

Seed Advisory Board Meeting
 CDFA Plant Diagnostics Center
 3294 Meadowview Road
 Sacramento, CA
 8:15 AM, Thursday November 6, 2008

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1. Call to Order – Roll call

Chairman Scarlett called the meeting to order at 8:16 am. The following members and guests were present:

Kelly Keithly	George Hansen	Riad Baalbaki
Rick Falconer	Dennis Choate	Mike Colvin
Gabe Patin	Umesh Kodira	John Heaton
Marc Meyer	Connie Weiner	Sue DiTomaso
Ken Scarlett	Betsy Peterson	Mary Schlosser
John McShane	Chris Zanobini	Jamie Miller
Ron Tingley	Deborah Meyer	Cathy Vue
Larry Hirahara	Mike Campbell	Tim Tidwell
Paul Frey	Jim Effenberger	

2. Acceptance of minutes from May 15, 2008 meeting

Larry Hirahara and John Heaton each noted one minor typographical error.
 John McShane motioned that the corrected minutes be accepted.
 Kelly Keithly seconded the motion.
 Motion carried.

3. Seed Services Overview

Chairman Scarlett explained to the Board that since there are several new members on the Board, he recently requested John Heaton to prepare an overview of the Seed Services Program for new members.

Heaton presented a brief history of the California Seed Law with comparisons to present day activities (attachment 1.) The main points of the presentation were:

- The evolution or development of seed laws
- The purpose and activities of the former California Seed Council
- Designation of the Seed Services Program in CDFA to enforce the California Seed Law
- A recommendation by the Governor's Task Force in 1968 for the program to become self-funded
- Formation of the Seed Advisory Board
- The implementation of fees and assessment payments
- Independence of the Seed Lab from the Seed Services Program
- Funding for the CDFA Seed Lab
- Funding for the UCD Seed Biotechnology Center
- Funding for Seed Subvention payments to County Agricultural Commissioners
- Comparisons of previous funding levels to present funding levels, after adjustments for inflation

Heaton also provided an outline of the current activities and responsibilities of staff in the Seed Services Program at CDFA (attachment 2).

4. Seed Services Finances

Analysis of Collections from Fees and Assessments

Heaton reported that there were 471 companies authorized to sell seed in California during 2008/09. Approximately 199 of the 471 companies (or 42%) were out-of-state firms.

During the first three months of FY 2008/09, the total amount of collections from assessments, fees, and penalties was \$1,492,998. This amount compared favorably to the approved budget of \$1,553,629. Heaton was confident that the difference of \$60,631 would be covered by additional collections and interest in the remaining 7 months of the fiscal year.

The following graphs were presented as analyses of reported seed sales and assessment collections:

- Number of Firms in Each Assessment Category based on Reported Seed Sales made in CA during FY 2007-08 (attachment 3)
- Percent total assessments paid by selected firms that reported seed sales made in CA during FY 2007-08 (attachment 4)
- Comparison of Reported Seed Sales in FY 2007-08; Out of State Firms vs. CA Firms (attachment 5)
- Categories of Reported Seed Sales made in California during FY 2007-08 (attachment 6)

Heaton provided a brief report about the Fund Condition (attachment 7) for the Seed Services Program. He noted that for FY 07-08, the collections exceeded the approved budget and that the expenditures were less than the approved budget. He cautioned the Board however, that there still are some outstanding encumbrances that will increase the

expenditure tally. Even with those additional expenses, however, Heaton is confident the Program will only spend about 95% of the approved budget.

The Fund Condition showed that even after subtracting a six month reserve of \$668,686 which is required by CDFA, the Seed Services Program has an available balance of \$301,517. Heaton reminded the Board that this value is not entirely accurate since \$120,000 and about \$50,000 still must to be paid for contract obligations. Even with contract obligations and miscellaneous additional minor expenses, Heaton observed that the available balance beyond the reserve would be slightly over \$100,000 going into FY 08-09.

For FY2008-09, Heaton noted that the program has already received collections in excess of the approved budget. He expressed optimism that the Program would receive additional collections in the remaining seven months, especially from unregistered out-of-state labelers identified from Border Inspection Reports. In addition, Heaton was confident that the Program would show additional savings by being under budget again.

5a. Recent Developments in the Seed Laboratory

Deborah Meyer provided a brief summary of the various activities performed by the lab. As one of five labs in the CDFA Plant Pest Diagnostic Center, the mission of the seed laboratory is to serve as a scientific resource for the state and to provide leadership in plant diagnostic science as well as excellence in service. The lab's primary task is to provide timely and accurate assessments of seed quality, including weed pests and seed diseases. In addition, they also provide expert consultation to CDFA's Pest Prevention Program and other external clientele. The CDFA lab is an official laboratory of the Association of Official Seed Analysts (AOSA), which is an organization of government laboratories throughout the U.S. and Canada. Members of the CDFA lab attend AOSA meetings and identify issues of importance when seed testing methods are proposed and could impact the California seed industry. Meyer reiterated the earlier point made by Heaton, that the CDFA Seed Laboratory is a separate entity from the Seed Services Program, and can therefore provide neutral and third-party analyses about seed samples submitted by the Seed Services Program, as well as others. The CDFA Seed Lab has a national reputation and is considered a major resource for seed identification in North America.

The lab is currently staffed with four scientists and two laboratory technicians. Deborah Meyer is the Lab Supervisor, Dr. Riad Baalbaki is the Seed Physiologist, Jim Effenberger and Don Jolly are Seed Taxonomists. Jim and Don perform the tests dealing with purity and noxious weed seed examinations. Connie Weiner is a technician that logs in all of the regulatory samples for the Seed Services Program. Evelyn Ramos is the lab's other technician. She performs various tasks, including helping Connie prepare seed samples for testing and evaluation by the scientific staff.

Currently the lab has one scientist and one technician position that are vacant due to retirements. Deborah Meyer was in the process of recruiting for the vacant positions when the state enacted a hiring freeze. The positions are vacant and will remain vacant for the time being.

The CDFA Seed Laboratory compares very favorably in size and scope to other AOSA labs. Although California is number one in agriculture, it has a relatively small seed

laboratory. Oregon's seed laboratory has twenty-one full-time employees, while Texas maintains three laboratories and Georgia has two seed laboratories.

Types of seed samples evaluated by the CDFA Seed Laboratory include:

- Quarantine seed samples – received mainly from border inspection stations and evaluated primarily for noxious weed seeds.
- Seed identification samples – received from various interested parties. Identifications are performed free of charge per statute.
- Official or Regulatory seed samples – received from the CDFA Seed Services Program.
- Service Seed Samples – received mainly from seed companies wanting certain tests. A fee is charged for these tests.
- Phytosanitary Seed Samples – received from seed companies that export seed and which require tests in support of the issuance of phytosanitary certificates. Phytosanitary seed samples are mainly evaluated by the seed lab for unwanted weed seeds and fungal bodies that are often the same size as seeds.
- Samples for mill approvals – evaluated for the presence of certain viable weed species in fulfillment of feed regulations.

Meyer noted that the tests for regulatory samples represent about 45% of the overall number of tests performed in the seed laboratory. She also reported that revenue from service testing was approximately \$28,000.

In addition to the seed testing performed by the laboratory staff, CDFA maintains the largest seed collection west of the Mississippi River. The collection currently has about 40,000 seed specimens. For the last three years the CDFA seed laboratory staff has been methodically entered information about seed specimens into a database. In addition, they have also been re-labeling each specimen. Much of the work has been performed by seasonal help loaned from other CDFA laboratories during their slow times. There has been no cost to the seed laboratory since these people were loaned between busy periods that normally occur in their assigned labs. The most recent effort in categorizing the collection is to incorporate pictures of the specimens in the database.

The seed collection was originally designed for morphological identification of major crops and common weed species in agricultural settings. Since the lab is now doing identifications for other purposes, the staff has been adding specimens that go beyond the original agricultural scope.

Deborah noted that seed identifications provide a first line defense to the spread of noxious weeds. These weed seeds are not just occasionally found in planting seed, but are also routinely identified in shipments of sprinkler pipes, beehives, hay and animal feed products.

The CDFA laboratory also performs seed analysis on samples received from private seed laboratories, as an informal quality assurance check for labs in some private companies. On occasion the CDFA lab is requested to identify weed specimens that the private labs can't identify. The collection maintained by CDFA serves as a tremendous resource for those situations. Some of the more interesting identifications have included:

- human and livestock poisoning cases
- university research projects
- criminal investigations
- documentation of environmental studies

Another function that the laboratory staff performs is to evaluate and develop standardized test procedures for species of which there are no standard procedures. The CDFA seed lab frequently serve as a referee lab for the evaluation of new seed testing methods proposed by other labs and seed testing organizations. It is partly because of these activities that during the last ten years, staff of the CDFA lab has been responsible for authoring or co-authoring, 44% of all seed testing rule change proposals at AOSA.

The CDFA laboratory staff serves on numerous committees for:

- The Society of Commercial Seed Technologists
- The Association of Official Seed Analysts
- The International Seed Testing Association

Meyer serves on the national Registered Seed Technologist Examination Board and noted that the exam is quite difficult to pass. While the state does not require CDFA staff to be Registered Seed Technologists or Certified Seed Analysts, it is preferable. Exam candidates must be trained for several years before they are allowed to take these exams.

Another important function of the CDFA Seed Lab is to provide training for individuals wishing to take the RST exam or re-instate their RST status. CDFA staff prepares training manuals for various workshops that are offered to individuals working in various private seed labs and other governmental organizations.

Meyer summarized her presentation by stating that the CDFA Seed Lab provides the following:

- Serves as an independent seed lab for CDFA and for the seed industry.
- Serves as a valuable resource for seed and fruit identification.
- Conducts independent and cooperative research to improve laboratory testing.
- Serves as California's voice in all matters related to seed and quality assessment, nationally and internationally.

Heaton asked Meyer if rule change proposals have any effect on the acceptance of U.S seed testing procedures in international commerce.

Meyer replied that all of the proposals are evaluated in terms of how they related to other testing rules. There is a major effort to have harmonization of seed testing rules and that is always considered with any rule change proposal.

Heaton commented to the Board that some of the activities the lab performs, beyond the testing of regulatory seed samples, have an indirect benefit for the seed industry. As an example, he stated that it is important to have evidence that noxious weed seeds are

coming into the state in other commodities, other than planting seed. Activities other than analysis of regulatory samples provide data and direct evidence of other sources of weed seed contamination than planting seed. The Seed Services Program can use that evidence to make the argument that the seed law adequately addresses the issue of noxious weed seeds and does not need to be changed to address falsely perceived problems in planting seed.

Heaton also noted that the CDFA Seed Lab is immensely valuable when he has to investigate seed complaints. On numerous occasions, results from the CDFA Seed Lab have provided evidence about the quality of suspect planting seed, which have dissuaded growers from pursuing formal seed complaints.

Member Paul Frey asked if the CDFA seed lab performs any tests to determine the presence or absence of GMO traits.

Deborah Meyer replied that the lab was involved in such endeavors during the StarLink investigation; however the Board has not requested a continuation or expansion into that type of testing. In her opinion, she believes that seed products labeled as containing one or more GMO traits should be tested for those traits.

5b. Recent Developments at the California Crop Improvement Association

Mary Schlosser reported that the CCIA recently hired Mary Voorhies to be their new Registered Seed Technologist. Ms. Voorhies will establish an audit procedure of labs in California when they submit seed analyses to CCIA. The CDFA lab staff has been assisting Mary Voorhies with training and is providing her hands-on opportunities to assist her in re-establishing her RST status.

6. Report on Seed Services Activities and Follow-up Items

Heaton supplied handouts to summarize the following activities performed by the seed services program.

Seed Sampling:

- Status of Seed Sampling for Compliance Monitoring in FY 2008-2009.
 - YTD the sampling is at about 20% for the entire year, which is comparable to the previous year.
- Analysis of Regulatory Seed Samples that failed in FY 2007-2008.
 - 27 out of 620 samples failed [attachment 8].
 - 21 of 27 or 78% of failures were due to misstatement of germination.
 - Most of the failed samples were grass seeds collected in Riverside County [attachment 9].

