



"WHAT'S GROWING ON?"

News from your very local community garden

Sustainable, Optimized Urban and Latino-driven Agriculture (SOULA)

By Autumn Stoll, SDSU Student
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The SOULA project at San Diego State University leases about 1,000 square feet of space at the nearby privately run College Area Community Garden (CACG), thanks to grant support from the US Department of Agriculture. This outdoor classroom and research space is being used to develop an urban version of the Milpa planting style which combines corn, beans and squash. The Milpa style has origins in the Oaxaca area of Mexico. It is characterized in part by plants using then re-depositing soil nutrients, as well as preventing erosion. One primary aspect of the SOULA project is to learn from this

Mesoamerican farming technique and then create a sustainable planting system for urban use. The SDSU SOULA project has become a highly valued opportunity for SDSU students in different majors to achieve hands-on scientific research experience outdoors which enhances their other classroom experiences.

Our research space was created at the CACG in the spring of 2018 with six raised planting boxes and other research facilities, all built within a fenced enclosure. The original crops planted were removed on August 31st, 2018. Most recently, the raised boxes were prepared for this year's crop.

Two boxes contain fertilized soil, and another two are filled with local San Diego soil which was collected just outside the leased space. The remaining two boxes are filled with a mixture of half fertilized soil and half local San Diego soil.

Bean seeds, pumpkin seeds and red, blue, white and yellow corn seeds were planted in each bed on September 7th, 2018. The bean and corn seeds were purchased from farmers in Oaxaca, Mexico and the pumpkin seeds were purchased from a local store. A hybrid corn was also planted for comparison. The Milpa system improves yield through what's

called photostacking. The corn seeds were planted in a tight circle around the beans, to allow the beans to climb up the corn stalk. Pumpkin seeds were planted at the end of the beds and are expected to grow throughout the gardening space. The beans restore soil nitrogen and the pumpkins help retain moisture and inhibit growth of weeds.

Four SDSU professors, Drs. David Larom, Changqi Liu, John Love, and Ramona Perez (along with their motivated and hardworking students) are testing these synergistic effects using scientific methodology and appropriate instrumentation.



Corn sprouts, September, 2018 USDA funded SDSU/SOULA Project at the College Area Community Garden.



Students measuring plant growth USDA funded SDSU/SOULA Project at the College Area Community Garden.

For general information about our non-profit (501c3) community garden AND to join us as a gardener (no matter your previous experience), please see our website <http://www.collegeareagarden.org> Also, find us on Facebook: @collegeareagarden - Twitter: CACGardener - Instagram: CACGardener We have some really good raised boxes available that are filled with rich soil and are ready for new gardeners. Why not join us? The month of September, 2018 is FREE for new gardeners signing up for a full year.