

Nash, Edgecombe and Wilson Counties 4-H Growing Giants project - 2022

"Sweet Caroline"

Dustin Trychta
Morgantown, WV

The 2019 N.C. State Fair
The Great Pumpkin & Watermelon Weigh-off
Dustin Trychta
MORGANTOWN, WV
WEIGHT 1549.5

The Great Pumpkin
Competition
Weigh-off is now in the works!

The 2019 N.C. State Fair
The Great Pumpkin & Watermelon Weigh-off
Chris Radebaugh
LEWISBURG, WV
WEIGHT 1347.5



Program overview - Timeline

- **March 21**, 7 pm, Wilson County Agriculture Center
 - Overview of the project, site selection, soil sampling
 - March 30, soil samples due to your county extension office
- **April 26**, 7 pm, East Carolina Ag & Education Center
 - PICK UP PLANTS, Soil Test reports, early management tips,
 - Distribute lime and fertilizer
- **June 7**, 7 pm, Nash County Agriculture Center
 - Plants, pest and late season management
 - Check in on progress
- **October 1**, Spring Hope Festival
 - Cash prizes for 4-Her's in program



Expenses

- Program will provide plants, 1 bag of lime, 1 bag of fertilizer and production information.
- Optional
 - Additional fertilizer
 - Shade cloth/tent
 - Pesticides - insects, leaf diseases, herbicides, etc.
 - Sprayer - pump up
 - Irrigation
 - Pallet(s) for pumpkins
 - Tiller and or tractor with disk for garden preparation.
- Required
 - Have fun with your project!!

Prizes for those in the program

- Senior (ages 14 - 18) and Junior (ages 8 - 13) divisions for pumpkins and watermelons
 - 1st - \$150
 - 2nd - \$100
 - 3rd - \$75
- Cloverbuds are noncompetitive- will receive a 4-H prize pack

Site selection considerations



Location

1. Full sun!
2. Well drained soil
3. Slight slope can help with drainage
4. Water source
5. Access for pumpkin at harvest (tractor!)
6. Site size - 500 - 900 ft²
Roughly 30' x 30' per plant
7. Windbreak can help

500-900 square foot per plant
Roughly 30' x 30'



It looks excessive early in the season...

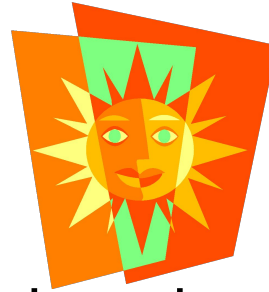
Homework

- Identify site for “Growing Giants”
- Take soil sample and return to county extension office by **March 30, 2022**
- This will allow for soil reports to be complete prior to planting.
- Spray glyphosate to kill grass and weeds
 - This will make the soil easier to prepare
- Begin soil preparation 2-4 weeks prior to planting

Fertilizer, lime & soil sampling

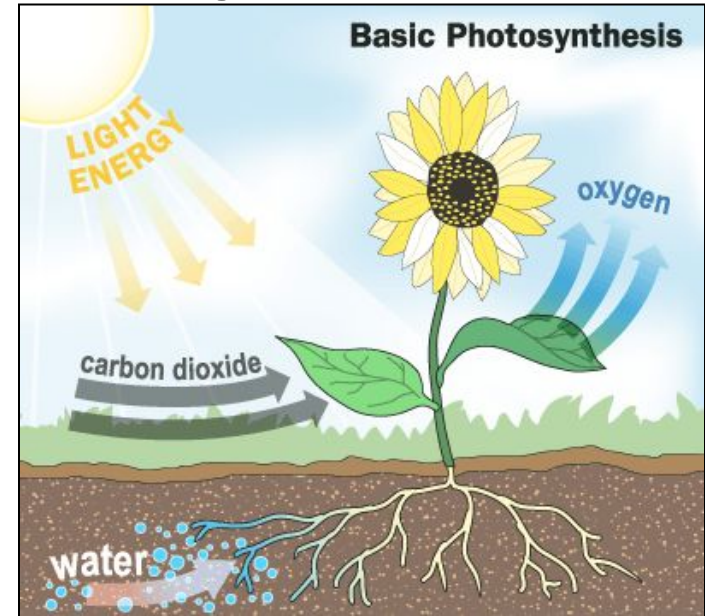
Non-Mineral Nutrients

- The **Non-Mineral Nutrients** are:
 - **Hydrogen (H)**
 - **Oxygen (O)**
 - **Carbon (C)**
- These nutrients are found in the air and water.



