, Chairperson
Bob Driver, Vice-Chairperson
Mat Conant
Bert Crane
David Keyawa
Lynn Morgan (arrived 9:58 a.m.)
Todd Ramos
Bill Tos

All Committee members were present. Also present were Dr. David Ramos, CWB Research Director; Bruce Lampinen of UC Davis; Joe Grant, UC Cooperative Extension Service Farm Advisor/Chairperson of PRAC; Andrea Ricci of USDA/AMS; and CWB staff member Dana Hull.

The first order of business was the approval of the meeting minutes from November 21, 2013. Mr. Crane made a motion to approve the minutes as mailed. Mr. Keyawa seconded the motion and it carried unanimously.

Chairperson Moore asked Dr. Lampinen to present the next agenda item Drought Effects/Economic Impacts on Walnuts. Dr. Lampinen began his presentation by talking about what has been learned by water use in his light interception project. The summary shows that at 50% light interception trees can produce about 2.5 tons per acre; at 90% trees can produce about 4.5 tons per acre. Going back to old data from the walnut irrigation trial, he stated that they conducted two deficit irrigation treatments in Tehama county and San Joaquin county; San Joaquin county was a 15-20 year old Chandler orchard that had been traditionally planted and the Tehama county orchard was a mechanically hedged hedgerow of Chandlers. The yield differences showed that the Tehama orchard averaged about two tons per acre and in San Joaquin almost four tons per acre during the three years of the trial. The effects of the deficit were not significant in San Joaquin county until the third year. Dr. Lampinen showed some slides with the relationship between the canopy size (light interception), applied water and the yield potential.

Dr. Ramos commented that he's not sure the canopy cover data is the intent of this agenda item; he believes that the industry and Mr. Balint are looking for some hard data on what percent crop reduction we can expect from the drought. Dr. Lampinen and the Committee agreed that there is no hard data and too many variables to speculate at this point on the economic impact.

Chairperson Moore asked Mr. Joe Grant to report on the next agenda item, Report of the PRAC Proposal Evaluations. Mr. Grant began by talking about the working group process and that it is working well; each working group seems to have developed its own operating style. He commented that the farm advisor participation is lacking in the meetings but he hopes that will change as they begin to recognize the value of the working groups. The Research Committee liaison people have been attending the meetings and their involvement is very helpful. Mr. Grant commented that PRAC met on January 29th to review the proposals that the Committee will make decisions on today. He mentioned that the priority lists have been reviewed annually, however, they would like to wait two or three years before making changes to the priority list again. PRAC believes that it will benefit them to review the body of work, addressing the priorities and progress, rather than updating the priorities each year. He distributed a copy of a spreadsheet on which PRAC evaluated the merits of the proposals, giving them a score between 1 to 5 with 1 being low and 5 being high priority. The criteria for the ranking were conformity with PRAC Working Group long-term priorities and goals, balance between the amount requested and the value of a successful outcome to the walnut industry, likelihood that the project will produce practical benefits for growers, and technically sound methods for the proposed work.

The Committee discussed how to get more participation of key industry members in the PRAC working groups. Chairperson Moore mentioned that there is a vacancy on the Genetic Improvement Working Group for co-chair since Brian Blain has stepped down. He and Mr. Tos are recommending Paul Stanfield, a grower in the Hanford area. Paul has worked with Bob Beede a lot over the years on ReTain and other projects. Mr. Tos stated that Paul is a very professional grower and was recently elected to the Kings River Conservation District. Hearing no objection from the Committee, Chairperson Moore will proceed with the appointment of Paul Stanfield to the GI Working Group co-chairmanship.

Chairperson Moore thanked Mr. Grant for his comments and asked Dr. Ramos to begin discussion about the next agenda item, Review and Decisions of FY 2013/2014 Research Proposals. The total budget remaining for 2013/2014 is $1,100,000; the Committee allocated $400,000 to Dr. David Neale's walnut breeding program at their meeting in November. Dr. Ramos distributed his funding recommendations for the Committee based on research needs and priorities.

The Committee went through each project and made funding recommendations as follows:

Budget Request:

ENTOMOLOGY

1. Biology and Control of Walnut Husk Fly Using Reduced Risk Products – 12 CWB 6
Van Steenwyck (Continuing 3 of 3) 44,196

Based on the recommendation from Dr. Ramos, the Committee approved this project at a reduced budget amount of $42,000.

2. Phenology Model for Walnut Husk Fly – 14 CWB 1
Mills (New) 18,042

The Committee funded this project at the amount requested.

3. Impact of Aerosol Emitter Deployment Density on Codling Moth Suppression in Walnut – 14 CWB 2
Gut (Renewal 1 of 1) 56,995

The Committee funded this project at a reduced budget amount of $53,000.

4. Navel Orangeworm in Walnuts: Monitoring and Management – 12 CWB 8
Burks (Continuing 3 of 3) 44,489

The Committee funded this project at a reduced budget amount of $43,903.