Heaton provided a column chart [attachment 10] to compare the time required for a regulatory seed sample to be processed by the seed laboratory. The average number of days to process a regulatory seed sample has been reduced from 47 days in 2003, when they did 893 samples, to 19 days in 2007, when the lab did about 600 regulatory samples.

Heaton attributed the improvement to organization brought to the seed lab in 2004, when Deborah Meyer became Supervisor, and to the reduction in submission errors of 600 seed samples now submitted by CDFA inspectors, rather than the 1,000 samples submitted from county inspectors, many of which required extra handling due to errors.

Meyer reminded the Board that it is important to remember that service samples and quarantine samples are processed before regulatory samples, because the results for those are needed by companies wanting to move seed in commerce.

Chairman Scarlett asked if the timeline for germination test results would show the same improvement.

Deborah Meyer explained that the rules for testing official seed samples require that the lab perform the germination test on seed from the purity analysis. This is an important distinction because the lab has to be sure that the germination test is only being conducted on the pure seed. She clarified that it is not uncommon for private labs to run purity and germination tests simultaneously, however such a shortcut is not acceptable when the analysis of official seed samples may be the basis for enforcement actions.

Heaton noted that the number of days currently required to process a regulatory seed sample is favorable when compared to an archive document [attachments 11 & 12] that showed that an average of 60 days were needed in 1988 to process a regulatory sample.

Deborah Meyer added that it is important to note that the turnaround time for regulatory samples does not reflect the fact that the analyses of services samples and quarantine samples are started the day they arrive in the lab. In addition, weed seed identifications are usually completed the same day they are submitted. Some situations and tests take priority and do contribute to the turnaround time. Occasionally the regulatory tests must wait while the lab staff addresses priority situations.

Medical Marijuana Follow-up

- Medical marijuana - The status of medical marijuana seeds [attachment 13].
 - Medical marijuana has not been legalized but rather decriminalized, which changes the burden of proof.
 - The seeds for cultivation of any marijuana, medical or otherwise, are no more legal or available than before.
 - California Health and Safety Code 11018 defines marijuana to include the seeds and thereof.
 - Possession with intent to sell any amount of marijuana is still a felony.
 - These interpretations provide the reason why the CDFA Seed Services Program does not regulate the sale of medical marijuana seeds. In short, it is already a felony to sell them, so CDFA does not need to regulate an activity that is already illegal and regulated by the Police and Federal Authorities.

Seed Complaints Status Report

Heaton received several inquiries about the procedures for filing a seed complaint. So far only one formal seed complaint has been filed. Heaton was not able to elaborate on the formal seed complaint because it's an ongoing investigation. He acknowledged however, the outstanding investigation performed by CDFA Associate Biologists in Riverside. Through their efforts, CDFA was able to obtain seed of the lot named in the complaint from a grower one hundred and twenty miles remote to the complaint location. The seed obtained was from the same lot but sold by a different dealer. Heaton has forwarded several seed samples related to this complaint to the Federal Seed Regulatory Testing Branch for further testing. Once the investigation is complete and the Investigative

Committee has finished their report, Heaton will provide more details about this complaint to the Board. Heaton wanted to mention the complaint because it demonstrates how important it is to have CDFA staff available at remote locations to perform seed complaint investigations. In addition, he wanted the Board to understand how timeframes for seed complaints must be flexible if both parties are to be served fairly.

In late September, Heaton received another inquiry about filing a seed complaint for a situation involving stand establishment of a grain sorghum crop. While he is fairly confident that the seed was not mislabeled, he is still communicating with the grower and the seed company to determine exactly how the variety was represented.

He emphasized the importance of conducting a field investigation even though a formal seed complaint was not filed. Heaton and a CDFA staff member from the Fresno office were able to locate and obtain seed from the field. That seed was submitted to the CDFA Seed Lab, which characterized and documented the condition of the seed. The results of the lab's analysis suggest that the original planting seed was of satisfactory condition and that a combination of cultural practices may have contributed to the poor stand.

Heaton will meet with the grower to discuss the results from the preliminary investigation, as well as the grower's option to pursue a formal seed complaint. He is hopeful that the early investigative work, combined with the lab results, will alleviate some of the grower's concerns.

A third inquiry about the process for seed complaints involved a bag of tall fescue grass seed which had two different labels attached. Upon investigation and consultation with the seed lab, Heaton learned that both labels were actually correct because one label used the old taxonomical nomenclature, while the other label used the new nomenclature. The customer was satisfied with the explanation and did not file a complaint. Heaton will follow-up this recent investigation with letters to the seed companies and stress the importance of having only one accurate label on seed products.

PVP Follow-up

Heaton provided a handout [attachment 14] to clarify a previous discussion about PVP. He recently asked the PVP Office whether a farmer could hold back only enough PVP seed to replant the approximate area that he originally planted, or if a farmer could propagate a PVP variety and then plant a greater area of his own land. The reply was that it depends on when the variety was protected by PVP and if the Title V option was exercised by the certificate holder. Title V prevents the sale of propagated seed. In 1970, farmers could not only save PVP seed, but they could also sell it to other producers. In 1994, when Title V amendments were passed, the farmer to farmer sales exemption was eliminated.

Border Inspection Reports

The Seed Services Program is presently reviewing about 15,000 records from inspections conducted at CDFA border stations. Heaton is attempting to identify firms that are shipping planting seed into California, but which are not authorized to sell agricultural or vegetable seed in California. In addition he is also reconciling the quantities shipped with reported sales and the assessment paid. He anticipates that his investigation will be completed in early 2009, at which time he will send out enforcement letters. He is hopeful that the enforcement letters will generate additional collections.

Internet Seed Sales

Heaton referenced an article about the poor quality of packet seed in the United Kingdom and he noted that he has recently received inquiries from firms in the UK about selling packet seed in California. Although he has not had time to meet with companies that offer seed for sale on the internet, he did recently write a brief article about seed law and internet seed sales, which was posted on the internet web site of SeedQuest.

Arbitration in CCR 3915.1

A discussion occurred about the possible need to remove references of arbitration in the mandatory Notice of Arbitration/Mediation/Conciliation. Heaton suggested that since the Supreme Court recently ruled that states cannot assign arbitration to a state agency when private agreements for arbitration exist, and since the U.S. House of Representatives is considering an Arbitration Fairness Act that will probably pass, it may be time to consider if CCR 3915.1 is enforceable. Heaton pointed out that CCR 3915.1 references arbitration as part of the alternative dispute resolution process for seed complaints. He acknowledged that the Board and CSA recently decided to not develop regulations for implementation of the arbitration process in seed complaints, but Heaton suggested that perhaps it would best to remove all references to arbitration in the mandatory dispute resolution process. Heaton fears that someone might be able to claim that the other parts of the dispute resolution process for seed complaints are steps toward an arbitration process and then make an argument for removal of conciliation and mediation because they are seemingly lumped in with arbitration.

Ken Scarlett noted that this will be the same issue for all states. Heaton agreed.

Heaton cited a recent Wall Street Journal article that reported a provision of the recently passed farm bill which prohibits mandatory arbitration to resolve disputes over livestock and poultry contracts. He suggested that it is not unlikely that there will be a similar provision prohibiting mandatory arbitration in seed disputes in the future.

Heaton asked the Board if they want him to pursue changes to the notice of arbitration, conciliation, mediation required by several states

Ron Tingley pointed out that any changes to the statement in California would put the statement out of compliance in other states.

Heaton acknowledged Tingley's point and explained that any change would take at least three steps.

- 1) The new wording would have to be developed in conjunction with CSA.
- 2) The new language would have to be presented to the Association of American Seed Control Officials (AASCO) for approval and be amended to the Recommended and Uniform State Seed Law (RUSSL).
- 3) The changes would have to be implemented in the California Code of Regulation.

The Board recommended that no changes be pursued by CDFR at this time and that ASTA should take the lead on this issue.

7. **Seed Biotechnology Center Report**

Mike Campbell, Kent Bradford and Sue DiTamaso provided a PowerPoint summary of recent developments and activities at the UCD Seed Biotechnology Center. Items of interest included:

- Organization of a Delphi Study - to create the most comprehensive plant breeding graduate education program in the U.S. at UC Davis.
- Chile-California Initiative - to encourage and support collaborative research and development of new varieties in both annual and perennial crops.
- Array Marker Development Projects – collaborative projects with industry partners
- Research on Lettuce
- High Temperature Dormancy of Lettuce Seed
- High Resolution Mapping of QTL in Lettuce
- Participation in the Compositae Genome Project -refunded by NSF for another 4 years
- Participation in the Solanaceae Coordinated Agricultural Project (SolCap) - to develop markers in breeding germplasm of tomato and potato.
- Participate in the first genomics project in carrot – research applications of DNA markers in carrot breeding
- Gene Flow in Pima and Acala Cottons - % geneflow of Pima cottons are nearly zero at about 1000 feet, which is about 1/10th of what was observed in Acala cotton.
- Participated in CAST Publication about gene flow in alfalfa which is being utilized by the USDA in preparation of the EIS for RR alfalfa
- Participated in proposal submitted by SCRA (Specialty Crop Regulatory Assistance) to establish a National Research Support Program within the Agricultural Experiment Station system
- Prepared a Strategic Communications Plan for improved outreach
- Organizing a Seed Biology, Production and Quality Course
- Published a history of plant breeding to coincide with the 100th anniversary of the UC Davis campus

SBC Request for Funding to Conduct an Industry Survey.

Mike Campbell explained that various organizations, including the California Seed Association, have identified the need for a comprehensive survey of the California seed industry to establish the total economic impact of the industry.

Campbell identified the following potential benefits from such a survey:

- The information can be used by the California Seed Association and the Seed Advisory Board to insure that legislation and regulations affecting the California seed industry are beneficial to the citizens, as well as to the economy of California.
- The information will help substantiate that California is a worldwide leader in seed production.
- Information about manpower needs by job classification will assist the industry in identifying needs, and perhaps lead to the development of appropriate training programs.

John Heaton added that accurate economic information regarding the seed industry is very useful to anyone conducting legislative analysis for seed-related legislation.

Chairman Scarlett asked Mike Campbell how much the survey and summary report would cost.

Campbell replied that the Agricultural Issues Center at UCD has indicated they would work with SBC to conduct the study, with the assistance of a post-graduate fellow. They estimate the study would take about six months and would cost approximately \$40,000. He added that SBC and CSA would cooperate to assist in the study.

Chairman Scarlett asked Heaton if the Program has the funds to cover the request.

Heaton referred to the previously supplied Fund Condition Report which showed there is approximately \$300,000 in the fund balance for FY2007-08. He noted that the Program still has to pay about \$60,000 in outstanding invoices to the SBC from the FY07-08 budget. That would leave around \$200,000 in the fund balance. He added that he expects the same situation in FY2008-09, where collections exceed the approved budget and the Program is also under budget. Heaton stated that he believes the Program could fund the \$40,000 request if the Board desired, while still maintaining about \$200,000 in the fund balance over the next few years.

Chairman Scarlett asked Heaton what the procedure would be to make such a payment.

Heaton replied that since the Seed Services Program has an existing contract with the Seed Biotechnology Center, he believes the contract can be amended to achieve payment. He explained that such an amendment would require review by the budgets office, but since the Program has been under budget and the collections are higher than projected, he was optimistic the amendment would get approval.

Mike Campbell expressed hope that the SBC could obtain a commitment for the money immediately, so that the survey and report can be concluded as soon as possible, hopefully by the summer of 2009.

Several Board members agreed that such a study is needed and expressed their strong support. They noted that an increasing number of members in the legislature lack agricultural backgrounds and need this kind of information to make informed decisions.

Member Falconer expressed hope that the proposed survey would have more participants than the survey that was conducted ten years ago. He urged everyone to encourage industry partners to participate in the survey.

Kent Bradford explained that Falconer's observation is one of the reasons the SBC is requesting the funding; namely to get the assistance they need to do a very professional job.

