

CALIFORNIA CITRUS NURSERY BOARD

PROJECT PLAN

Fiscal Year: 2020

Duration of Project: ongoing

This project is: continuing

Project Leader: Georgios Vidalakis

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Collaborators:

Project Title: Staff Research Associate (SRA) position based at the Citrus Clonal Protection Program - Lindcove Foundation Facility (CCPP-LFF)

Keywords: Foundation blocks, citrus budwood, citrus budwood sources, disease tested propagating material, pathogen detection, trueness to type evaluation.

Executive Summary

On August 13, 2012, Dr. Rock Christiano joined the CCPP team as Staff Research Associate (SRA) and became the Manager of the Citrus Clonal Protection Program - Lindcove Foundation Facility (CCPP-LFF). Since September 2012, National Clean Plant Network (NCPN) funds have been covering 50% of annual salary and benefits for this SRA position. With this proposal, we would like to request the remaining 50% of fund for the position.

The California citrus nurseries are depended on the CCPP-LFF at the Lindcove Research and Extension Center (LREC) for the primary pathogen-tested citrus budwood for propagation of high-quality nursery trees. The CCPP-LFF has 7,7000 sq.ft. of screenhouses with 1008 mother-trees, 5,8000 sq.ft. of positive-pressured greenhouses with 1,212 trees, and 11 acres of trueness-to-type evaluation fields with 759 trees.

This SRA position has truly transformed the CCPP-LFF services and quality. Before this position, the CCPP-LFF offered budwood cut only three times per year and served almost exclusively commercial citrus entities. Currently, budwood is distributed weekly (citrus nurseries can also request budwood at any time as needed) and the CCPP-LFF has increased dramatically its services to non-commercial entities. In 2018-2019, 87% of budwood orders were placed by non-commercial entities (Fig. 1-A). This is very important because it means that the CCPP-LFF is providing non-commercial citrus enthusiasts with pathogen-tested budwood, which is a tremendous contribution to the Huanglongbing (HLB) battle by disrupting illegal citrus budwood movement and exchange into California. In the past, non-commercial entities probably were using budwood from unknown and untested sources, like in the case of the first HLB positive tree in Los Angeles that had 23 different grafts/buds on it from unknown sources.

The number of CCPP budwood accounts has increase 1000%, mainly due to non-commercial registration (Fig. 1-B). Despite, that tremendous increase of non-commercial orders/customers

registration, the CCPP still is mostly distributing most of the budwood quantity, to commercial citrus entities and researchers. In 2018-2019, 70% of total distributed buds was for commercial and research purposes (Fig.1-C).

Finally, the SRA in the CCPP-LFF has been constantly improving budwood tree sources caring, potting, and pruning. In addition, the SRA has been updating standard operation procedures, monitoring closely the health and performance of the budwood source trees and reestablished the budwood tree sources in the 2016 damaged screenhouse (#119) (Fig. 2). There is no question that this SRA position has improved and continue improving the CCPP-LFF services for the benefit of the California citrus nurseries and industry and we hope that CCNB will continue its support.

Benefit to the Industry

The SRA position located at CCPP-LFF exponentially increased the capacity of caring for the budwood source trees (e.g. re-propagation, special pruning, irrigation, fertilization, etc.), testing for graft-transmissible pathogens, evaluating trueness-to-type and coordinating the budwood distribution to the California citrus industry, NCPN-Citrus centers, research institutions, and all other interested parties.

Objectives

Partial funding for an SRA position located at the CCPP-LFF.

