

**CALIFORNIA CROP IMPROVEMENT ASSOCIATION
ANNUAL MEMBERS MEETING**

Prato Room, Parsons Seed Certification Center
UC Davis campus
9:00 a.m. May 24, 2012

1. Call to order – President Tom Hearne

2. Roll call – Executive Director Larry Teuber

Directors present:	Frank Saviez	CCIA:	CCIA absent:	Honorary Member:
Bob Baglietto	Ken Scarlett	Larry Teuber	Mary Voorhees	Bob Simas
Jack De Wit	Chuck Schonauer	Nicole Hostert		
Ed Eggers		Pablo Guzman		Guests:
Glenn Hawes	Directors absent:	Timothy Blank		Jorge Dubcovsky
Tom Hearne	Kent Bradford	Alex Mkandawire		Dan Putnam
John Heaton	Andrea Fox	Kitty Schlosser		L.W. Gallagher
Jim Hill	Chris van Kessel	Katy Soden		Paul Gepts
Scott Hudson	Mary Wadsworth	Bob Stewart		
Shannon Mueller	Ray Johnson	Catalina Oramas		
Glenn Powell				

3. Minutes of previous meeting

It was ***moved, seconded, and passed*** to accept the minutes as distributed.

4. Additions to agenda – Tom Hearne

None

5. Agency Directors

All current agency directors have been reappointed:

Agricultural Commissioners – Scott Hudson
California Farm Bureau Federation – Andrea Fox
California Dept of Food & Ag – John Heaton
California Seed Association – Ken Scarlett
UC Cooperative Extension – Shannon Mueller
UCD, College of Agriculture & Environmental Sciences – Jim Hill
UCD, Department of Plant Sciences – Chris van Kessel
Seed Biotechnology Center (*ex officio*) – Kent Bradford

It was ***moved, seconded, and passed*** to accept the appointment of all agency directors.

6. Nomination and election of board officers –Charles Schonauer

Schonauer reported that the nomination committee (De Wit, Johnson and Schonauer) recommends the current slate of officers continue for 2012-13:

President – Tom Hearne
Vice-President – Glenn Hawes
Treasurer – Mary Wadsworth

All directors accepted the nominations. It was ***moved, seconded, and passed*** to seat the officers as noted.

7. Research reports were presented for research funded in 2011-12 and requests for funding in 2012-13. The abstract from each proposal is included below as a description of their presentation.

- a. Lynn Gallagher reported on two continuing research projects:

- 1) "Oat Improvement for California"

This project will improve oats by traditional breeding methods through the creation and evaluation of new segregating populations and the selection of advanced lines which have potential for release as cultivars in diverse California environments. The breeding program will emphasize forage varietal improvement with selection for earliness to heading/maturity and for resistance to the most important oat diseases, namely, barley yellow dwarf (BYD) and cereal yellow dwarf (CYD), both of which cause leaf reddening/yellowing and stunting. Resistance to crown rust, stem rust, and leaf blotch diseases will also be sought. Selection for grain yield is of secondary importance. Additional agronomic improvement will emphasize culm thinness, stature and resistance to lodging. Until four years ago, no new hybridizations for oat improvement had been made in the last twenty-two years in California. Eight new varieties recently were released by the University of California, Davis, after 25 years of sporadic breeding efforts. The popular oat variety Montezuma, the only early variety in use, was released 40 years ago and is

- highly susceptible to BYD/CYD, crown rust, stem rust, and leaf blotch. No replacement for Montezuma has been bred. About 240,000 acres of oats were grown in California in 2010, which is about half the breadwheat acreage. Funding for oat breeding at UCD is inadequate to maintain a robust program.
- 2) “Breeding Malting Barley for California”

New opportunities exist for barley production in the Central Valley of California, especially for high quality malting barley free from *Fusarium* head scab and its DON toxin which plagues upper Midwest malting barley production. Malting barley germplasm development at UCD is supported by the American Malting Barley Association (AMBA), but this organization does not encourage varietal development for California. AMBA wants to develop malting barleys with broader adaptation which would require only the development of germplasm resistant to a broader spectrum of diseases. California produces little or no malting barley, except by contract now and then in the Klamath Basin. California produces and consumes more beer than any other state. Because malt houses are built in areas of malting barley production, no large malt houses exist at this time in California. California growers must be capable of producing sizeable amounts of malting barley before a large malt house is built. Sierra Nevada Brewery is building a small floor malting operation. Two-rowed barley moves in international trade but very little six-rowed barley is found in export markets. Malting barley may be produced with annual rainfall in a sustainable way without irrigation, although irrigation would be required in most of the San Joaquin Valley. Development of malting varieties adapted to Central Valley growing conditions requires a long term commitment because of the great number of characteristics desired by the brewing industry. A major constraint in the development of two-rowed malting barley has been the incorporation of resistance to Cereal Yellow Dwarf Virus (CYDV). A mapping population has been created to study the resistance in Madre Selva.
 - b. Jorge Dubcovsky reported on two continuing research programs and introduced the newly hired project scientist to work on Barley breeding:
 - 1) “Development of Wheat Varieties for California”