Betsy Peterson of CSA suggested that the survey should also attempt to gather information about the cost of regulatory compliance. She noted that seeds are very highly regulated and her experience has been that many of the legislators do not understand why the industry is so resistant to new rules. She added that it is important to try to quantify the cost of all of the regulations, including certification costs, water regulatory costs, regulations about labor and many other regulatory costs. This kind of information is valuable when organizations such as CSA try to explain why they oppose legislation that adds more regulations on an already burdened industry. She added that the industry is not

always opposed, but too often the information required by these regulations cost more than the gain that is expected from the regulations. For these reasons, she agreed it is important to try and quantify some of the economics associated with seed production.

Member Kelly Keithly made a motion that the Board recommend the Secretary amend the current SBC Contract in the amount of \$40,000 to provide the necessary funds for the study.

Member George Hansen seconded the motion. Motion carried.

8. Legislative Report

Chris Zanobini provided a brief summary of proposed legislation. He noted the following bills:

AB856 – involves renewing the seed subvention to counties. Unfortunately this bill got caught up in party politics and was not passed as originally proposed, but amended to extend authorization for seed subvention until January 1, 2010.

AB2175 - involves mandatory water conservation. If this bill passed, it would have required the agricultural industry to reduce water use by 500,000 acre feet. Fortunately the bill died in the Senate.

AB977 – involves local regulation of pesticides. The desire for local regulation is similar to some of the initiatives that the Board has seen regarding local regulation of GMO crop plantings. The bill would have removed the state preemption of pesticide regulation.

The light brown apple moth situation has generated a number of bills that deal with pest eradication. Some of these bills would have reduced or even eliminated the ability of CDFA to do any type of eradication in the future. A coalition of various agricultural groups worked diligently to craft language that provided acceptable legislation for some of the proposals. The bills that did pass were:

AB2763 – requires advanced planning and presentation of eradication programs that must be approved.

AB2765 – requires public hearing and notice of pest eradication efforts.

Zanobini anticipates that there will be many new legislative proposals in the future that involve the issue of water supply. He urged the industry to support communication efforts that inform people of how much progress agriculture has already made in water utilization. For example, he recently read a report that stated California agriculture is producing twice as many crops on the same amount of water that was used ten years ago. Another report stated that 4500 gallons of water are needed each day to provide the food we need as individuals. The point to be made is that our need for food is what drives the farmers demand for water.

Zanobini reported that the current state budget is reported to be eleven billion dollars in the red, and if something isn't done, it is projected to grow to twenty-three billion dollars. The increase is due to the fact that the budget is short one-billion dollars per month. The budget situation makes it imperative that the Board continue to watch how costs are

allocated to the program. It's important to also watch how cuts are made to the Department.

The fact that Proposition 2 was approved by the voters at the level of 67% to 33%, really sends a message that the agricultural industry has a big job ahead to educate the consumer about food production.

In the Senate, the election results have moved the Democrats one seat away from having a two-thirds majority in the Senate. In the Assembly, it looks like the Republicans lost two seats, and maybe even three seats, once all of the votes are counted.

Since AB856 only extended the sunset for subvention of seed law enforcement to January 1, 2010, Heaton requested that the Board provide a motion that the Secretary support new legislation that would extend the seed subvention of \$120,000 for another five years. Member Kelly Keithly provided the motion. Tingley seconded. The motion passed.

9. Nominating Committee Report

Rick Falconer reported that the Nominating Committee is recommending that the Secretary re-instate the five people whose terms are set to expire. He made a motion that the Board accept the Nominating Committee's recommendation and that the Board make the same recommendation for re-appointment to the Secretary.

George Hansen seconded the motion. Motion carried.

Heaton reminded the Board that their motion is a recommendation and that under Department policy he is still obligated to post and publicly notice the expiring terms and possible vacant positions at the Board. If anyone wishes to serve and has the necessary experience, Heaton will present their name for consideration to the Secretary, along with the recommendation made by the Board. For the sake of clarity, the recommendation is to reappoint the following members for three years, starting April 1, 2009:

Gabe Patin
Larry Hirahara
Ron Tingley

Marc Meyer
Ken Scarlett

10. Closed Executive Session pursuant to Government Code 11126

None requested

11. Public Comment

Sustainable Agriculture Update

Betsy Peterson reported that about a year ago, a movement was started to make a national standard for sustainable agriculture. The effort was to be facilitated by the Leonardo Academy, which is located in Madison, WI. They are undertaking this endeavor on behalf of an organization called Scientific Certification Services (SCS) which is located at Albany, CA. They are a third-party certification agency.

The goal of this endeavor is to develop a standard that can be proposed to the American National Standards Institute (ANSI). Betsy was selected from over 250 applicants to serve on the Standards Committee. She reported that before the first meeting, she was

emailed a 600 page document that contained all of the appeals and comments that had been mailed to the Leonardo Academy because of concern about their draft standards. The main concerns about the standards were:

- Not technology neutral – meaning organic and sustainable were being equated as one in the same.
- Not very flexible – the scope is very broad. The draft covers all of agriculture except for livestock. The task was given to the Standards Committee to determine if livestock should be included in the draft standards proposal to ANSI.
- Does not allow the use of any GM crop inputs.
- Is not economically feasible, which is a major part of the sustainable concept.

In a September meeting, Betsy participated in a workgroup that was successful in motioning that the draft standard be set aside but used as a reference document. The next step was to divide up the Standards Committee into six taskforce groups that will evaluate, among other things:

- The mission
- The needs for sustainable agricultural standards
- The reference documents
- The metrics methodology taskforce to look at the scope
- The future funding of the task force, which is currently being covered by SCS and which elicited some concerns of conflict of interest.
- The outreach – are all interested parties being included?

Peterson provided a copy of a letter from USDA to ANSI that presented nine points of appeal to the proposed standards.

The Organic Coalition, which includes the Center for Food Safety, wrote to each committee member and urged them not to participate in the process because they felt it was going to undermine the existing organic program.

The draft is required to be submitted to ANSI by spring of 2010. Peterson was skeptical that this deadline could be met, especially when considering how many concerns need to be addressed.

Member George Hansen expressed that he has never heard of the Leonardo Academy and was a bit surprised by their proposal for a sustainable agriculture standard.

Betsy explained that their background is in the green building industry. She described them as a facilitator that is to bring the groups together to develop a standard that can be submitted to ANSI.

Hansen asked why the proposal isn't just presented to USDA.

Peterson answered that mainly because it is a voluntary standard and not a regulatory standard.

Hansen wondered why this is being pursued if the interested parties are not trying to establish regulations that the USDA will later have to regulate or enforce.

Peterson explained that this is an attempt to market the concept of sustainability. It essentially involves placing an endorsement on the product label that states the product was produced according to the sustainable standards.

Kent Bradford pointed out that since SCS is in the business of certifying, he thinks there may be a conflict of interest for SCS to also be funding the Leonardo Academy in this effort.

Peterson noted that if one eliminated GM agriculture and conventional agriculture, but kept organic as eligible, only about 3% of agricultural products could even be considered to be eligible for consideration under sustainable agricultural standards.

Keithly expressed caution about having a single group designate how so many processes have to be performed in order to meet their idea of sustainability.

12. Other Items – Next meeting date

Chairman Scarlett set the date for the next meeting on Wednesday May 13, 2009 at 8:15 a.m., at the CDFA Meadowview facility.

13. Adjournment

Member Marc Meyer motioned that the meeting be adjourned.
Member John McShane seconded the motion. Motion carried.

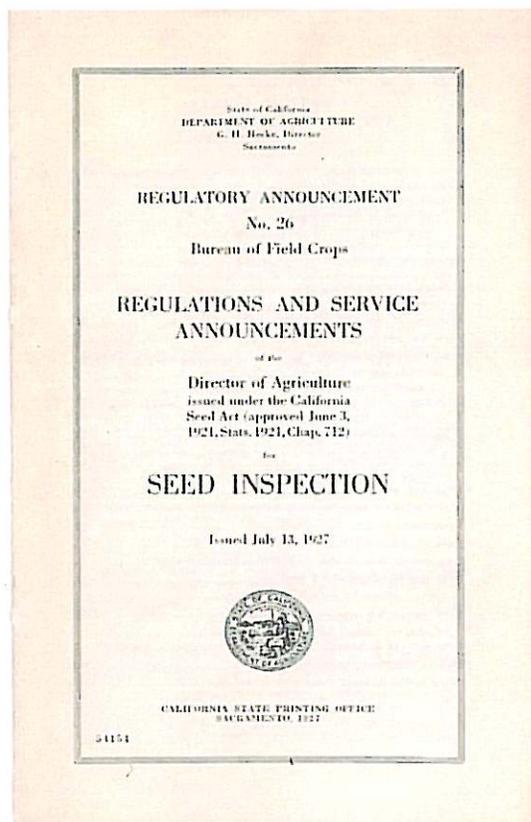
Time of adjournment was 12:07p.m.

14. Attachments 1 through 14

Respectfully Submitted

John Heaton

A Brief History of the California Seed Law and CDFA Seed Services
Prepared by John Heaton, CDFA Seed Services
Presented November 2008 - Seed Advisory Board Meeting



History of Seed Law with present day comparisons

As far back as 1816, steps have been taken to regulate the sale of seeds. Switzerland appears to be the first country to have enacted laws to improve the quality of seeds, mainly because of unsatisfactory results from planting seeds with questionable purity and germination. The first official steps taken in England were in 1869 and 1878 when the adulteration of seeds acts were passed. The U.S. passed the Annual Importation Act in 1905, which gave the U.S. Department of Agriculture (USDA) authority to purchase seed on the open market and test it for adulteration and mislabeling, however, individual states were already implementing seed legislation.

In 1897 Maine enacted a state law governing the sale of agricultural seeds. Other states followed and by 1928, forty-five states had laws regulating the quality of agricultural seeds sold. These states also maintained seed testing laboratories as an aid and protection to agriculture in their state. [Reference: *Seeds from the Regulatory Angle*, By O.F. Anderson, USDA Agricultural Bulletin, September, 1949]

Seed laws were desired because not only do they protect the buyer by requiring the seed is properly labeled, but they also protect producers by setting forth clear regulations and procedures that, if followed, will enable them to avoid controversies and litigation over seed quality and performance. Consequently, seed laws are an essential part of a well developed, mature seed industry which contributes to efficient agriculture.

In 1921 the California Legislature approved the California Seed Act with the intent of providing an orderly market for seed sales and to ensure the availability of high quality seed to consumers.

By 1928, the California Seed Council had formed. The Council acted as an open forum for matters of interest to the seed industry. The chief purpose of the Council was to promote the production, distribution and use of better seed. The slogan of the Council was "KNOW WHAT YOU SOW."

THE CALIFORNIA SEED COUNCIL

The California Seed Council is composed of representatives of the various agencies and organizations directly interested in seed problems. It was set up to serve as a clearing house for information, ideas and suggestions for improvements in the production and distribution of farm seed. On suggestion of *Mr. A. J. Ogaard, Executive Secretary of the Farm Seed Association of North America, Mr. Lester Morse of the Ferry-Morse Seed Co. invited representatives of a number of interested organizations to meet at the Palace Hotel, San Francisco, on August 15, 1928, to consider the organization of a seed council. Mr. Ogaard discussed the organization and aims of the Seed Council of North America, and urged the setting up of an affiliated state organization to deal with local problems. Thus the idea of the California Seed Council was born.

The council was formally organized at a meeting held on December 20th of the same year, at which time the membership was determined and the constitution and by-laws adopted. The membership agreed upon and subsequently amended is as follows:

	<i>Delegate</i>
California State Department of Agriculture	1
Agricultural Commissioners' Association.....	1
Pure Seed Association of the California Farm Bureau Federation	1
Commercial Seed Analysts.....	1
California membership of the Pacific States Seedsmen's Association	3
California Hay, Grain and Feed Dealers' Association	2
Official Seed Analysts	1
Extension Division of the College of Agriculture	1
Smith-Hughes Teachers' Association.....	1
Agronomy Division of the College of Agriculture	1

*Deceased.

