

Spring & Summer Gardening



How to Fertilize, Mulch, and Build Soil



- For new soil, use 1 cup of fertilizer per 1 square foot
- For established soil, use 1 cup per 4 square feet
- Compost would be good to add at the same time that fertilizer is applied.
- Mulch is required for spring & summer
- No need for mulch in the fall and winter

Organic Fertilizer


MicroLife™
VEGETABLE AND FLOWER
8-4-6
ALL ORGANIC,
BIOLOGICAL FERTILIZER

**AMAZING NUTRITION TO HELP
ALL VEGETABLES AND FLOWERS
ACHIEVE THEIR GREATEST
POTENTIAL**

*If you want the very best in Vegetable and Flower
performance this product is it*

100% Slow release, will not burn
Contains 2% Iron, extra Rock Minerals, Humates
and billions of beneficial microorganisms

Net Wt 7 lb (3.17 kg)

PLANT FOOD INGREDIENTS

Alfalfa, Fish Meal, Humates, Kelp Meal, Soy Meal,
Wheat Middling's, Pork and Bone Meal, Bat Guano,
Potassium Sulfate, Iron Sulfate,
Sulfate of Potash Magnesia, Molasses, Corn Meal

NON PLANT FOOD INGREDIENTS (Beneficial Microorganisms)

In every bag of MicroLife 8-4-6

Endomycorrhizal Fungi: Glomus intraradices, Glomus
mossae, Glomus aggregatim 50,000 propagules per lb.

Ectomycorrhizal Fungi: Rhizopogon villosulles, Rhizopogon
luteolus, Rhizopogon amylopogon, Rhizopogon fulvigleba,
Rhizopogon tinctorius 55,000,000 propagules per lb.

Rhizobial Microorganisms: Bacillus subtilis, Bacillus
licheniformis, Bacillus megaterium, Bacillus pumulis, Bacillus
azotoformans, Bacillus coagulans, Bacillus stearothermophilis,
Paenibacillus polymyxa, Paenibacillus durum 250,000,000,000
CFU per lb. **Microbial Nutrients:** Amino Acids, biotin,
folic acid, B Complex, Vitamins, Natural Sugars

Ecological Pest Control

Establish native flowers & well adapted plants near your garden beds

- Winter favorites dill, cilantro, fennel, parsley
- Plant seeds in fall – Black Eyed Susan, lantana, butterfly weed



Planting The Seed

Depth – Plant the seed to a depth 3 times the width of the seed.

- Kale, collards, cabbage, cauliflower – ¼” deep
- Lettuce, endive, carrot – 1/8” deep (surface)
- Beet, Swiss chard – ½” deep
- Beans – ½” to 1”



Kale



Lettuce



Beet



Bean

Plant Spacing

Spacing – Set the spacing for the adult size of the plant. The adult leaves should barely touch.



Sweet Peppers
2' to 2.5' squares



Summer Squash
24" squares



Cucumbers on a
Trellis, 8-12" apart



Bush Beans
10" squares

Proper Watering

- Soil of seeds must remain moist for seed to germinate.
- If soil dries out the plant will die.
 - Water every day for newly planted seeds
 - Water every 2nd or 3rd day after plant has 4 leaves
- Too much water will make a plant weak and disease prone.
- Water just enough for soil to be moist 2” deep (use your finger to test)
- Use Fan or Rose nozzle, Rubber hose & let water cool

Plant at the right time

Soil temperature

- Vegetables are individuals
- Even in same family

Disease and pests

- Almost none at right temperature
- Rampant pests and diseases at wrong temperature

We will place a planting schedule on the website.

Seed Selection

Buy seed from Westbury Community Garden!

Hybrid:

Seed deliberately crossed from two or more ancestral varieties. Most of our seed is hybrid to create varieties for best production, disease resistance and best taste.

Open Pollinated Heirloom Seeds:

Seed that is saved without careful crossing of ancestral lines.

Genetically modified:

Made by exporting genes from one type of organism to a very different one (BT into corn, for example).

The main concern is that it is nearly impossible to prove safety, inadequate safety requirements are in place, and it will be difficult to recapture problem pollen once it is released.

