DPR/PML Contract Status Report

Report No: (First Quarterly)
Reporting Period: February 1, 2012 to May 1, 2012
Submittal Date: 6/27/2012

Contract No: 11-C0102
Project Name: Research Experiments… RaBeT Production System.
Principal Investigator: Daniel E. Legard, PhD

I certify under penalty of law that this document and any attachment was prepared by me of under my direction in accordance with the terms and conditions of contract 11-C0102 with the Department of Pesticide Regulation. Based on my inquiry of the persons who manage the project, or those directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. All information submitted in this document and all attachments conform to and is in accordance with the state and federal laws and I so here certify with my signature. I am aware that there are significant penalties for submitting false or misleading information.

_____ _____

Principal Investigator Signature Date
or Designated Representative

1. Is this project on target according to the approved task time line?

Fruit harvesting and yield data collection started as scheduled at each grower site and at the research site (January – Oxnard; March-April – Santa Maria and Watsonville). Fertigation and related weekly data collection was collected at the 5 grower demonstrations and 1 experimental trial site. Data has been reviewed and analyzed and in-field management programs adjusted to improve production or react to fertility concerns. Monthly nutritional analyses of substrate and plants were conducted at each site. The advisory group has held monthly meetings/conference calls to discuss issues and results.

2. What work was performed during this quarter?

Sites were visited on a weekly basis by the experimental coordinator and a bi-weekly basis by the project manager to assess site-specific developments to provide on-site support for growers and their employees and to address fertigation and other substrate-related growing concerns. Weekly irrigation and fertigation data was collected, processed and reviewed for all grower demonstration sites and the experimental site. Bi-weekly leachate reports continued to be generated and distributed by the project manager. Yield data continued to be collected from the Oxnard site and started at the Santa Maria and Watsonville grower sites and at the Monterey Bay Academy experimental site. Preliminary yield data was reported.

Monthly plant tissue, fertigation water, and substrate samples were collected and analyzed on the weeks of February 1-9, March 7-12 and April 12-18 for all sites. Data was reviewed and the fertigation system adjusted in response to observed values. Monthly meetings/conference calls were conducted on February 16, March 16 and April 20, 2012 to review data with consultants and direct response efforts were held as scheduled for all sites.

Fertilizer programs were changed at two of the sites of the sites (1 in Watsonville-Salinas, 1 in Santa Maria), to enable growers to use fertilizers they had in stock. The research team made modifications and adjustments to fertilizer programs to maintaining target values.

Current results of the study were presented at the 2012 Annual Central Coast Strawberry Meeting on February 2, 2012 and at the UCCE Fumigant Alternatives and Soilborne Pathogens Field Day in Ventura, April 3, 2012.

3. What milestones, if any, were achieved during this quarter?

- We hired the Experimental Coordinator/Production Research Specialist (Alex Orosco) for the project and he started work on April 26, 2012.
- Yield and fertigation data was collected, processed and reported.
- An research update was presented at the 2012 Annual Central Coast Strawberry Meeting on February 2, 2012.
- An research update was presented at the UCCE Fumigant Alternatives and Soilborne Pathogens Field Day in Ventura, April 3, 2012.
- The CSC staff and the advisory team addressed high EC values in the substrate production systems at both the grower demonstrations and experimental research site. In response, the team began planning for the upgrading of the fertigation systems to a more sophisticated control system for the 2012-2013 season to improve management of fertility and irrigation.

4. Were any problems encountered in the performance of the work?

- There were several irrigation pump issues in March at both Santa Maria sites and these have been addressed.
- Electrical conductivity (EC) readings in the substrate rose to levels exceeding target values at 3 sites in February-March due to a combination of a lack of rainfall and issues with the fertigation systems. The EC's were reduced to acceptable levels by modifying the fertigation programs by the end of the quarter.
- Management issues with the fertigation systems at the grower sites suggested that growers need more extensive training in substrate production systems. The team is developing training materials and programs for grower collaborators for the 2012-2013 season.

5. Please list major expenditures incurred during this quarter.

- See submitted expense report

6. List any personnel changes that have occurred or are anticipated this quarter.

Alex Orosco was hired as the Experimental Coordinator/Production Research Specialist