The object of the organization as stated in Article II, Section I, of the constitution and by-laws "shall be to bring about greater unity of purpose, policy and program among the various agencies directly, or indirectly interested in the farm seed problems of the State of California." During the seven years the council has been in existence, notable progress has been made toward the realization of these objectives. At its quarterly meeting, problems dealing with all phases of better seed have been considered. The council has been largely instrumental in shaping legislation for the clarification and improvement of the California seed law. It has encouraged the dissemination of information on the character and value of good seed, and has through the issuance of posters, through personal contacts, and through its various organizations contributed materially to this program.

As indicated in its slogan "KNOW WHAT YOU SOW", it has encouraged the use of seed of known germination and purity. It has emphasized the value of using only tested seed obtained from recognized and reliable sources.

Attention has been given to the problems which have arisen in the administration of the seed and weed laws, to the problems of weed control, and the problem of crop improvement. The greatest achievement of the council, however, has been the development of mutual confidence, and a friendly spirit of cooperation among the various agencies, which are concerned with our farm seed problems.



Joint efforts by the Legislative Committee in the Seed Council and the Legislative Committee of the California Seed Association, assured that any contradicting provisions proposed to control seed-related problems were resolved before being presented to the Legislature.

Meanwhile at the Federal level, although previous seed legislation addressed specific concerns about the labeling and quality of seed marketed in the United States, it was clear that a single, more comprehensive law was needed. Consequently, discussions were initiated around 1936, which culminated in the enactment of the Federal Seed Act of 1939. This act is the single most important piece of seed legislation in U.S. history and covers all agricultural and vegetable seeds imported into the

United States and shipped in interstate commerce. Unlike previous acts, it did not require proof of intent to defraud in cases of mislabeling. [Reference: China Farmers' Daily, Foreign Seed Industry Edition, Article 4. <http://www.amseed.com/docs/CFDarticle4.doc>]

Since formation of the California Seed Law, enforcement of the provisions have been achieved through the joint efforts of County Agriculture Commissioners, various bureaus or programs in the California Department of Agriculture, and the state seed lab. In 1941 responsibility for enforcement of the California Seed Law was transferred from the Bureau of Field Crops to the Bureau of Rodent, Plague and Seed Control. In more recent years, responsibility for enforcement of the Seed Law has rested with the Seed Services Program in the Pest Exclusion Branch of CDFA.

In reviewing the historical minutes of Seed Council meetings, it is interesting to note how little things have changed. For example, as early as 1946, there was considerable discussion about adequate funds to control seed law violations. Comments by Bureau Chief, Dr. William Ball at a 1946 Seed Council meeting indicate that human nature hasn't changed much. The minutes quote him as saying "There are individuals who are attempting to comply with the law, who if they are familiar with the measure will cooperate; but if those individuals do not have enforcement officials checking on them there is a tendency to let certain important violations go by." That sentiment is shared by most, if not all, Seed Control Officials today.

In 1950 Dr. Emro Bruch, Field Supervisor of Seed Inspection for the California Department of Agriculture, provided a 5-year summary of the state's seed lab activities. He identified the same types of seed samples being submitted to the lab in 1950, as are analyzed in today's lab.

- Service samples – (fees implemented for analysis in January 1, 1947)
- Certification samples
- Quarantine samples
- Enforcing samples – now referred to as official or regulatory samples.
- Federal samples – for enforcement of FSA in Western States and export certification

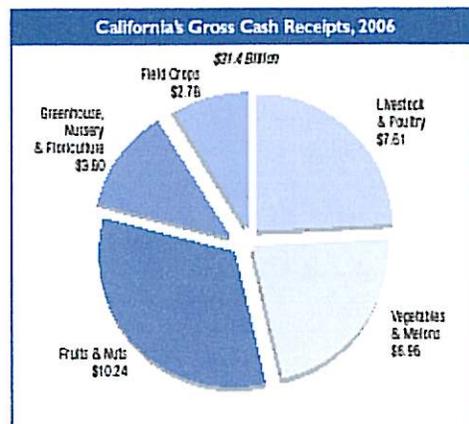
Interestingly, Dr. Bruch noted that samples for enforcement purposes only accounted for about 2.5% of the samples submitted in the prior five years. He also noted that they had a "considerable back log" of samples in the lab. Unfortunately, the total number of each type of sample was not provided in his comments. The point was made however, that enforcement samples comprised only a small part of the lab's activities and function in 1950. The flow of various types of samples continues to be a concern for the seed lab even today.

Throughout the years, the Council reviewed the cost of various seed law enforcement and compliance monitoring activities.

In 1959, the Deputy Director for the California Department of Agriculture, Dr. James Ralph, addressed the Seed Council. He noted that the cash farm income for California in 1959 was \$1.2 billion. He pointed out that much of that farm income starts with the seed. He added that the cost for processing the official seed samples in the prior year was \$30,000, a price he thought to be very reasonable considering the protection provided to the entire agricultural community. That cost for processing official seed samples, calculates to roughly 0.0025% of the cash farm income in California during 1959.

As a comparison, in 2006 California's cash farm income was reported to be \$31.4 billion dollars. The cost for the entire seed lab in 2006, not just the processing of official samples, was ~\$765,000 or about

0.0024% of cash farm income for California in 2006. Almost 50 years later, the change in the cost of processing lab samples is almost null, though admittedly the present cost reflects more lab activities:



[Reference: <http://www.cdffa.ca.gov/files/pdf/card/cashreceiptsNEW.pdf>]

It is interesting to note that even 50 years ago, seedsmen were struggling with lawsuits about seed quality. By 1960, the Seed Council was discussing the formation of an Arbitration Committee. Eventually they proposed an addition to the California Seed Law, section 921, entitled "Complaint, investigation and finding, and recommendation prerequisite to legal action." Even today, the seed industry has real concerns about lawsuits and struggles with how best to handle seed complaints.

In 1968, funding for seed law enforcement began to change. The Governor's Task Force recommended the following changes:

1. The seed inspection program become self-supporting and that legislation be prepared for a license or tonnage tax or some similar device to present to the legislature.
2. The state inspection officials should do all the seed inspections.
3. The California State Seed Laboratory should be transferred from the Division of the Plant Industry to the Division of Inspection Services.

In 1970 Bob Skaggs replaced Emro Bruch and Rodney Cobb. He became the Program Supervisor of Seed Services Program in the California Agricultural Department. At that time he reported that the budget for Seed Services in FY 1970-71 was \$181,000.

While there are many ways to calculate present value of \$181,000 in the 1970 budget, the most appropriate indicator is arguably the nominal GDP per capita. This indicator measures the "average" per-person output of the economy in the prices of the current year. A relative value calculator was used to determine that \$181,000.00 from 1970 is worth \$1,633,682 in 2007 when one selects the nominal GDP per capita as the indicator. This amount compares favorably with the \$1,400,028 budget the Seed Services Program had in FY 2007-08.

If the same calculation is used for the reported seed lab budget of \$60,000 in 1972, the calculated 2007 value of \$464,896 also compares favorably to the \$410,000 budgeted to the seed lab in 2007.

By 1972, the Seed Council was seriously exploring ways to self-fund the Seed Services Program. It was clear that adequate funds would no longer be available from the general funds. The Council was determined to maintain enforcement at the state level rather than defaulting to enforcement at the

individual county levels. In FY 1972-73, no funds were allocated from the general fund for the Seed Services Program. Enforcement of label violations was assigned solely to counties.

The industry responded but struggled with how to develop a mechanism to fund the Seed Services Program. In 1973, Bob Skaggs presented the 17th draft of proposed amendments to the seed law, for funding the enforcement that would be conducted by the California Department of Agriculture. Most significant among the draft were the addition of Articles 2.5 and 4.5. Article 2.5 established the Seed Advisory Board and article 4.5 established the requirement for registration of seed sellers and payment of an annual assessment on the value of seed sold in California.

As a result of these successful amendments to the Seed Law by the seed industry, the first Seed Advisory Board commenced activities on July 1, 1974 and was composed of seven individuals from the seed industry.

In 1975, the Plant Division of CDFA was reorganized such that the Program Supervisor of the Seed Services Program was no longer responsible for the state seed laboratory. The reorganization was partly in response to complaints that the rate of failed samples increased when budgets were low but decreased when budgets were high. Through separation of the Seed Services Program and the Seed Lab, the supervising botanist of the Seed Lab was independent of the enforcing unit, thus reducing the possibility for claims of bias.

By 1978, participation at meetings of the California Seed Council was beginning to wane and the Council started to review their purpose and to question the need for their future existence. They noted that other organizations were now performing the functions and activities they previously performed. The Council continued to meet however, until the mid 1980s at which time it ceased to function.

In 1982, the USDA decided to close the Federal Seed Lab located in Sacramento. The state seed lab remained open at the downtown headquarters, however it struggled for general fund resources to support operational activities. Financial concerns resulted in various analyses, including one that can be used to make comparisons against present day lab activities.

An analysis of the workload for the state seed lab in 1984, reported that the average number of tests completed per personnel year was 1,190. The number of personnel years in the lab was 6.5. In comparison, for FY 2006-07 the lab conducted 4,987 tests on 2,907 seed samples with 6.5 personnel years. This works out to an average of 767 tests per personnel year in 2006-07. The slight reduction in the average number of tests per personnel year, can be attributed to the reduction in submitted regulatory samples that the Seed Services Program initiated. That decision resulted in faster turnaround of regulatory samples and consequently more enforcement opportunities.

During the budget of fiscal year 1991-92, the *general* funding for the state seed lab was cut by \$52,335. Although section 52356 of the California Seed Law only required the industry to provide one-third funding for the state seed lab, the Seed Advisory Board decided to provide additional funding so the lab could maintain its output and quality of analysis. The Board directed the Seed Services Program to establish an annual Memorandum of Understanding with the lab, such that the Board could annually review its level of funding at a level beyond the mandatory one-third of operational costs required by section 52356.

Then, almost in contradiction to the mandate to cover more than one-third the operational costs of the lab, the Seed Advisory Board voted at the December 1992 meeting, to request the Director of the

Department of Food and Agriculture to refund \$500,000 of the accumulated reserves in the Seed Services Program. It is interesting to note that in making the recommendation, the Board was aware that the assessment rate for FY 1993-94 would have to be substantially higher (0.32/\$100 value). One can only speculate as to the reason why a refund was given, only to be followed by a substantial increase in assessment rate.

In 1994, the State Seed Lab, which was now part of the Plant Diagnostics Branch of CDFA, moved to its present location on Meadowview Road. The Seed Advisory Board continues to support the use of assessment collections from the seed industry to cover approximately one-half of the state seed lab's operating budget.

In 1998, the Board of Directors for the California Seed Association approved a motion to support the establishment of the UCD Seed Biotechnology Center. They also agreed that a portion of assessments (\$0.05/\$100 sales) should be used to fund operational costs of the SBC and that the operational funding mechanism should sunset after 3 years. In FY 2000-01, on recommendation by the Seed Advisory Board, the CDFA Seed Services Program executed a three-year MOU with the newly-founded UCD Seed Biotechnology Center. The amount of the MOU was for \$150,000 per year. The MOU was renewed in 2003 and increased to \$200,000 in 2006. At the May 2008 meeting, the Seed Advisory Board committed to another three-year MOU for funding the SBC.

The seed industry, through collections administered by the CDFA Seed Services Program, continues to fund the state seed lab at a level of one-half the lab's operational costs minus revenue from service samples. In addition, the industry has also committed to fund the UCD Seed Biotechnology Center in the amount of at least \$200,000 a year through 2012. The statute for Seed Subvention, or payment of \$120,000 to County Agricultural Commissioners for seed law enforcement, was approved by the legislature for FY 2008-2009 but must be considered again in the next legislative session.

The remaining funds in the Seed Services Budget are left for the Seed Services program to conduct seed law enforcement activities and administer the Seed Services Program. The November meeting of the Seed Advisory Board has become the traditional time for participants of MOUs and the supervisor of the Seed Services Program to present summaries of their activities and staffing levels.

