CAFÉ Workshop

Saturday February 6, 2016

Orange Group

**Project Theme: Southern California Urban Agriculture**

**Issue:** Changing demographics, reduced arable land, compromised food delivery systems, and a decline in overall nutrition in certain demographics sectors have combined to create a situation affecting the underserved and underrepresented populations of Southern California.

There is a correlation between education, income, and nutrition. Additionally, residential location affects availability of quality foods, food retail choices, and food delivery systems. Often the choice of high quality foods is diminished or costly in urban underserved Southern California sectors.

The challenge is to provide less expensive food choices of high nutritional value which may be substitutes or first choice alternatives to costly food. Secondly, current food delivery systems are not conducive to small urban agriculture. A new infrastructure must be developed to accommodate smaller urban agriculture.

UCR has a rich research history working with legacy plant crops, including “cowpea”, citrus, avocado, and other subtropical crops. Cowpea (also known as blackeyes or blackeyed peas) has a 40 year history of UCR research in sub-Saharan Africa and the desert portions of Southern California. Additionally, UCR maintains a cowpea germplasm collection of more than 6000 accessions and new breeding lines. The cowpea is well adapted to Southern California growing environments, and is a food that has strong cultural connections to many Southern California immigrant populations. The cowpea can be processed into various food pastes and combinations, adding to its cultural appeal. Citrus is among the most common backyard trees in Southern California but is currently threatened by Huanglongbing (HLB) and other devastating exotic diseases. Use of unauthorized propagative material by urban growers may promote the spread of HLB in urban environments. UCR has been a leading institution in supplying high health budwood to the industry and is doing outreach in this area. Latinos constitute a large proportion of the urban base of Southern California. The avocado is a traditional fruit used by this ethnic group. Additionally, consumption of avocado nationwide has quadrupled in the past 15 years as its overall contribution to a healthy diet is increasingly recognized. UCR has a century long history of avocado research including varietal and rootstock improvement. Several of the new UCR varietal selections are more dwarfing and thus more adaptable to urban landscapes. UCR also has extensive expertise in vegetable production, which are one of the most commonly grown groups of commodities in urban environments.

This project will study the potential for implementing cowpea production in Southern California and developing a delivery system to underserved regions. We will also develop information to help homeowners grow healthy and productive citrus and avocado trees that produce tasty fruit to urban gardeners. Programs regarding nutritional education will also be developed in parallel. This project will utilize and interconnect research from various departments including Botany & Plant Sciences, Plant
Pathology, Engineering, Entomology, Environmental Sciences, Economics, Sociology, Genetics & Bioinformatics, and others.