The general objective of the UC wheat breeding program is to develop common and durum wheat varieties adapted to different California environments. The specific objectives are 1) introduce new sources of disease resistance and end-use quality characteristics; 2) create new segregating populations by hybridization and select the best lines using field based selection; 3) determine the genetic basis for important resistance and agronomic traits and develop markers to accelerate the introduction of these genes into breeding lines adapted to different California environments; and 4) produce Breeder’s seed of the best lines targeted for variety release. The field-based selection program will be complemented by marker assisted selection to accelerate the introgression of valuable traits. Marker assisted selection efforts in the area of disease resistance will be focused on the pyramiding of slow rusting resistance genes *Yr48*, *Yr36* and *Yr18*. We will continue the introgression of *septoria tritici* blotch resistance genes *Stb3*, *Stb4*, and *Stb7*. As part of a preventive breeding effort, we will incorporate sources of resistance to the stem rust race UG99. In the area of drought tolerance we will initiate the introgression of an engineered IRS translocation from rye that increases drought tolerance without limited impact on quality. In the area of salt tolerance we will introduce the *Nax2* gene into durum wheat that increases salt tolerance. In parallel, we will continue our efforts to develop durum wheat varieties with low Cadmium to comply with new international regulations and initiate a three year project to map yield components in bread wheat.
 - 2) “Evaluation of Small Grains in California”

The requested funding will be used to support common wheat, durum wheat, and barley trials in the major small grain-producing areas of California. The Regional Cereal Evaluation Program will include evaluation nurseries of advanced breeding lines and new and standard cultivars obtained from public and private breeding programs. Trials will be located at representative environments in the Sacramento, San Joaquin, Imperial, and northern intermountain valleys, and south-central coastal foothills. The Regional Cereal Evaluation Program will also provide elite germplasm nurseries for the UC wheat breeding program in two selected locations to help accelerate the development of public cultivars. Nurseries will be grown using production practices appropriate for each environment. The performances (yield, agronomic characteristics, diseases and pest reactions, grain quality) of the entries will be documented and summarized in the Agronomy Progress Reports and reported on the Small Grains website. The resulting information will be used to help identify areas where new cultivars are best adapted and as supporting data for justifying the release of advanced breeding lines from both public and private breeding programs.
 - 3) “Developing a Malting Industry in California”

Dr. Dubcovsky introduced Alicia del Blanco, Project Scientist, as the barley breeder hired to work on this proposal. She will work with Lynn Gallagher to continue breeding malting barley.

- c. Paul Gepts has requested a no-cost extension to continue working on the proposal “Development of a High-Density Genetic Map to Facilitate Transfer of *Lygus* and Nematode Resistance among Lima Bean Varieties” funded last year. Dr. Gepts provided an update to the board on the status of his research.
- d. Dan Putnam reported on his continuing research project “Alfalfa Experimental Variety and Germplasm Adaptation and Evaluation”.

This state-wide alfalfa variety yield testing program is the most comprehensive of any state in the US, and has been of tremendous value to alfalfa growers and seed companies. We propose to conduct 8 trials in California in 2012-13, depending upon the level of support. This includes Tulelake, Scott Valley, Davis, Modesto, Parlier, Five Points, Lancaster and El Centro. This includes two new trials planted in 2011 (Davis & Modesto), and two new trials (Scott Valley and El Centro) planted in 2012. This program includes both released lines and experimental cultivars, and we conduct more than 8500 individual yield estimations/year. Funding requested this year funds only ½ of SRA (Craig Giannini) at Davis. Additional support for field station charges, additional labor, travel, supplies, equipment (including capital expenditures), web management and computer support to handle greater than 8,500 yield observations each year will have to be borne by contributions by seed companies. Trials will be curtailed depending upon the level of support. Results of these trials will be reported at: <http://alfalfa.ucdavis.edu> and at field days and in end-of year publications. The economic differences due to high-yielding varieties are worth hundreds of dollars more per acre per year to farmers than lower yielding lines, and millions to California as a whole. Variety trials continue to be of vital interest to growers and seed marketers in California, and CCIA is the key supporter of this program.

8. Since all the CCIA members present at the meeting are also members of the CCIA Board of Directors, Larry Teuber requested to move the Executive Director report to the Board of Directors meeting scheduled immediately after this meeting. The board was in agreement with this request.
9. Meeting was adjourned at 10:30 am.

Respectfully submitted,



Katy Soden