Overview of activities conducted by CDFA Seed Services Program

Prepared by John Heaton, CDFA Sr. Ag. Biologist – Seed Services
Seed Advisory Board Meeting, Nov 6, 2008

Enforcement Activities

Statewide seed law enforcement activities performed by the Seed Services Program include the following:

- **Compliance monitoring throughout the state**
 - Monitor incoming seed shipments reported by CDFA Border Inspectors
 - ◆ ~15,000 seed shipments noted per year.
 - ◆ 008 Reports issued to county agricultural departments of shipment destinations.
 - Label evaluation by county agricultural inspectors
 - ◆ at county labeler facilities.
 - ◆ on shipments associated with 008 quarantine reports from Border Inspectors.
 - Random seed sampling and label evaluations conducted by CDFA Associate Agricultural Biologists in four regions of the state. All are trained in official methods to sample seeds and are also authorized to pull samples for submission to the Federal Seed Lab.
 - Prepare samples for blind submission to the state seed lab.
 - Submit ~ 600 regulatory samples to the state seed lab for seed analysis.
 - Analyze seed laboratory results and notify seed labelers of failures.
- **Direct enforcement throughout the state**
 - Coordinate stop-sale orders with county inspectors and regional CDFA biologists.
 - Coordinate seed complaint investigations with county inspectors and regional CDFA.
 - Enforce requirement to obtain authorization from Secretary to sell seed in CA.
 - ◆ Send letters about requirements of CSL to out-of-state labelers (~ 60/year).
 - ◆ Send renewal notifications, delinquent notifications and cancellations
 - Review reported sales amounts and assessments paid.
 - ◆ Request explanations for significant reductions in reported sales
 - ◆ Request explanations for discrepancies between reported sales and amount of seed observed in commerce.
 - Investigate reports and coordinate investigations of unauthorized sales of seed.
 - Investigate reports of unauthorized propagations and sales of varieties protected by PVP.
 - Investigate and sample plantings believed to contain patented traits (AB541)
 - Investigate misrepresentations of Certified Seed.
 - Assist and cooperate with the USDA Federal Seed Regulatory Testing Branch.

Administrative Activities

Statewide administrative duties performed by the Seed Services Program include:

- **Financial**
 - Monitor the overall financial status of the Seed Services statewide program
 - ◆ Reconcile collections via monthly revenue reports submitted to the CDFA Financial Services Unit.
 - ◆ Review and approve Program expenditures as needed.
 - ◆ Review monthly budget reports prepared by the CDFA Financial Services.

- ◆ Prepare projections of expenditures and revenue for Board review and approval.
- ◆ After budget approval, prepare proposed spending plans for CDFA Financial Services.
- ◆ Prepare mid-year and 3rd quarter projections for Financial Services.

- **Personnel/Staffing**
 - ◆ Ensure staffing is maintained at adequate levels and employees receive training.
 - Prepare necessary documents to hire qualified applicants including:
 - position justifications
 - duty statements
 - freeze exemption requests
 - ◆ Interview and hire qualified applicants.
 - ◆ Provide objective evaluations of staff performance.
 - ◆ Approve Merit Salary Adjustments
 - ◆ Monitor and provide adequate safety training to all staff.

- **Seed Subvention Payment to Counties**
 - Prepare separate Memorandum of Understanding for each county
 - ◆ Determine scope of work based on registered labelers in each county.
 - ◆ Measure completed work by tallying Report 6s from each county.
 - ◆ Based on work completed by all counties, allocate funds and propose payment to each county.
 - ◆ Submit completed invoices to Financial Services for payment to counties.

- **Administer alternative dispute resolution process for seed complaints.**
 - ◆ Coordinate seed complaint investigations with CDFA regional biologists and county agricultural commissioners.
 - ◆ Correspond with complainants and respondents about the seed complaint process.
 - ◆ Recruit Investigative Committee to review details and investigative findings of the seed complaint.
 - ◆ Prepare a report of findings by the Investigative Committee and document their recommendation to the Secretary.
 - ◆ Arrange for mediation if mediation is requested by participants.
 - ◆ Document and release complaint.

- **Seed Advisory Board**
 - Serve as Secretary to the Seed Advisory Board
 - ◆ Prepare meeting agendas and public meeting notices in a timely manner.
 - ◆ Prepare minutes of each meeting.
 - ◆ Prepare public notices of Board vacancies.
 - ◆ Present credentials of candidates and nominations to the Secretary for Board appointment.
 - ◆ Assist Board members with travel expense claims and arrange for timely reimbursement of expenditures incurred to attend Board meetings.

- **Attend Meetings**
 - Attend industry meetings to report on issues of interest to the industry or new regulations.

- ◆ California Seed Association's midyear and annual meetings.
- ◆ American Seed Trade Association meetings
- ◆ County Agricultural Commissioner meetings
- ◆ Deputy Agricultural Commissioner meetings
- ◆ Association of American Seed Control Official meetings
- ◆ California Crop Improvement Association Board meetings
- ◆ Miscellaneous Department and industry meetings

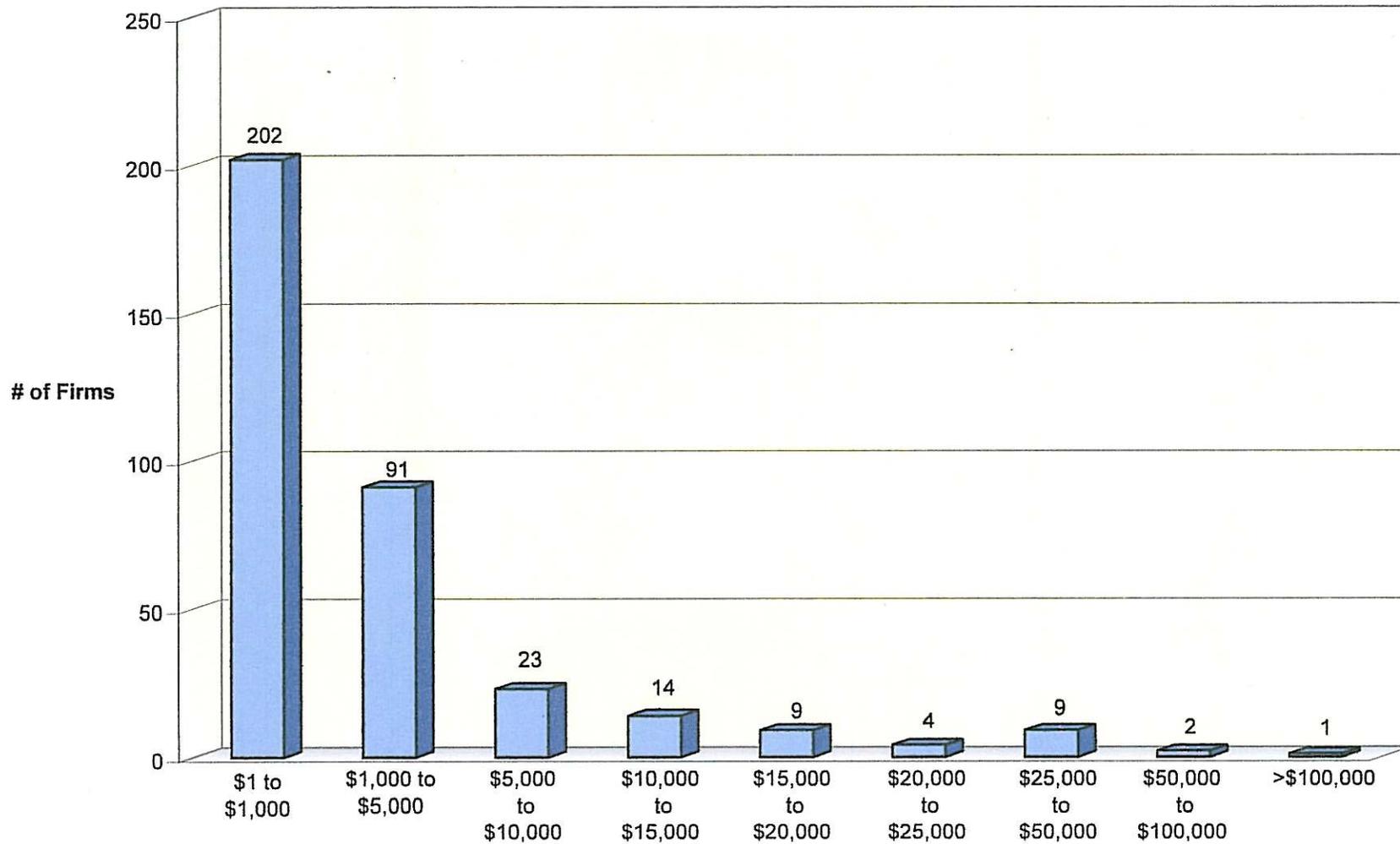
➤ **Legislative Analysis**

- ◆ Perform legislative analysis of any proposed legislation related to seed.
- ◆ Perform legislative analysis of revised legislation related to seed.
- ◆ Meet with industry or legislative staff about proposed seed related legislation
- ◆ Attend legislative hearings when requested by CDFA Executive Administration.

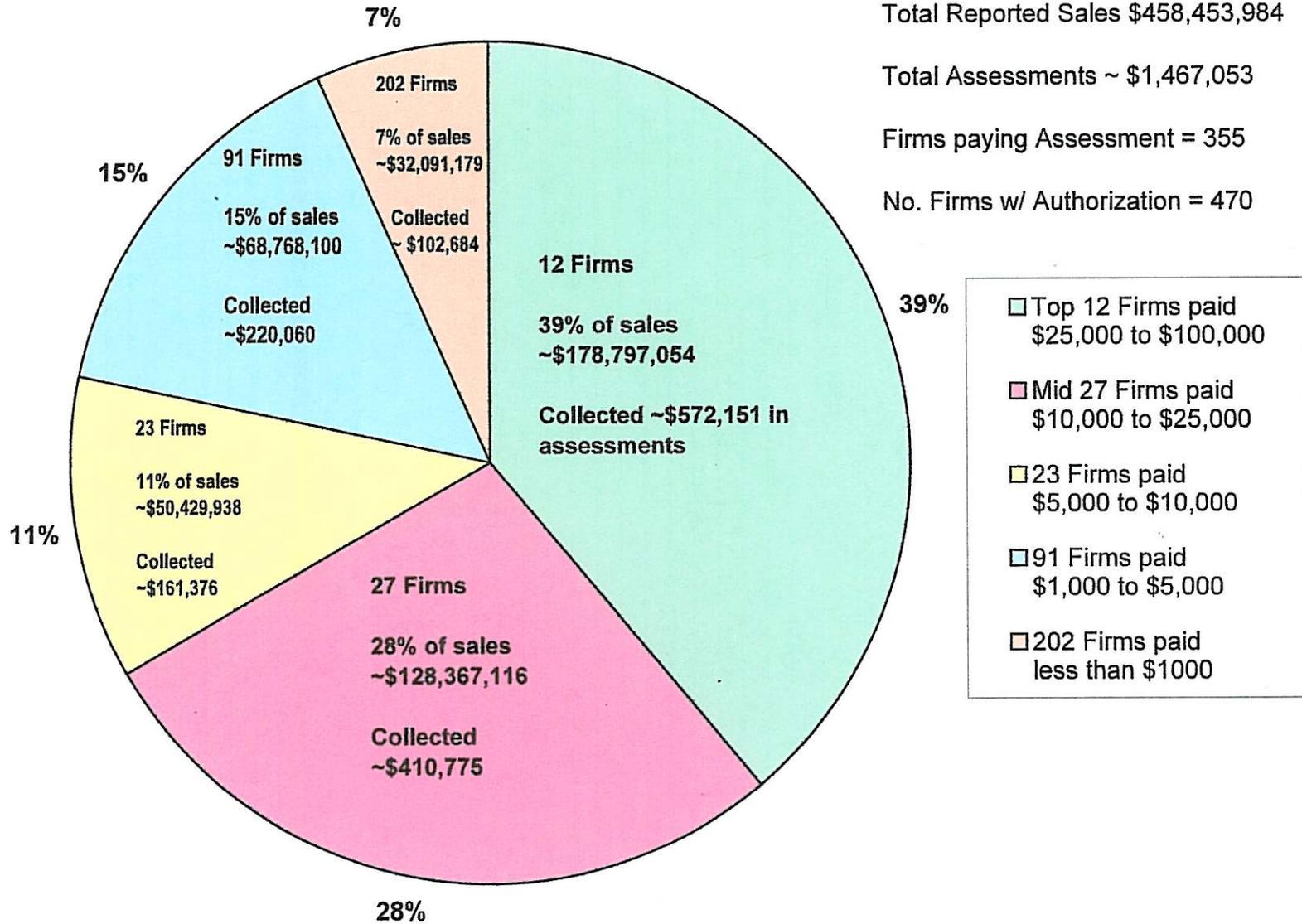
➤ **Research Contracts**

- Prepare multi-year research contracts for UC Seed Biotechnology Center
 - ◆ Request Director's approval for implementation of research contract
 - ◆ Determine scope of work to be performed in the research contract.
 - ◆ Evaluate and document the work performed.
 - ◆ Approve requested payments.

