It's Seed Propagation Time at the Grow Lab!

By Joyce Gonzales, Master Gardener Trainee

Seed Propagation Day - about twenty of us descended on the Grow Lab in Riverside and planted roughly 3,000 seeds! They were mostly tomatoes and peppers, but we did some flowers and a few other vegetables as well.

The acres are filled with garden beds, fruit trees and other sustainable, wonderful things. It's an inspiring place and gives you so many ideas for your own backyard.



The place is sprawling, so you have to know where you are going.



There are a ton of garden beds with vegetables and plants.



The lettuce looked delicious.



They have solar power! I wish I could fit these panels in my yard.



They even have chickens!



The barn is where we got our seeds and instructions.



When you walk inside, on the left is a counter and beyond it is a cozy sitting area with gardening books.



On the counter were cups of pepper seeds soaking in diluted Chamomile tea.



Pepper seeds germinate better when soaked overnight in the tea, but these were soaked for just several hours.



It was a little tricky to get the seeds out of the water. Some people used a spoon, others poured out one seed carefully at a time.



In the spacious barn, they are getting everything ready to get us started.



Marco Baldi, the Grow Lab coordinator, shows us the trays we will be using for the tomatoes and peppers.



He explains we are propagating all types of seed: organic, hybrid, heirloom. The main directions are to work on one seed packet at a time, put in one seed per cell, plant exactly the right depth, plant only one variety per tray, use three labels per tray, and clean your hands between trays.



The red sign posted on the wall lists the key factors for germination:

- 1) Viable seed
- 2) Proper depth
- 3) Seed contact to soil
- 4) Humidity
- 5) Temperature



We go to the seed master table where we are given one packet of seed and labels. The seed masters meticulously code each packet and take down your name so they know who planted which seed. This means if a tray fails to germinate, they will know exactly who did that tray! If that happens, maybe you messed it up or maybe the seed was no good.



Close up of the thirty celled tray.



A packet of seeds and the coded and labelled sticks we put in each tray.





We also have to label the tray itself in a special way.





After the tray is labeled, we take it to the "soil masters" who filled them with soil for us.



Kudos to the gentlemen who were always standing by for hours and were ready to dish out the soil anytime.



It was back-aching work.





Getting ready to plant. The day was windy with strong gusts which made it harder.



Using an empty tray to lightly tap the soil down.





Some people used a pencil to make a hole as well as to gauge the depth of the hole. We had to plant some seeds at a quarter of an inch, others at half an inch. It takes experience to be able to be accurate when you take into account you might be adding a little more soil on top of the cells.



Ready for the seeds.



This is a tomato seed. Hard to believe something so tiny will grow to be so big!



Had to be careful to keep track of which cells already had seeds in them and not miss any cells.



Peppers need hot weather, about 85 degrees to germinate, so in order to be ready in time for the sale, the trays we planted were placed on these blue heating pads in the barn. Marcos said they should germinate in about five days on these mats.



Redi-Heat is the name of pads and the company that makes them is called Phytotronics. The website is <u>www.phytrotronics.com</u>. These mats were 21 feet long and were 300 watts hot.



A final picture of some of our trays that will stay outside under shade cloth to germinate. We filled about 300 trays.