Non-Mineral Nutrients

- In a process called **photosynthesis**, plants use **energy from the sun** to change **carbon dioxide** and **water** into starches and sugars.
- These starches and sugars are the plant's food.



Mineral Nutrients

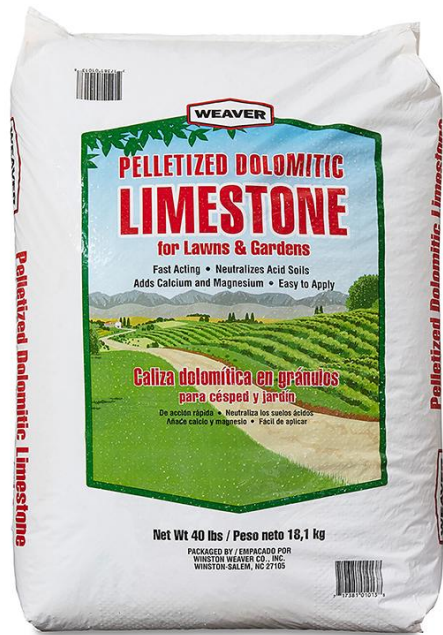
- The **13 mineral nutrients**, which come from the soil, are dissolved in water and absorbed through a plant's roots. There are not always enough of these nutrients in the soil for a plant to grow healthy.
- This is why many farmers and gardeners use fertilizers to add the nutrients to the soil.
- The mineral nutrients are divided into two groups:
[macronutrients](#) and [micronutrients](#).

Macronutrients - Primary



- The **primary nutrients** are
 - Nitrogen
 - Phosphorus
 - Potassium
- These are the nutrients referred in a fertilizer analysis.
 - Example: A 10-10-10 fertilizer is 10% Nitrogen, 10% Phosphorus, and 10% Potassium

Soil pH



- pH is expressed on a scale of 1 – 14
 - The lower the number the more acidic and the higher the number the more alkaline
- In North Carolina, our soils are naturally acidic.
- **Lime** can be added to the soil to make it less acid and also supplies calcium and magnesium for plants to use. Lime also raises the pH to the desired range of 6.0 to 6.5.

What is a Soil Test?

- Provided by NCDA
- A soil test is a process by which [elements](#) are chemically removed from the soil and measured for their "plant available" content within the sample.
 - The quantity of available nutrients in the sample determines the amount of [fertilizer](#) that is recommended.
- A soil test also measures [soil pH](#).
 - These analyses indicate whether lime is needed and, if so, how much to apply.