5. Navel Orangeworm Attractant Volatiles from Walnut – 14 CWB 3
Beck (New 1 of 1) 12,000

The Committee did not fund this project.

6. Spider Mite Management in Walnuts – 13 CWB 14
Mills (Continuing 2 of 3) 62,441

The Committee funded this project at the request amount.

7. Determining the Impact of Walnut Twig Beetle on the Productivity and Health of English Walnut by Synthesizing Biotic and Abiotic Methods of Assessment – 14 CWB 4
Seybold (New 1 of 1) 29,344

The Committee did not fund this project.

8. Disinfestation of Walnut Twig Beetle Infested Wood from Commercial Walnut Orchards – 14 CWB 5
Fichtner (New 1 of 1) 14,577

The Committee did not fund this project.

ORCHARD MANAGEMENT

9. Local Applied Walnut Research and Extension Activities – 11 CWB 15
Brar (Ongoing with review) 12,000

The Committee funded the project at the amount requested.

10. Evaluating Physiological Indicators for Early Season Water Management in Walnut – 14 CWB 6
Shackel (New 1 of 5) 51,770

The Committee funded the project at the amount requested.

11. 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) 53,595

The Committee funded this project at the reduced budget amount of $50,000.

12. Refining the Relationship between Canopy Light Interception and Yield in Walnut – 13 CWB 9
Lampinen (Continuing 2 of 2) 32,163

The Committee funded this project at the budget amount requested.

13. Root Growth Dynamics and Constraints on Aboveground Growth and Yield of Walnuts – 14 CWB 7

Lampinen	(Renewal 1 of 3)	43,449

The Committee funded this project at the budget amount requested.

14. Development of a Nutrient Budget Approach and Optimization of Fertilizer Management in Walnut – 13 CWB 10

DeJong, Pope	(Continuing 2 of 4)	45,300

The Committee funded this project at the budget amount requested.

GENETIC IMPROVEMENT

15. Walnut Improvement Program – 92 WMB 2

Leslie	(Ongoing with review)	302,144

Based on the recommendation from Dr. Ramos, the Committee funded this project at the reduced budget amount of $290,000.

16. Discovery of the Causative Mutation of the Lateral Bearing Phenotype in Walnut – 14 CWB 9

Dvorak	(New 1 of 1)	67,734

The Committee did not fund this project but would like to consider it again for 2014/2015.

17. Determining the Genetic Basis of Pellicle Coloration in Walnut – 14 CWB 10

Dandekar	(New 1 of 1)	69,777

The Committee did not fund this project.

18. Disease and Pest Resistant Transgenic Rootstocks: Analysis, Validation, Deregulation and Stacking of RNAi-Mediated Resistance Traits – 13 CWB 5

Dandekar	(Continuing 2 of 3)	79,932

The Committee funded this project at the budget amount requested.

PLANT PATHOLOGY/NEMATOLOGY/WEEDS

19. Epidemiology and Management of Walnut Blight – 12 CWB 1

Adaskaveg	(Continuing 3 of 4)	63,000

The Committee funded this project at a reduced budget amount of $53,000.

20. Walnut Blight Control Decisions Using Dormant (Dec., Jan., Feb.) Bud Population Sampling 13 CWB 1

Buchner	(Continuing 2 of 2)	17,096

The Committee did not fund this project.

21. Rapid Phenotyping of Walnut Seedlings for Susceptibility to Walnut Blight - 14 CWB 11

Dandekar	(New 1 of 3)	63,777

The Committee did not fund this project.

22. Managing Botryosphaeria/Phomopsis Cankers and Anthracnose Blight of Walnut in California – 12 CWB 2

Michailides	(Continuing 3 of 3)	46,984

The Committee funded this project a reduced budget amount of $43,000.

23. Development of Disease-Resistant Walnut Rootstocks: Integration of Conventional and Genomic Approaches – 13 CWB 3

Kluepfel	(Continuing 2 of 4)	180,000

The Committee funded this project at the budget amount requested.

24. Weed Control Research and Extension: Providing Herbicide Efficacy, Crop Safety, and Glyphosate-resistant Weed Management Information for the Central Valley Industry – 14 CWB 8

Hanson	(Renewal 1 of 1)	32,403

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 (at $42,000), 2, 3 (at $53,000), 4 (at $43,903), 6, 9, 10, 11 (at $50,000), 12, 13, 14, 15 (at $290,000), 18, 19 (at $53,000), 22 (at $43,000) and 23 for a total of $1,100,000. Mr. Tos seconded the motion and it carried unanimously.

The next item on the agenda was the Recommendation to the Board for Research Funding for 2014/2015. The Committee discussed the current research budget and projections for the coming year. Mr. Tos made a motion to recommend to the Budget & Personnel Committee a 2014/2015 research budget of $1,600,000. Mr. Crane seconded the motion and the motion carried unanimously.

The time and place of the next meeting will be on Wednesday, September 3, 2014 at a location to be determined. An executive session was not necessary. Hearing no further business, Chairperson Moore adjourned the meeting at 2:13 p.m.