What to Plant - Spring and Summer



Selecting the Right vegetable variety is critical 10

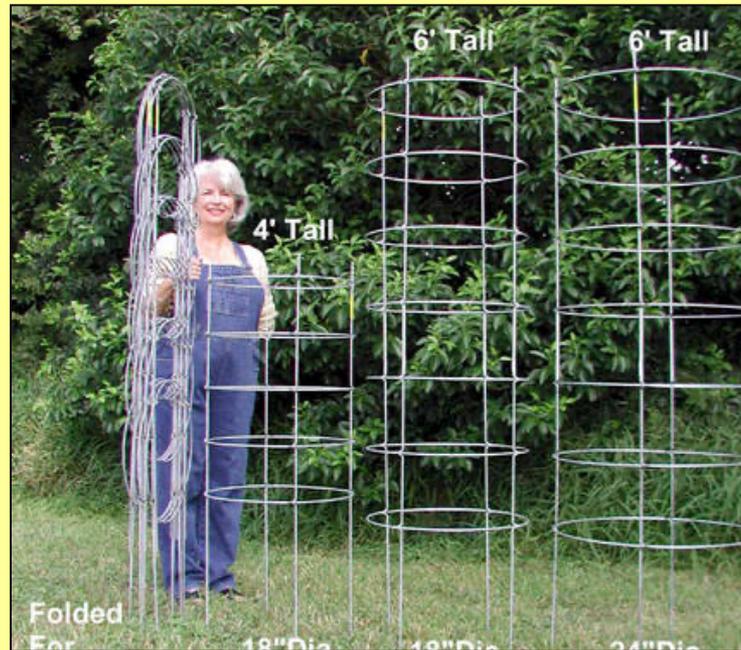
Tomatoes

Solanaceae Family

Use large cage for support - 2' diameter

Set plants at least 3' apart

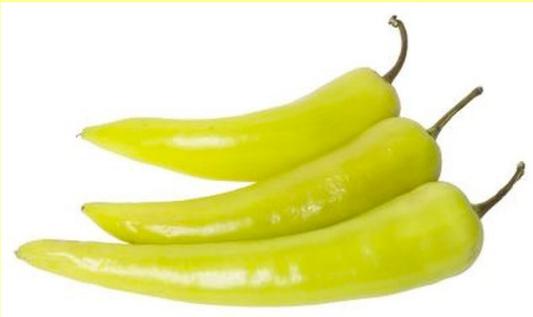
Support cage with T-stake



Peppers



Sweet Pepper:
Tolli's



Sweet Pepper:
Banana Pepper

When: Start seeds inside January 15-31, follow directions for tomatoes OR

buy plants in store & plant them March 1- 15

Varieties: Tolli's Sweet Italian, any banana peppers or elongated pepper varieties, Carmen, Gypsy, Giant Marconi, Ariane, all hot peppers.

Do NOT plant bell peppers! They do not work in our climate.

How:

- 1) Plant at least 24" apart.
- 2) Dig hole, stir in a handful of Microlife.
- 3) Bury deep, remove first leaves & bury up to the first true leaves.
- 4) Mulch plants immediately to protect from soil being sprayed on leave & hold in moisture.
- 5) If temperatures are below 45 F., protect plants from cold.

Planting Peppers



- 6) Keep soil moist & fertilize during the spring. Keep leaves deep green.
- 7) Providing some shade in summer is beneficial. Summer is stressful and production will drop for all peppers except hot peppers. Fall brings increased production.
- 8) Harvest when they change color. They will produce all summer and fall.

Seeds – Totally Tomato, Tomato Growers, many other locations

Plants – Wabash, Southwest Fertilizer, Buchanan's



Planting Peppers



Protect plants from temperatures below 45 F.

Place Walls of Water until plant grows out of container.



When larger than container cover w/ blanket & place gallon of water next to plant.