Number of Firms in Each Assessment Category based on Reported Seed Sales made in CA during FY 2007-08

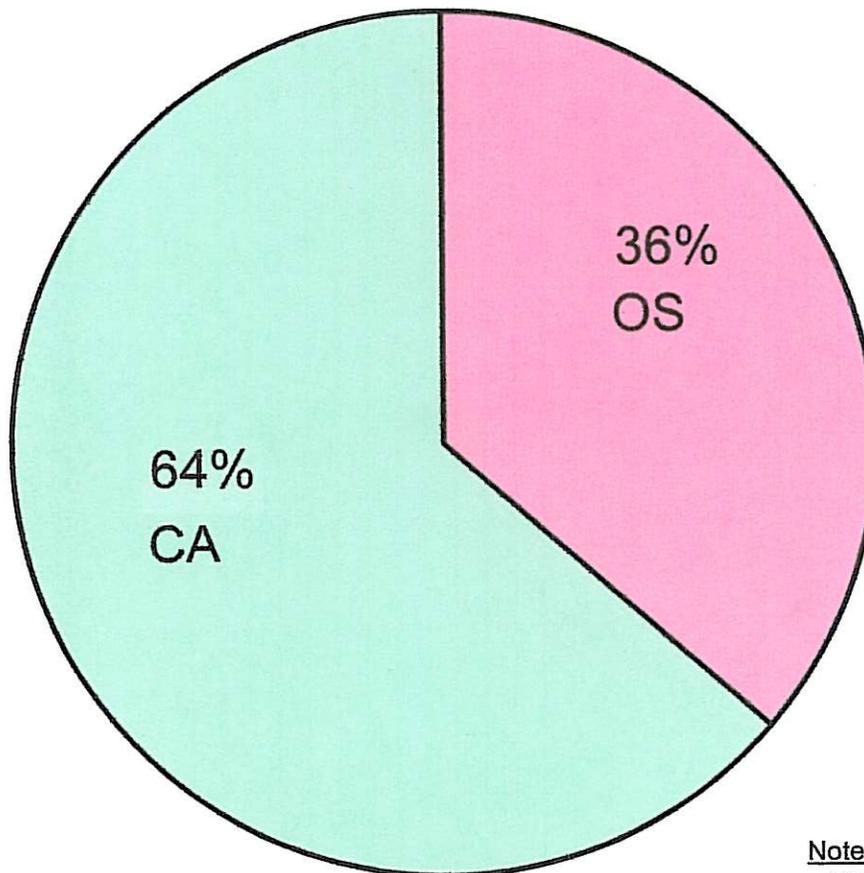


Percent total assessments paid by selected firms that reported seed sales made in CA during FY 2007-08



Comparision of Reported Seed Sales in FY 2007-08 Out-of-State Firms vs. CA Firms

Total reported sales by all firms = **\$458,453,984**



Just out-of-state Firms

\$167,300,766 of all sales, or 36% of sales, were made by 153 out-of-state (OS) firms.

6 OS Firms paid > \$25K Assess.

147 OS Firms pd < \$25K Assess.

Total Assessments collected by OS Firms totaled ~ \$535,362

Avg. assessment paid by 147 OS Firms was ~ \$1,808

Just in-state or CA Firms

\$291,153,219 of all sales, or 64% of sales, were made by 202 CA firms.

6 CA Firms paid > \$25K assess.

196 CA Firms pd < \$25K assess

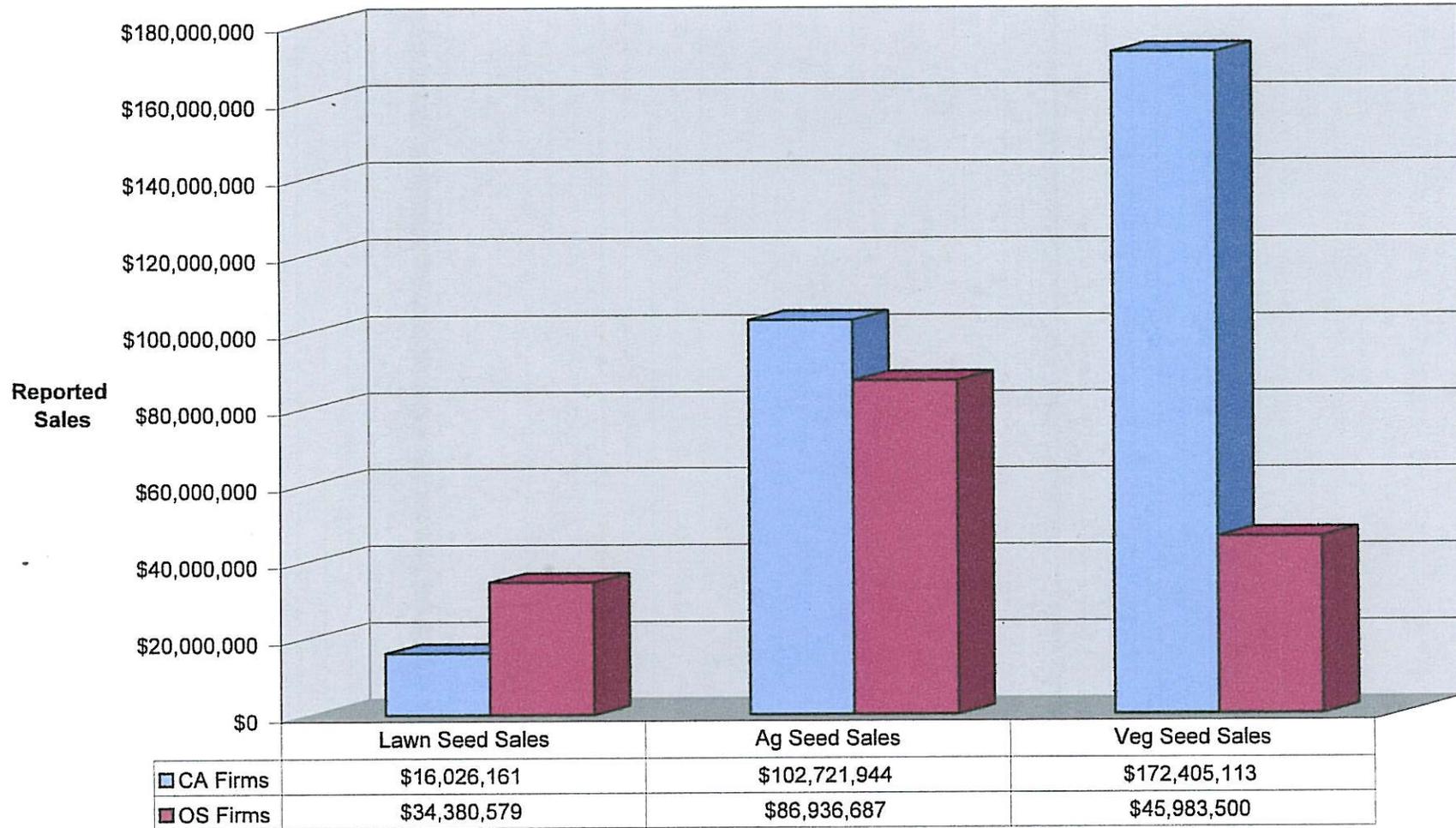
Total Assessments collected by CA Firms totaled ~ \$931,690

Avg. Assess by 196 CA Firms was ~\$3,000

Note:

~ 355 of 471 firms paid combined assessments of \$1,467,053 for seed sales made in CA during FY 2007-08.

Categories of Reported Seed Sales made in California during FY 2007 - 2008



Department of Food and Agriculture
 0111 Agriculture Account
 Fund Condition Statement
 Seed Service (CA)
 15551 Formerly 20.55.51

FUND CONDITION

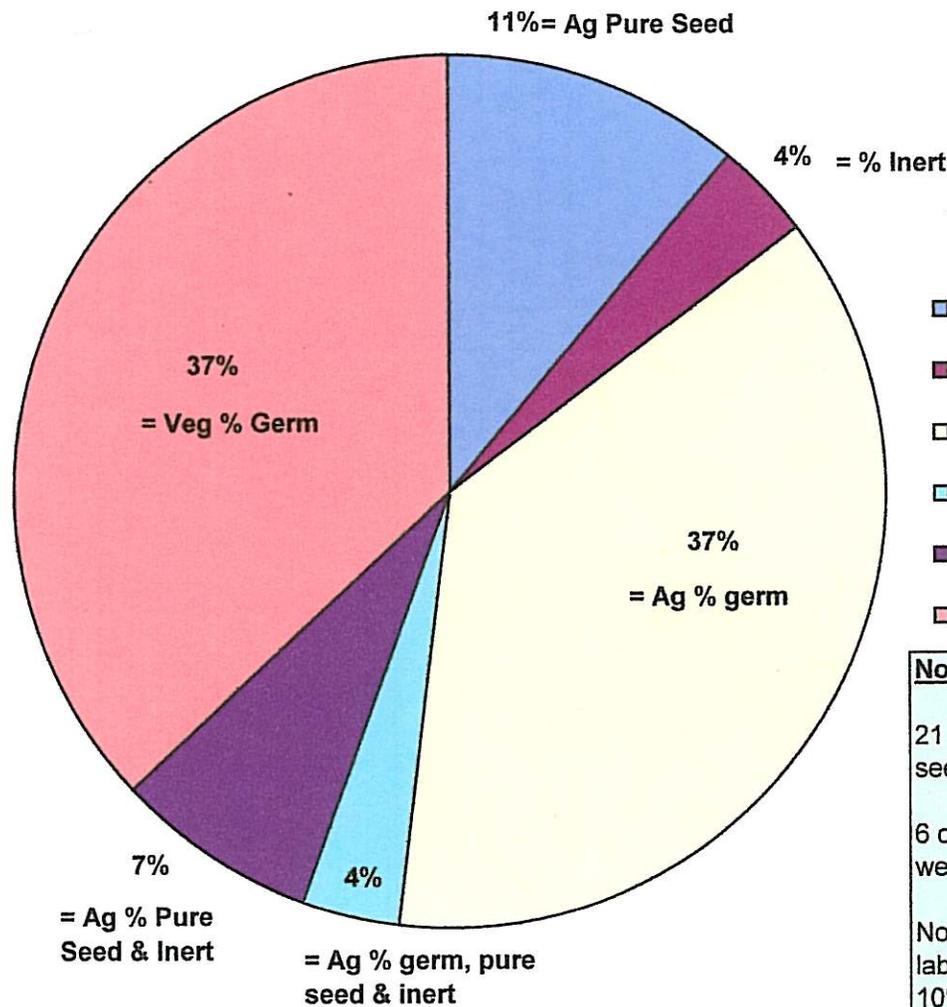
	2007-08	2008-09	2009-10
Beginning Balance	770,854.39	970,203.19	980,100.19
Prior Year Adjustments	19,430.45		
Balance, Adjusted	790,284.84	970,203.19	980,100.19
Revenues and Transfers			
Receipts:			
Revenues:			
121200 Other regulatory taxes	1,409,457.46	1,479,630.00	1,524,020.00
125600 Other regulatory fees	218.78	0.00	0.00
125700 Other regulatory licenses and permits	20,146.05	20,280.00	20,280.00
125900 Delinquent fees	7,802.31	2,500.00	2,500.00
141200 Sales of documents	0.00	0.00	0.00
142500 Miscellaneous services to the public	0.00	0.00	0.00
150300 Income from surplus money investments	76,975.64	70,000.00	77,000.00
150400 Interest income from loans	2,690.10	2,100.00	2,100.00
150500 Interest Income fr Interfund loans	0.00	0.00	0.00
160400 Sale of fixed assets	0.00	0.00	0.00
161000 Escheat of unclaimed checks and warrants	0.00	0.00	0.00
161400 Miscellaneous revenue	0.00	0.00	0.00
164300 Penalty assessments	0.00	0.00	0.00
Totals, Revenues	1,517,290.34	1,574,510.00	1,625,900.00
Transfers:			
Transfer to 19801			
Totals, Transfers from Other Funds	0.00	0.00	0.00
Totals, Revenues and Transfers	1,517,290.34	Proj*1,574,510.00	Proj 1,625,900.00
Totals, Resources	2,307,575.18	2,544,713.19	2,606,000.19
Expenditures			
Disbursements:			
8570 Department of Food and Agriculture:			
State Operations	1,336,902.98	approved budget 1,564,613.00	proposed 1,661,847
0840 State Controller (State Operations)	469.01		
Pro Rata Expenditures	1,337,371.99	1,564,613.00	1,564,613.00
Expenditure Reductions:			
8570 Department of Food and Agriculture:			
State Operations:			
9900 Statewide Gen Admin Costs (Pro Rata)			
Less funding provided by the General Fund			
Totals, Expenditures	1,337,371.99	1,564,613.00	1,564,613.00
Fund Balance	970,203.19	980,100.19	1,041,387.19
Reserve for economic Uncertainties <i>2/6 mos</i>	668,686.00	782,306.50	782,306.50
Available Balance	301,517.19	197,793.69	259,080.69

