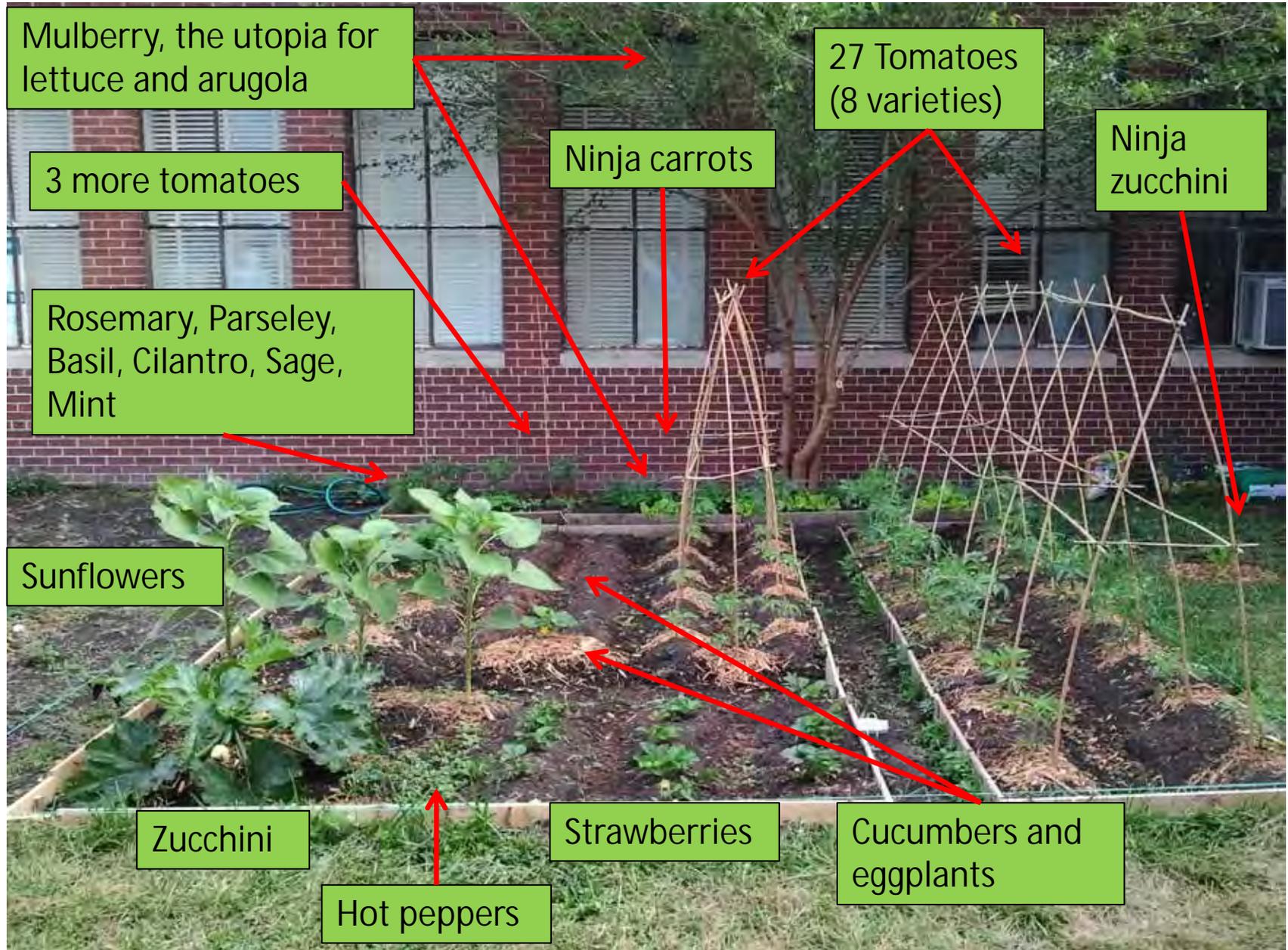


## Gardening Life in 200-South



# 200-South Plot 18: I wanted everything in it! (but more tomatoes)



# What I have learned about the soil

- Clay-rich (organic matter-rich clay at the top, yellow clay at the bottom)
- Soaks up a lot of water, but it retains it fairly well
- It can become very hard very quickly upon drying
- The top 15-20cm can dry up very fast if the soil has been worked and well aerated
- It might be deficient of nutrients
- The pH seems to be in the high range for soils, 8-9(?); The water might have something to do with it.
- You can spend very little or a lot!