Gypsy



Carmen



Ariane

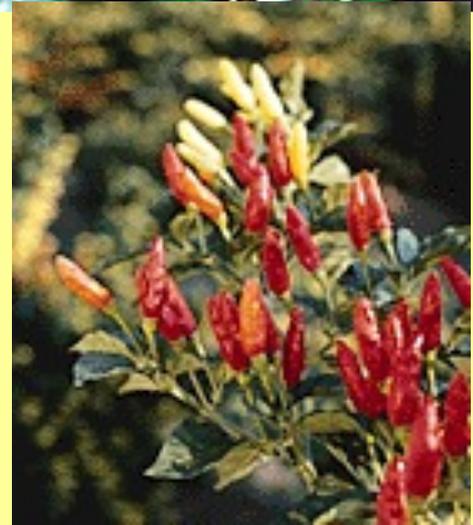


Giant Marconi



**Anaheim (TL),
Ancho Villa hyb (TR)
Thai Pepper (L)**

***C. chinense*: Caribbean Red Hot (LB) & Habañero (LT); *C. frutescens*: Tabasco (R)**



***C. pubescens*: Manzano (L) &
C. baccatum: Rocatillo & Aji (C&R)**



Chiles



Varieties:

Hottest – Habaneros, Scotch bonnets

Very hot – Cayenne, Thai, Tabasco

Hot – Jalapeno, Serrano

Spicy – TAM mild jalapeno, ancho

Mild – TAM mild chile 2

How:

Use same instruction as sweet peppers, but

1) Plant at least 18” apart. Use tomato cages

2) Plant last half of March

Seeds – Totally Tomato, Tomato Growers

Plants – Many locations



Scoville Heat Units

Scoville Rating	Pepper Type
15,000,000-16,000,000	Pure capasaicin
9,100,000	Nordihydrocapsaicin
2,000,000-5,300,000	Standard US Grade Pepper Spray
855,000-1,041,427	Naga Jolokia
876,000-970,000	Dorset Naga
350,000-577,000	Red Savina Habanero
100,000-350,000	Habanero Chile
100,000-350,000	Scotch Bonnet
100,000-200,000	Jamaican Hot Pepper
50,000-100,000	Thai Pepper, Malagueta Pepper, Chiltepin Pepper
30,000-50,000	Cayenne Pepper, Aji pepper, Tabasco pepper
10,000-23,000	Serrano Pepper
7,000-8,000	Tabasco Sauce Habanero
5,000-10,000	Wax Pepper
2,500-8,000	Jalapeño Pepper
2,500-5,000	Tabasco Sauce (Tabasco pepper)
1,500-2,500	Rocotillo Pepper
1,000-1,500	Poblano Pepper
600-800	Tabasco Sauce (Green Pepper)
500-1,000	Anaheim pepper
100-500	Pimento, Pepperoncini
0	No Heat, Bell Pepper

Ground Cherry

(Cape Gooseberry, Ground Cherry)



When: Plant seeds inside
in Feb; plants outside
Mar, April

Varieties: Goldie

How:

- 1) Plant 2' apart.
- 2) Dig hole, stir in a handful of Microlife. Bury deep, remove first leaves & bury up to the first true leaves.
- 3) Mulch plants immediately to protect from soil being sprayed on leave & hold in moisture.
- 4) If temperatures are below 45 F., protect plants from cold.
- 5) Keep soil moist & fertilize during the spring. Keep leaves deep green.
- 6) Providing some shade in summer is beneficial.
- 7) Harvest when husk is brown & dry, or when fruit falls

Check internet for availability of seeds.

Eggplant



Ping Tung



Antigua

When: Plant plants mid April – May, Plant Seeds inside - late Feb; outside in April

Varieties: Louisiana Long, Antigua, Ping Tung, Rosa Bianca, Orient Express

How:

- 1) Fertilize 1 cup/ 6 square ft.
- 2) Plant seeds ½” deep, on 18” squares; plant three seeds and thin to one plant
- 3) Cage with ½ of a large tomato cage (2’ diameter and 3’-4’ tall)
- 4) Mulch after planting
- 5) Water regularly when fruiting
- 6) Harvest before fruit loses its shine

Check internet for varieties listed.

Bush Beans

Leguminosae Family



Source of seeds – Baker Creek
Heirloom, Johnny's,
Territorial

When: Plant seeds March, every two weeks (65-80°)

Varieties: Derby, Provider, Gator Green & Contender, Jade, Maxibel

Disease resistance is important in selection for best production.

How:

1. Plant seeds on 10" squares, 1" deep
2. Fertilize lightly
3. Harvest every other day
4. Mulch after plant is 3" tall
5. Water ground & not plant. Plants are susceptible to fungus and will look bad toward the end, but keep producing.