11/5/08



✓

Reasons that 27/620 samples (~5%) failed the seed analysis



- A2-1 - Ag seed mislabeled as to % pure seed
- A2-2 - Ag seed mislabeled as to % inert matter
- A2-G - Ag seed mislabeled as to % germination
- A2-G, A2-PI - Ag seed, % germ, pure seed & inert mislabeled
- A2-PI - Ag Seed mislabeled as to % pure seed and inert
- V2-G - Vegetable seed mislabeled as to % germination

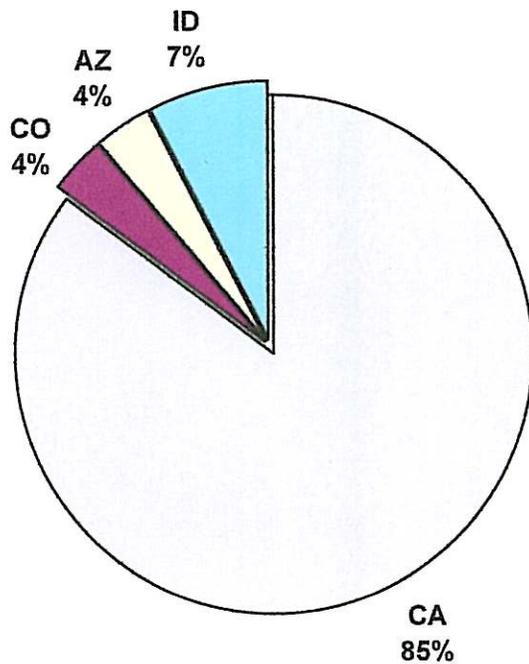
Note:

21 of the 27 failed samples (~ 78%) failed because the seed sample had germination out of tolerance.

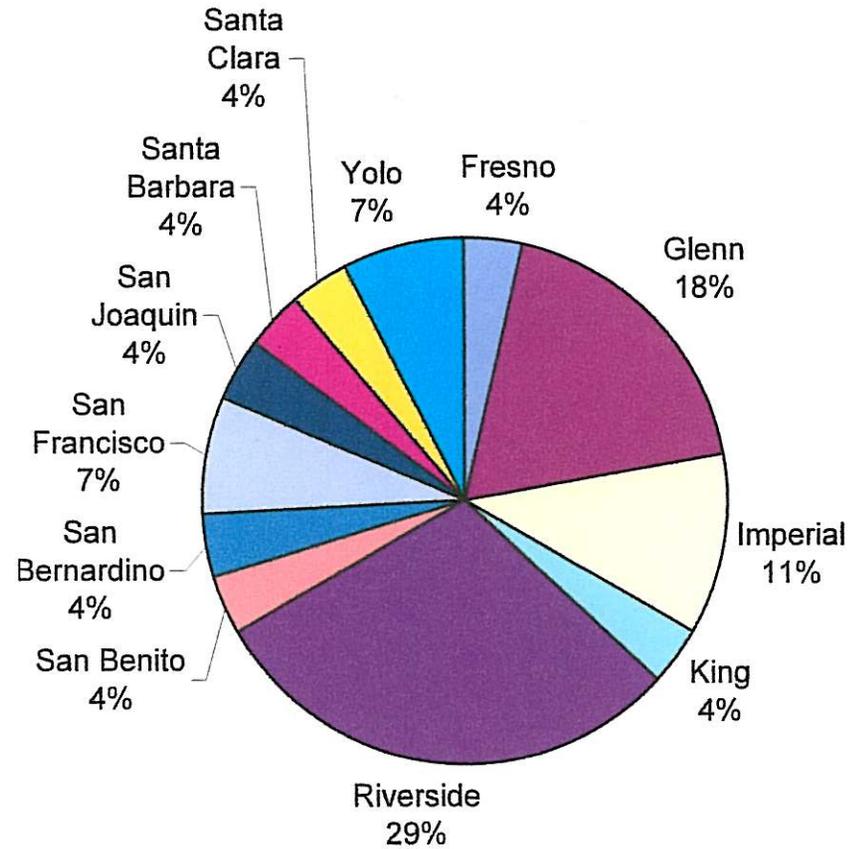
6 of the 27 failed samples (~ 23%) failed because they were mislabeled as to % purity or inert material.

Notifications of Failed Lab Analysis were sent to all labelers of regulatory seed samples that failed. About 10% of the Notification recipients responded.

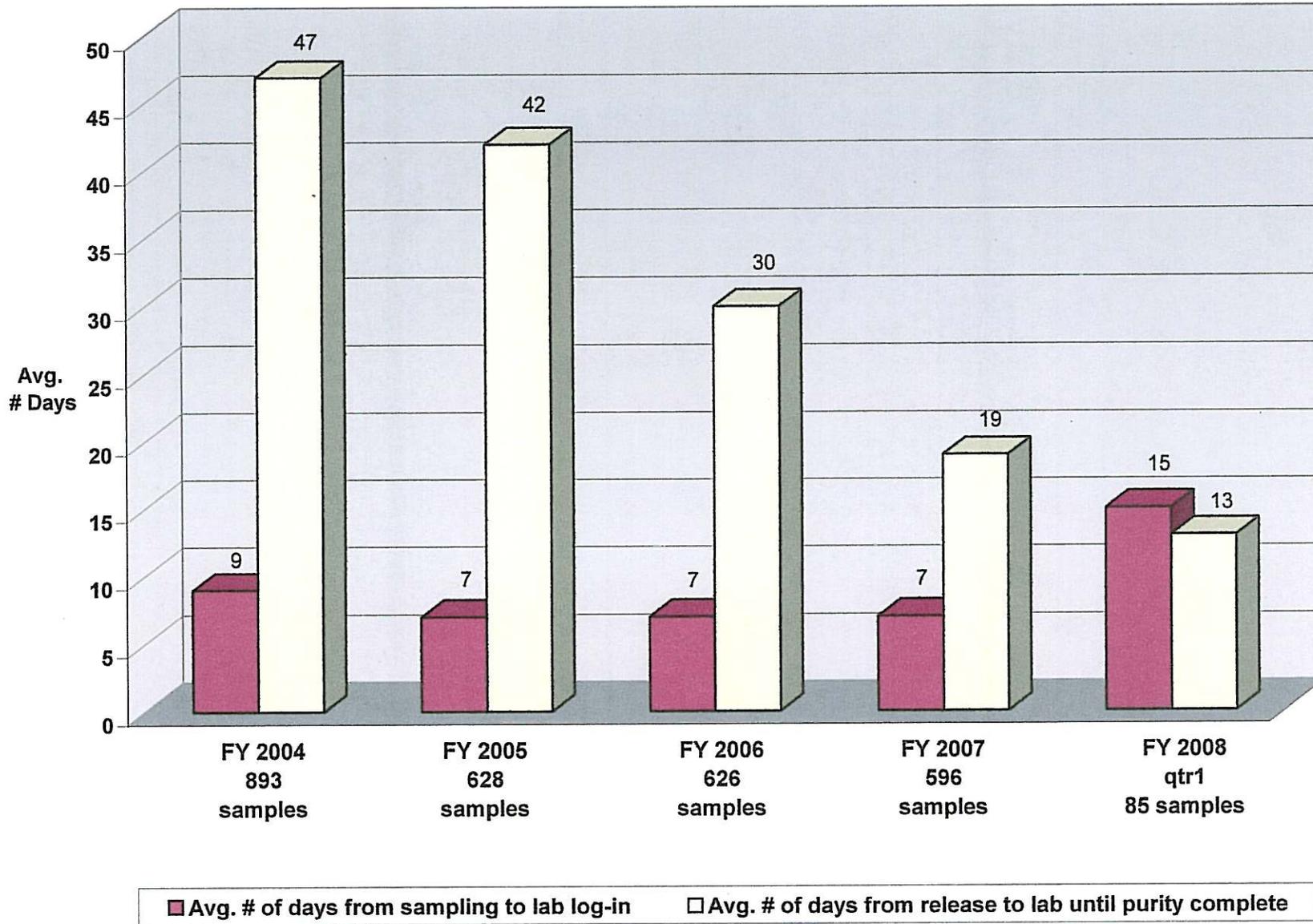
Origin of Labelers with Failed Seed Samples in FY 2007-08