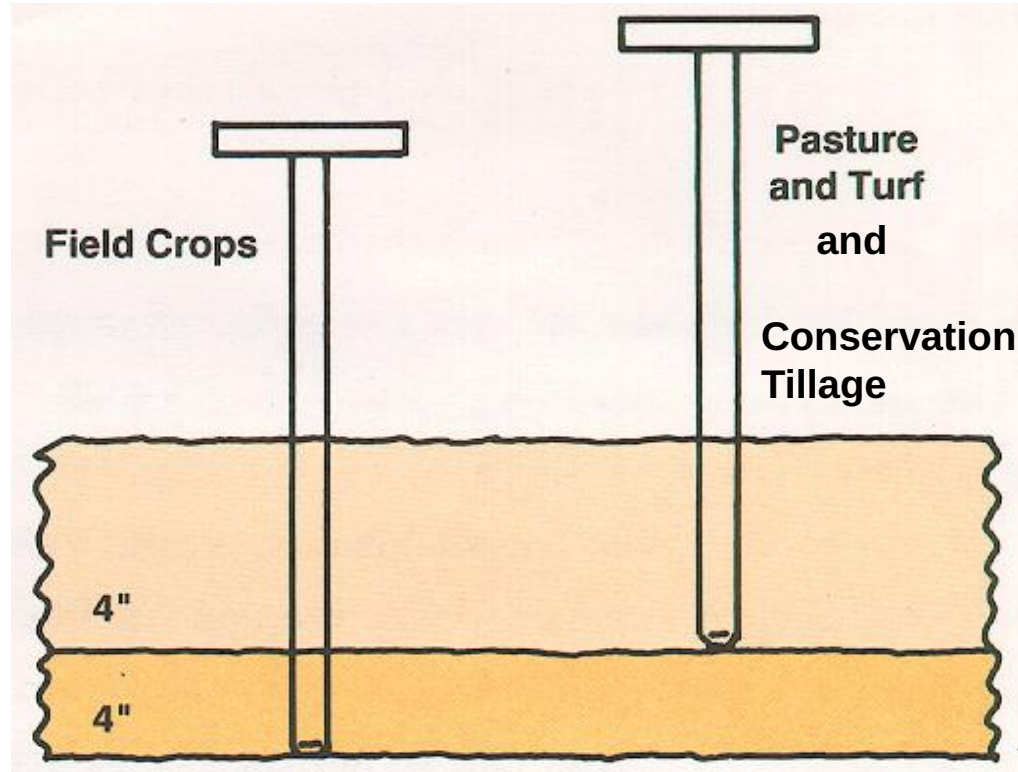
Soil Sample Tools



Please: No plastic bags or taped boxes

Pass out boxes and forms

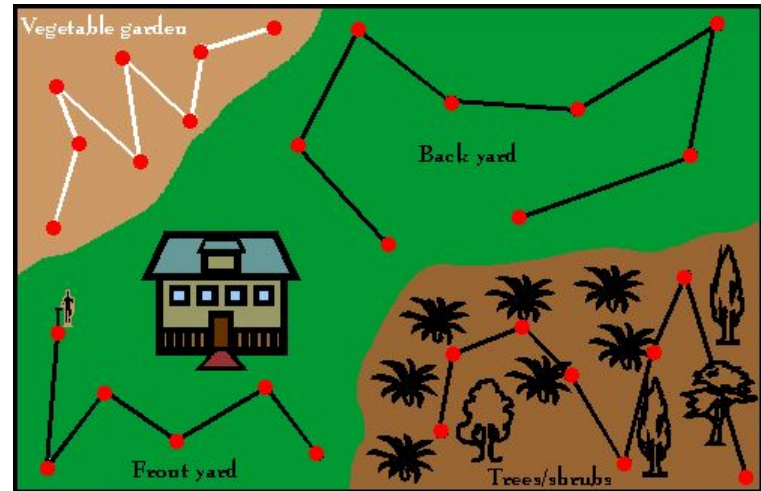
Soil Sampling Depth



Taking a good soil sample

- Use clean equipment - soil probe or shovel
- Sample area for Growing giant project
- Take at right depth
- Mix samples well in plastic bucket
- Take 15 - 20 cores randomly with soil probe or use shovel.
- Complete forms and fill soil sample box to line.

**Return to Extension office by
March 30!**



**SOIL SAMPLE INFORMATION**

Complete information sheet and return with sample(s).

**GROWER INFORMATION** — Please Print

LAST NAME		FIRST NAME	PHONE	NAME OF OTHER RECIPIENT		PHONE
ADDRESS				ADDRESS		
CITY		STATE	ZIP CODE	CITY	STATE	ZIP CODE
COUNTY (where samples were taken)	TOTAL NO. SAMPLES	FARM ID#	E-MAIL ADDRESS			

If you want an agricultural advisor or someone else to receive a copy of this report, please provide the name & address in this box.