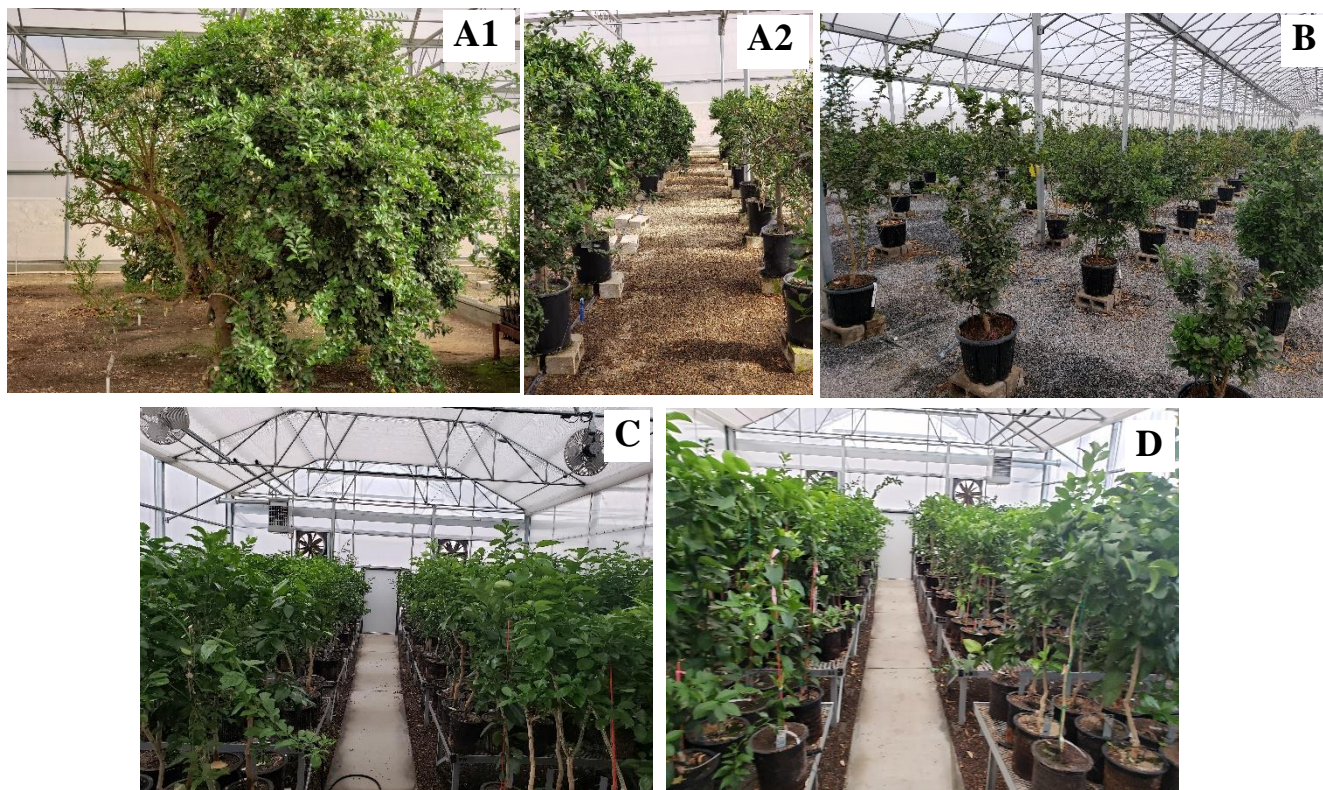
Workplans & Methods

See attached Job Description (attachment 2).

Figure 1. Impact of CCPP-LFF Staff Research Associate IV hired in 2012 at LREC on budwood distribution.



Figure 2. Screenhouse 109, showing an innovative pruning for budwood quality improvement (A1, A2), Schrenhouse 119, reestablished after 2016 damage, showing an improved potting (B), and Greenhouse 116 E and W (C, D).



Project Management and Evaluation

Dr. Christiano has been managing this project on his own with minimum supervision since 2012. Dr. Beth Grafton-Cardwell and Dr. Georgios Vidalakis have a long experience in managing the LREC and CCPP, respectively and have been providing support to Dr. Christiano as needed. In collaboration, they have identified the needs and they have set guidelines and formulated protocols necessary for the successful SRA service in the CCPP-LFF.

Budget Proposal

Project Title: Staff Research Associate (SRA) position based at the Citrus Clonal Protection Program - Lindcove Foundation Facility (CCPP-LFF)

Project Leaders: Georgios Vidalakis

Proposed Fiscal Year: 2020

PERSONNEL SERVICES:

50% SRA IV Salary	\$ <u>32,783</u>
Benefits (51.9%)	\$ <u>17,014</u>
TOTAL PERSONNEL SERVICE	\$ <u>49,797</u>

TOTAL BUDGET REQUESTED: **\$ 49,797**

Signatures of Requestors:  Date: 11-20-2019

_____ Date: _____

Signature of Cooperator: _____ Date: _____

Department Chair: _____ Date: _____

LIAISON OFFICER _____ Date _____