# What I did about it

- Added about 3 bags of Moo-nure and 1 of Mushroom Compost to fertilize the soil and worked them in well.
- Started most plants indoor, and transplanted using a bit of miracle-grow vegetable soil to give the roots an easy start.
- Prepared 10-25cm-tall beds to improve root growth and depth
- Watered the new plant-lings frequently for the first 3-4 days to soften the soil, decreased the water gradually to about once every 2-3 days
- Added some Peat Moss to slightly acidify the soil
- Will add some Epsom salt (Mg) for the tomatoes

\$2-3



\$4-5



\$7-8



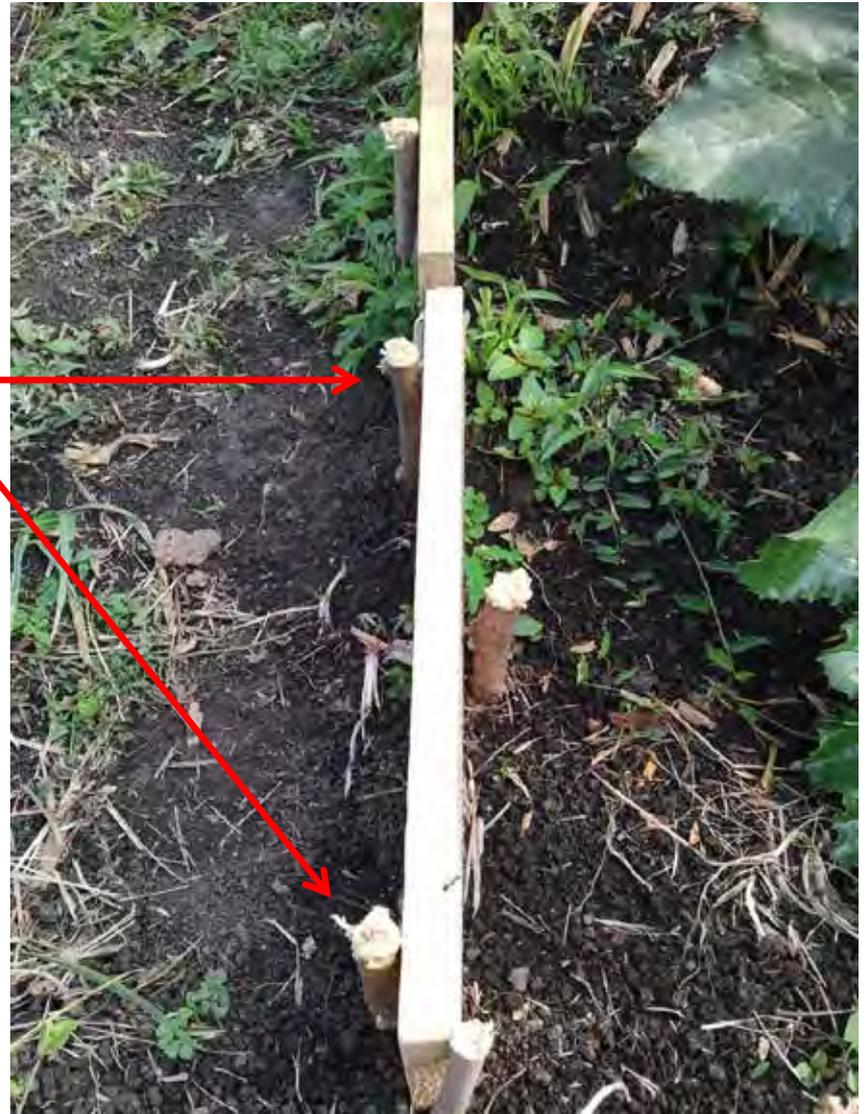
# The 'boxing'

Looks clean, easier to maintain, keeps the soil contained, and it is easier to treat different portions of the plot in different ways

I used about 25 boards \$0.7 each.