NCDA&CS Agronomic Division
Soil Testing Section
1040 Mail Service Center
Raleigh, NC 27699-1040

Phone: (919) 733-2655

Web Site: www.ncagr.com/agronomi

LAB NUMBER (Leave Blank)	SAMPLE IDENTIFICATION	LIME APPLIED WITHIN PAST 12 MONTHS			FIRST CROP		SECOND CROP	
		Tons/Acre	Month	Year	(See explanation on reverse side of form)	CROP CODE	(Following year— See explanation on reverse side of form)	CROP CODE
1								
2								
3								
4					pumpkin	107		
5					watermelon	80		
6								
7								
8								

Forage & Pasture
040 Alfalfa, E
041 Alfalfa, M
042 Common Bermuda/Bahia
043 Bermuda hay/pasture, E
044 Bermuda hay/pasture, M
047 Bluegrass pasture
048 Bluegrass/White Clover
049 Clover/Grass, E
050 Clover/Grass, M
051 Gamagrass
053 Legumes, misc.
054 Fescue/Orchard/Timothy, E
055 Fescue/Orchard/Timothy, M
056 Prairiegrass
057 Switchgrass
059 Sudan/Sorghum/Millet/Red Crabgrass
060 Sudan/Sorghum silage

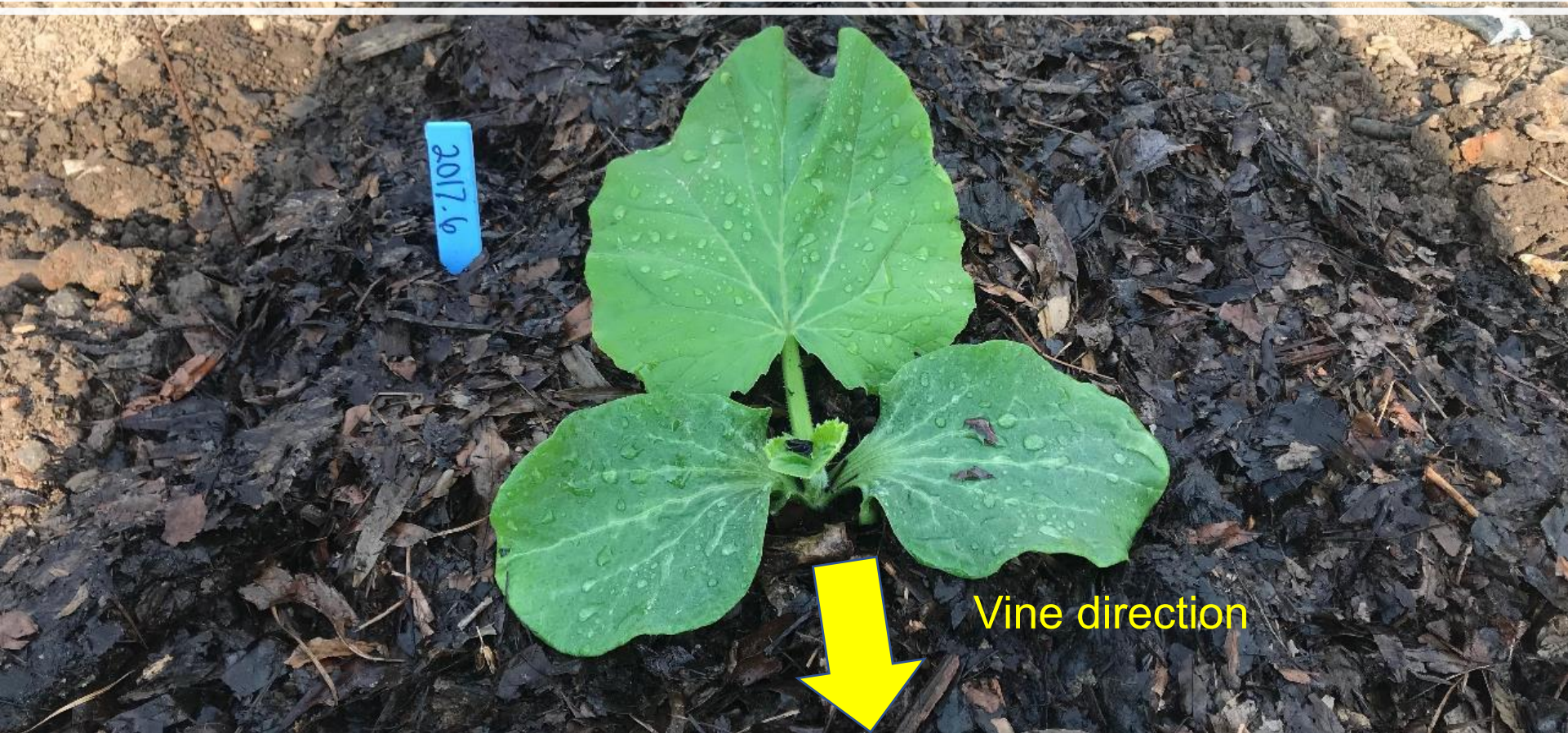
Will reduce lime recommendation
to account for un-reacted lime