Pole Beans

Leguminosae Family



Source of seeds – Johnny's
Select Seeds

When: Plant seeds March (65-80°)

Varieties: Dade, McCaslan. Fortex, Kentucky Blue, Marvel of Venice yellow

Chose varieties that are disease resistant

How:

1. Plant seeds every 6" on a trellis, 1" deep
2. Harvest every other day
3. Mulch after plant is 3" tall.
4. Try to water soil around plant and limit water on plant. They are highly susceptible to fungus

Long Beans

Leguminosae Family



When: Plant seeds mid-March – May

Varieties: Select varieties that do well in hot & humid climates – Gita, Red Noodle

How:

- 1) Plant seeds every 6” on a trellis, 1/2” deep
- 2) Mulch after plant is 3-4” tall.
- 3) Harvest daily
- 4) Keep ants and aphids off plants, with hard water spray

Seeds – Kitazawa Seeds & Evergreen Seeds

Soy Beans (Edamame)

Leguminosae Family



When: Plant seeds March – June (65-90)

Varieties: Midori from Kitazawa Seeds,
Butterbeans, select varieties that do well
in hot & humid climates

How:

- 1) Work in a light fertilizer.
- 2) Inoculate seeds with Rhizobia
- 3) Plant seeds every 3", 1" deep
- 4) Thin to 6 -9 inches apart
- 5) Plant every couple of weeks for continuous harvests
- 6) Mulch after plant is 3" tall, or before planting, if no snails
- 7) Harvest when pods are plump and still green

Snails/Slugs



Get rid of their homes

Use Escargo, Sluggo or other products with Iron Phosphate as a preventative.

Sprinkle the pellets around the outside of the vegetable beds in early spring and early fall, and other times when snails appear.

Snails will smell the product, eat it and die (never be able to eat anything else).



Aphids



Simplest solution is using a hard spray nozzle on the leaves to remove most of the aphids. Lady beetles will come in and remove the remaining aphids.

OR

Spray in early morning with insecticidal soap. Spray both on top of and under the leaves. Use 1 teaspoon of kitchen soap or insecticidal soap per 1 gallon of water. Or

Use a mixture of Neem Oil, garlic (crush and simmer for a few minutes and strain), molasses and water sprayed on the aphids.

One gallon of water (including the garlic water). 2 tablespoons of Neem, 1 tablespoon of molasses.

Spray everywhere you see aphids. Look on both sides of leaves and on vines. Do this immediately upon noticing the problem.

Check in two days to see if lady beetle larva are eating the remaining aphids. If so, cease spraying.

If there are no larva, and no decrease in aphids, repeat every few days until problem is gone.



Cantaloupe/ Melons



How:

1. Plant on trellis
2. Dig a trench 6-8" deep & pour in 1 cup of Microlife per 2'.
3. Cover with soil to about 3" from surface and repeat with fertilizer
4. Fill in trench
5. Fertilize on surface with rake, 1 cup/ 6 square feet & plant $\frac{1}{4}$ - $\frac{1}{2}$ " deep every 3" & thin to about 1'.
6. Watered consistently and do not overwater when plants are mature!
7. Mulch after plant begins to vine
8. Use panty hose to support plants as they mature.
9. Harvest when deep netting appears

When: Plant late Mar – Apr (75-95°)

Varieties: Ambrosia is best, Athena & French Orange is well tested, **do not grow Charentais melons in our climate**

Cucumbers

Suyo Long



Mexican Bean Beetle

When: Plant seeds mid March – August,
every six weeks

Varieties: Pickling – Calypso, H19 Little Leaf,
Long- Suyo Long, Armenian, Beit Alpha types

How:

- 1) Plant ½” deep, every 4” and thin to 8-12”
Do not overcrowd your trellis with plants
since cucumber will become diseased
without proper air circulation.
- 2) Use same fertilizing method shown for
melons.
- 3) Water regularly and plentifully, especially
when fruit is on vine.
- 4) Mulch when plant is about 4” tall
- 5) Continue to fertilize a cup per square foot
once or twice a month.
- 6) Harvest when ripe (before turning yellow)
or plant will die

Summer Squash

Tatume



When: Start seeds mid- March 70-95°

Varieties – Zephyr, Tatume, Sundrops, Sunburst well tested.