Total: \$15-ish

I used stakes obtained from the pruning of the Mulberry tree



# Climb, tomato, climb ('hang, tomato, hang'??)



## What you need:

- 7x packages of bamboo straws (\$2.7 each)
- 1x roll of gardening wire (\$ 3-4)
- Pliers

**Total: About \$30**

Added pellets of tomato fertilizer (only because I could not go chase after a chicken).



\$5-ish

This is chicken poo +

# Tepee-like tomato cages



Mulch is not necessary, but it helps in slowing down the weeds and reduces evaporation and steaming from the hot soil

# Princess Zucchini – the star of the plot



This pretty spoiled zucchini squash plant is a high maintenance one, as I manually defend it from bugs, spray it with organic insecticide, play music to, and more.

# What I know about growing tomatoes – ‘femminelle’



Removing them encourages main-stem growth and flowering. Make sure you don't remove the flowers!



# What I know about growing tomatoes: Bordeaux mixture

**Bordeaux mixture** is a mixture of copper(II) sulfate ( $\text{CuSO}_4$ ) and slaked lime [*hydrated lime*  $\text{Ca}(\text{OH})_2$ ] used as a fungicide in vineyards. It is used mainly to control garden, vineyard, nursery and farm infestations of fungi, primarily downy mildew, which can result from infections of *Plasmopora viticola*. It was invented in the Bordeaux region of France, where it is known locally as *Bouillie Bordelaise*. This fungicide has been used for over a century and is still used, although the copper can leach out and pollute streams (*Wikipedia*)



This is considered an organic preventive remedy for tomato blight, wilt, and any sort of mold, fungus, etc.

$\text{Cu}^{2+}$  affects the fungal spores in a way that prevents their germination. It does not help against bugs and such.

# Bordeaux mixture: how to make it



**Copper sulfate  $\text{CuSO}_4$**   
ebay: \$20-ish for 5 pounds  
(will last for a looong while)



**Hydrated lime  $\text{Ca(OH)}_2$**   
Menards: \$5-ish for 50 (!!)  
pounds



**Sprayer** (\$10 at Home Depot)

## Recipe

20g/gal  $\text{CuSO}_4$   
12g/gal  $\text{Ca(OH)}_2$

## Preparation

Separately, dissolve the two ingredients in  $\frac{1}{2}$  gallon of warm water (each), stir well for a while. Let the solutions rest for 30min-2hr, mix the two solutions, stirring well. Filter (optional), and spray on plant (mind the underside of the leaves). Do not spray directly on flowers.

# Other plants - shaded



# Other plants



# Watering



- Mostly, I use the 'stick-your-finger-in' method, but my (very much empiric) rules are:
  - Tomatoes are watered every 2-3 days
  - The squash-type plants can be watered everyday
  - Arugula and lettuce like it moist, strawberries and herbs like something in between
- When it's water time, it's a lot of water
- Water in the morning or in the evening, never at midday
- Channel-and-hole system to keep the leaves dry



# The budget, and what I am going to do in the future



- Trying to be as 'green' as possible, so far I have spent about \$150 for the plot, including tools. Hopefully most of the materials (e.g. bamboo) will be used at least for another year.
- Around midsummer, I will plant cooler weather plants (suggestions?)
- Next year I will add gypsum powder to the soil, as it clumps up the clay particles in bigger particles, allowing for more pore space and soil aeration.
- Before the winter I will turn over the soil and fertilize it, so as for it to be ready for next year. The regular tilling that they do is really not enough, I think, to get proper soil aeration and turnover.



**PS I weed at least 10 minutes every day**