Giant pumpkin timeline

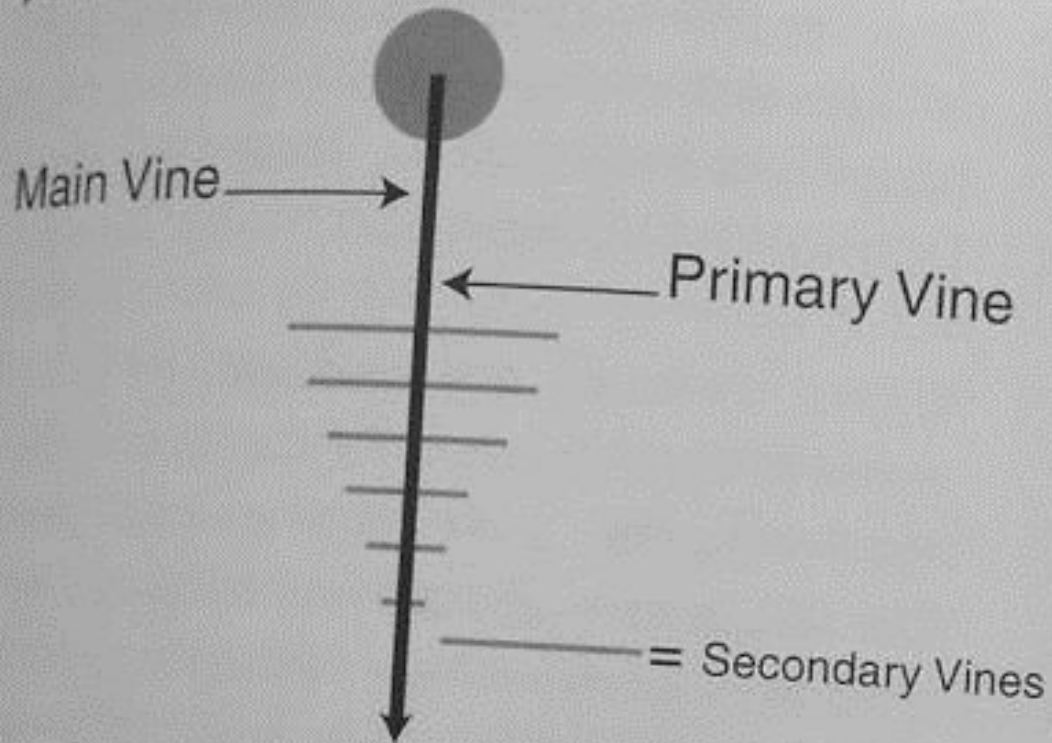
- A rough timeline for growing a giant pumpkin is as follow
- Day 0-50
 - Germination to full vegetative stage
- Day 50-150
 - Pollination to harvest
 - The pumpkin itself can grow 100 days after pollination



Transplanting 10–14-day old plant



The Christmas Tree



Watering

- Drip line irrigation
- Overhead -
 - could increase diseases





Questions??