% of Failed Seed Samples by County in FY 2007-08

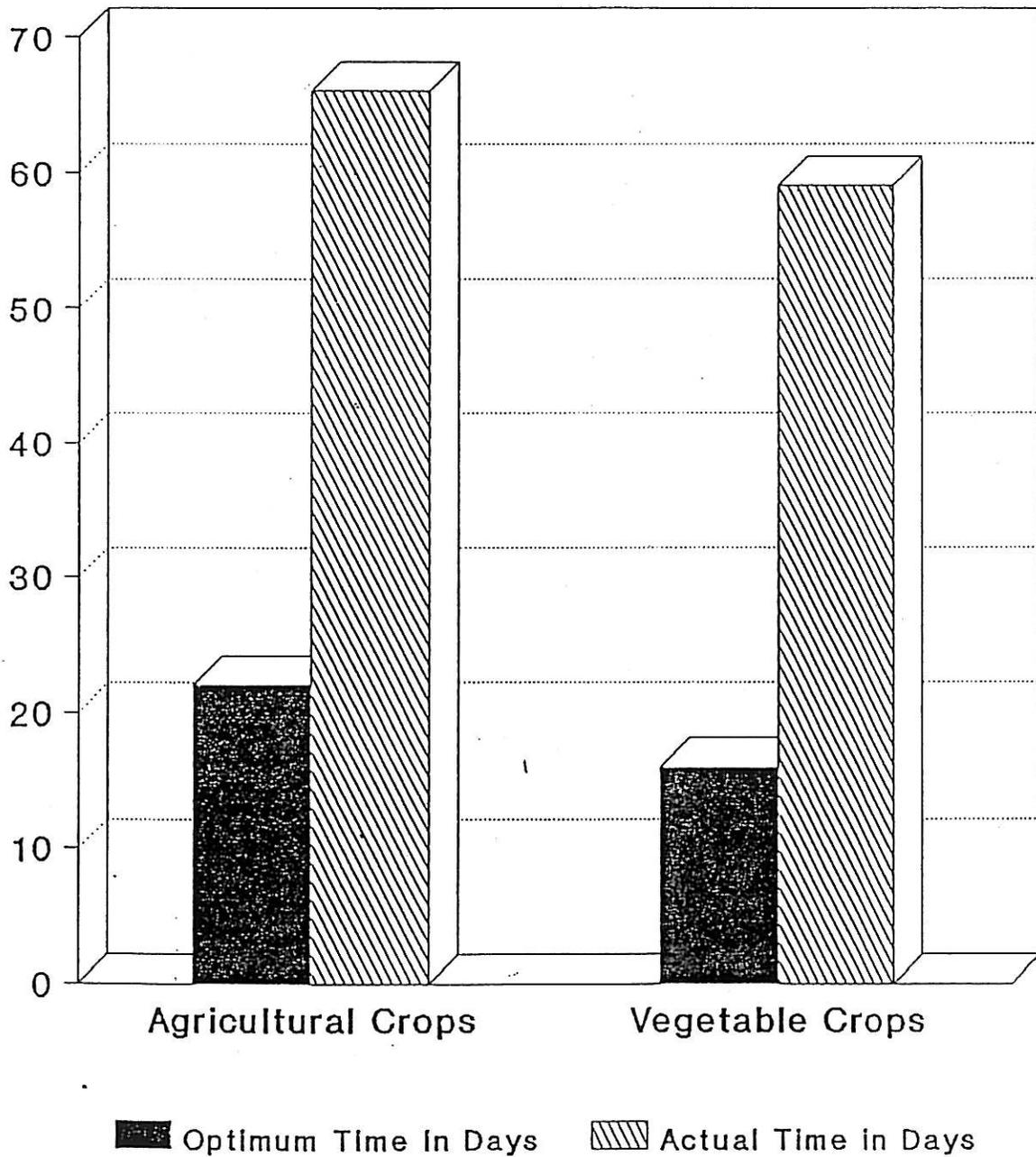


Comparison of time to process Regulatory Seed Samples FY2004 - FY2008 qtr1



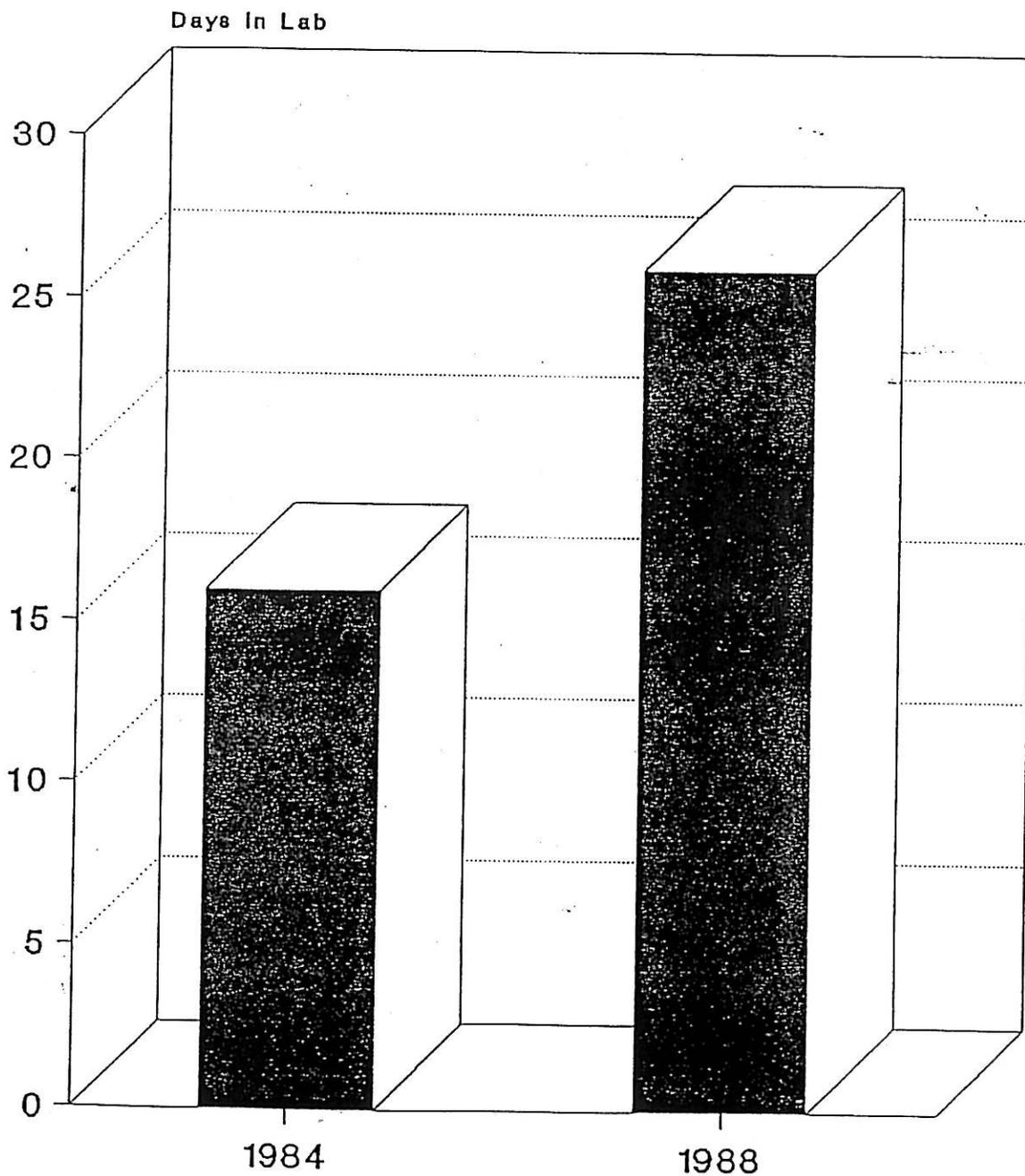
From 1988 Report

Regulatory Seed Samples Average Days Required for Testing



From 1988 Report

Service Seed Samples Average Days Required for Testing



**Medical Marijuana Seed clarified
Seed Advisory Board Meeting
Nov. 6, 2008**

The Seed Services Program was approached by a Consumer Protection Advocate who wanted to know why CDFA does not enforce the labeling requirements of the California Seed Law for Medical Marijuana Seeds.

When it was pointed out that marijuana is illegal, the advocate cited the following:

Medical marijuana is permitted under the state's Compassionate Use Act, which was approved by voters in 1996. The law, in part, made legal the use of marijuana for medical purposes to *qualified* patients and their caregivers. The law was further enhanced by SB 420, which went into effect in January 2004 and created a state-approved medical marijuana ID card program. The law established guidelines as to how much marijuana a patient or caregiver can possess and provided additional protections from state marijuana laws, including possession, transportation, distribution, importation and maintaining a place for selling, giving away or using a controlled substance.

Prop 215 & SB 420 guarantee qualified patients the right to possess, cultivate, and transport their medicine & plants.

Further research by Seed Services revealed:
<http://www.drugpolicy.org/library/cmrguide.cfm>

Prop. 215 did not legalize marijuana. It changed how certain people - medical patients and their "primary caregivers" - will be treated by the State of California's court system. Patients with a doctor's recommendation to use marijuana in medical treatment have a new legal defense available to them. If arrested on marijuana charges, patients can claim entitlement to an exemption from the law. The burden of proof is largely on the patient, to prove his or her medical need and to prove that marijuana was used with the recommendation of a doctor.

Under Prop. 215, the cultivation of marijuana plants for the personal, medical use of a patient is permitted. However, the **seeds** necessary to begin cultivating marijuana are no more legal or available than before. **Again, a patient must go to the black market for seeds or seedlings, and the transaction itself is still illegal.** Cultivation remains a felony in most cases under state and federal law. A person arrested and charged under state law has the right to use a Prop. 215 defense. Federal agents are believed to be unlikely to arrest and prosecute small-time growers of marijuana for medical use, because small-scale cases are not a high priority to federal law enforcement. Still, prosecutions by federal agencies are possible.

California Health & Safety Code 11018 defines Marijuana to mean "all parts of the plant *Cannabis sativa* L., whether growing or not; the seeds thereof; the resin extracted from any part of the plant; and every compound, manufacture, salt, derivative, mixture, or preparation of the plant, its seeds, or resin. It does not include the mature stalks of the plant, fiber produced from the stalks, oil or cake made from the seeds of the plant, any other compound, manufacture, salt, derivative, mixture, or preparation of the mature stalks (except the resin extracted therefrom), fiber, oil, or cake, or the sterilized seed of the plant which is incapable of germination."

Health & Safety Code 11362.77(d) defines Medical Marijuana as: "Only the dried mature processed flowers of female cannabis plant or the plant conversion shall be considered when determining allowable quantities of marijuana under this section."

Possession with intent to sell any amount of marijuana is a felony. Health and Safety Code 11359. There is a medical exemption in HS11362.775.

Cultivation of any amount of marijuana is a felony under Health and Safety Code 11358. People who grow for personal use are eligible for diversion under Penal Code 1000 so long as there is no evidence of intent to sell. There are no fixed plant number limits to personal use cultivation. It is possible to win diversion through a Williamson Hearing.

Clarification of PVP Infringement

Presented by John Heaton
California Seed Advisory Board Meeting, Nov 6, 2008

On June 25, 2008, Heaton called Paul Zankowski of the US PVP Office. The question posed was in regards to a farmer's exemption for a PVP Variety.

More specifically Heaton wanted to clarify whether a farmer could only hold back enough PVP seed to replant the approximate area originally planted, or if a farmer may propagate seed of a PVP variety and then plant a greater area of his OWN land?

Zankowski said that he believed there was nothing to prevent the propagation by the farmer to plant greater area of his own land. He noted that the UPOV Treaty has a clause that would provide for "reasonable" compensation to the breeder when such a propagation occurs. He did not know, however of any case successfully challenging the practice. He added that Title V prevents the sale of the propagated seed.

Heaton later found the following explanation of PVP in an article by Delta Farm Press, titled "US seed law history: a primer" <http://deltafarmpress.com/news/060302-seed-law/>

"A Plant Variety Protection certificate is infringed upon when someone without permission sells, markets, offers to sell, ships or solicits an offer to purchase a protected variety. It's forbidden when someone imports a sexually-reproducing variety into the United States as a step in marketing or using the varieties in producing a hybrid as opposed to developing a hybrid — this relates to an exemption I'll mention in a minute. It can also be infringed by dispensing the variety to others without proper notice."

The Plant Variety Protection has some important exemptions. The one of most interest to producers is probably the saved seed exemption. When originally enacted in 1970, the Plant Variety Protection Act had an exemption built in for farmers wanting to save seed from a protected variety. Not only could they save it but they could also sell it to other producers.

When the 1994 amendments were passed, the farmer-to-farmer sales exemption was eliminated. So, seed can still be saved but not sold.

"It's important to pay attention to what version of the law a particular variety is protected under. Those protected from 1970 through around 1993 can still be saved and sold. How many of those varieties remain available, I'm not sure. But certificates post-1994 prevent saved seed from being sold.

"There's also a research exemption for protected varieties for anyone engaged in research or developing new varieties."

The remedies the patent, or Plant Variety Protection holder, has include the right to file a civil law suit. The patent holder can seek an injunction to halt whatever infringing activity there may be.

They can also seek damages. The damages can be trebled by the court and, in exceptional cases, attorney fees are awarded to the prevailing party.

"There really aren't any criminal penalties associated with patent or Plant Variety Protection certificates. Basically, the only criminal penalties associated with these laws are for false marking. That includes marking an invention or plant with someone's patent or certificate that doesn't belong to you... or indicating a patent has been applied for when it hasn't. The penalty for that under patent law is \$500 per offense and, under the PVPA, \$500 to \$10,000."