How:

1. Fertilize the same way as melons.
2. Plant at least 18” apart.
3. Add extra fertilizer when they start to flower
4. Mulch after planting
5. Will get vine borers that damage the plant
6. Harvest at 6”-8”



Sunburst

Winter Squash



Tahitian



Butternut

When: Plant seeds mid-March to late-April

Varieties: Butternut, Tahitian, Seminole

How:

1. Select a spot halfway from the sides of a bed
2. Dig a 6" to 8" hole, about a foot in diameter
3. Put a handful of fertilizer in the hole, followed by soil, and more fertilizer and soil.
4. Plant 3 seeds $\frac{1}{2}$ " deep, spread over the area
5. Mulch when plants are 6" tall
6. Harvest when stem hardens & color of fruit changes

Check internet for availability of seeds.

Squash Pest: Vine Borer



Squash Vine Borer– Moth that is seen during the day lays eggs on stem

- Larvae feed inside of stems
- Plant summer squash early
- Plant vine borer resistant varieties of winter squash

Bitter Melon



When: Start seeds in April, May

Varieties: Any

How:

1. Plant 12" along a trellis
2. Harvest fruit before it changes to orange color
3. Check Internet for recipes. Must be cooked
4. Great medicinal qualities



Seeds – Kitazawa Seeds

Arugula

Sylvetta



When: Plant seeds anytime, but best in fall and early spring

Varieties: Sylvetta Arugula for spring summer and fall. Standard in winter only.

How:

1. Fertilize lightly
2. Plant near surface by gently roughing up soil
3. Pat down.
4. Clip leaves 1" from ground, when 5"-6" tall. It will grow back several times before bolting.

This plant can become a reseeding annual.

Okra

Zeebest



When: Plant seeds mid April – May

Varieties: Zeebest, Burmese, Texas
Cow Horn

How:

1. Fertilize 1 cup per 6 square feet
2. Plant ½” to 1” deep, on 24” squares
- more room for Zeebest
3. Water regularly when fruiting
4. Mulch heavily when plant is 6” tall
5. Harvest everyday, when fruit is small

Check internet for availability of seeds.



Cowhorn

Basil

Genovese



Rubin



Thai



When: Plant seeds mid April - June

Varieties: Eleonora, Genovese, Lemon, Thai, Red Rubin

How:

1. Fertilize 1 cup per 6 sq. ft
2. Plant seeds 2' apart, and 1/4" deep.
3. Mulch when plant is 6" tall
4. Flowering stops production of leaves. To prevent flowering, at 8 pair of true leaves, cut to 4 pair. Don't let new stems have more than 5 new leaf pairs.
5. Harvest before flower stalks appear. Cut off flower stalks immediately.

Check internet for availability of seeds.

Basil



Downey Mildew is a big problem with all sweet varieties

No organic treatment

Space plants to get good air flow

Give full sun

If you see smoky leaves, put bag over plant and remove immediately.

Red varieties not as sensitive. Eleonora has some resistance to Downey Mildew.

Roselle



When: Start seeds in April, May

Varieties: Thai Red Roselle

How:

1. Forms a bush – 3 sq ft
2. Mulch when plant is 6” tall
3. Harvest leaves for salads and cooking – citrus/lemon flavor
4. Use calyx petals to make tea

Check internet for availability of seeds.



Corn



When: Plant seeds early March (60-95°)

Varieties: Kandy Corn is our favorite, Silver Queen is a local favorite, Butterfruit bicolor.

How:

1. Sprout in wet paper towels inside & carefully plant in ground. Or plant seed 1" deep
2. Plant on 12" squares with at least 4 rows and 4 across (16 plants), for pollination.
3. Heavy fertilizer: 1 cup per sq. ft 2 weeks prior to planting.
4. Mulch after plant is about 6" tall.
5. Plants stalks need support in heavy winds. Push soil up around stalks or add a heavy mulch. Stake & wires to support plants.
6. Protect from ear worms with mineral oil when silk is present, by placing mineral oil into the silk of the plant. This is necessary to having corn!
7. Harvest when kernel is milky



Corn
Ear
Worm

Ginger



When: Start roots inside in February-March, outside April-May

Varieties: Get untreated roots from Asian market or Whole Foods; or Chinese Yellow from Exotica or Just Fruits

How:

1. In February or March, plant in pots inside, 2" deep. In April-May, plant outside on 8" squares, 1/2" deep.
2. Sun best, but tolerates shade.
3. Mulch after planting
4. Harvest in November. Leave some in ground for next year

Sun Choke

(Jerusalem Artichoke)



When: Plant tubers in March - April

Varieties: Stampede or untreated tubers from groceries.

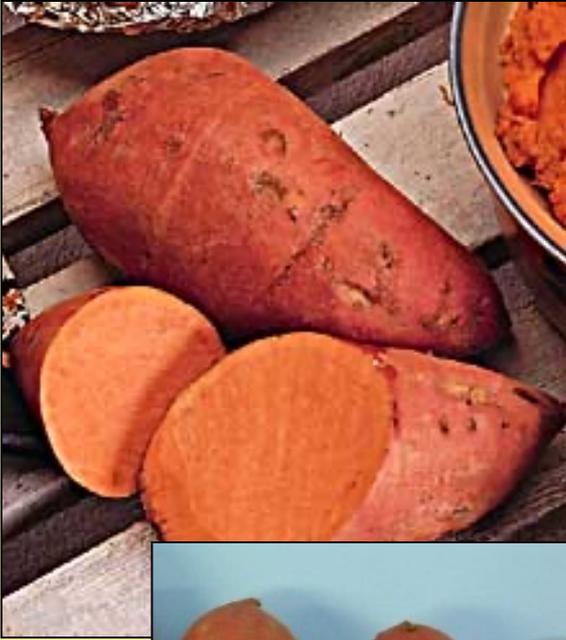
How:

1. Choose a site that is permanent and away from other beds. *They are invasive!*
2. Break or cut to 1 or 2 eyes per piece, and plant 12" to 18" apart, and 4" deep. Keep seed pieces moist until planting.
3. Plants are in the sunflower family and will get 4' to 5' tall
4. Mulch after plants come up
5. Harvest in late fall as needed. Dig carefully

Buy organic tubers at Whole Foods

Sweet Potato

Georgia Jet



Beauregard

When: Start shoots inside in late March-early April. Plant shoots outside April through May

Varieties: Georgia Jet (2 ½ - 3 months, and most productive), Jewel (3-4 months), Beauregard (90-100 day), Sumor (white skinned and very productive)

How:

1. Fertilize with 1 cup per 6 square feet
2. Move soil from sides of bed to form a mound down the length of the bed
3. Plant shoots at least 2" deep with leaves above ground. Space 9"-10" apart, in double rows down the center of bed.
4. Mulch
5. Prevent vines from rooting
6. Harvest August to November

Check internet for availability of plant shoots.

Sweet Potato



Wireworm

Harvest Aug to Sept to
avoid these critters



Sweet Potato Weevil

Malabar Spinach



When: Start seeds in April, May, June

Varieties: Green variety best

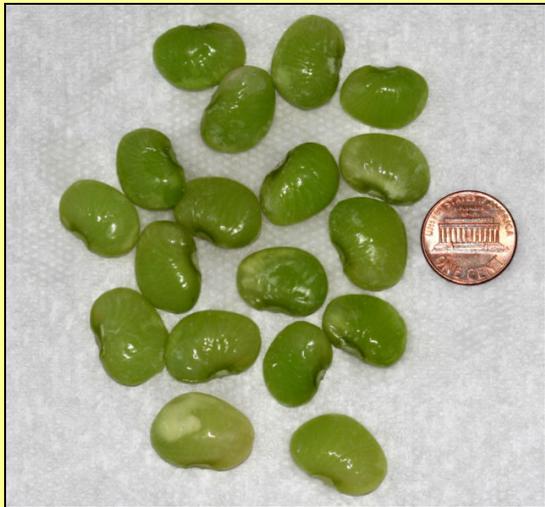
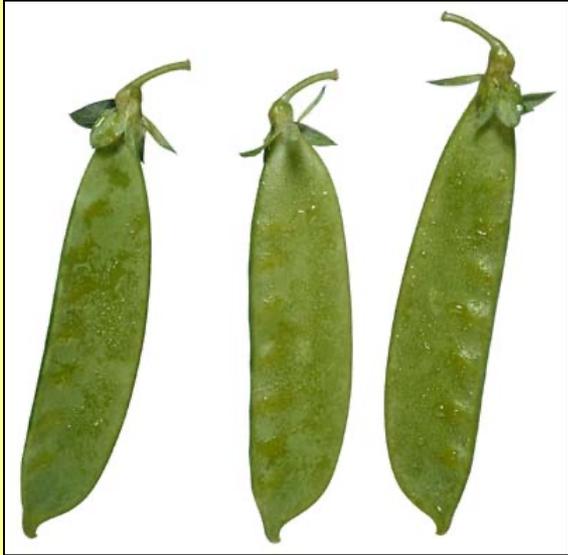
How:

1. Plant 12" apart on tall trellis
2. Harvest every other leaf
3. Leaves are more tender when small
4. Eat fresh or cooked for only a minute

Seeds – Evergreen Seeds

Must remove immediately when seeds start to form. It will be invasive if the seeds drops! Put in dumpster.

Lima Beans (Butter Beans)



When: Plant seeds April-May

Varieties: Dr. Martin's, Texas Speckled, Speckled Calico, Florida Speckled,

How:

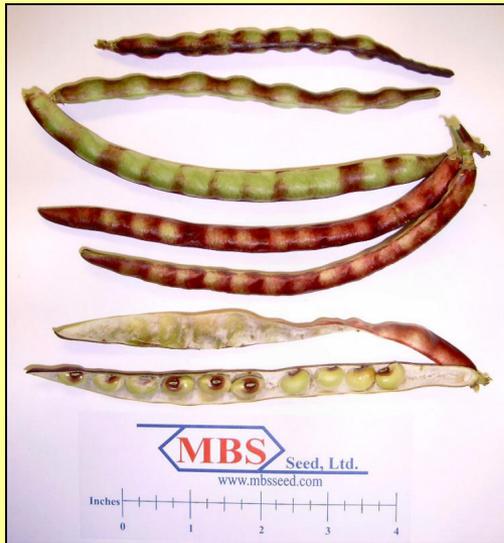
1. Plant 6" apart for pole, and 8" apart for bush types.
2. Plant 1" deep
3. Regular water during flowering and pod stages.
4. Mulch when plants are 6" tall
5. Avoid touching leaves when wet
6. Harvest when pods are full and store peas in refrigerator

Seeds - Shumway

Southern Peas

(Cream Peas, Cow Peas)

Zipper



When: Plant seeds April - July

Varieties:

- Crowders or Purple Hull for dry peas
- Zipper, Black-eyed 85 or Cream Pea Banquet for green peas.

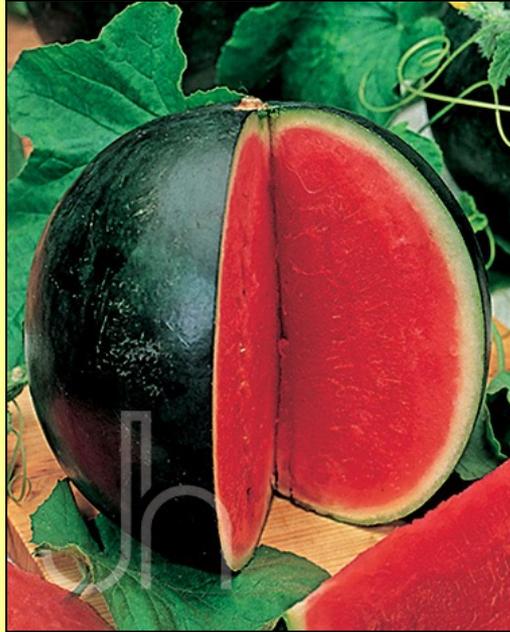
How:

1. Light fertilization or none
2. Plant seeds 2" deep
3. Plant every 5" for vining types; and on 12" squares for bush types
4. Harvest when pods begin to develop seeds, to encourage more production.
5. For fresh cream peas, harvest when pods have large seeds and pods turn yellow.

Check internet for availability of seeds.



Watermelon



Best not to plant since they are frequently stolen at the garden.

When: Seeds in March – mid April (70-85°)

Variety: Sugar Baby, an ice box melon

How:

- 1) Plant in a loose well composted soil. Does not do well in heavy soils.
- 2) Fertilize the same way as cantalope
- 3) Use a trellis to maximize the production space of your garden bed.
- 4) Use net or panty hose to support melons on trellis
- 5) Plant seed ½” deep every 3-4” & thin to 1 ft.
- 6) These are desert plants & need little water.
- 7) Mulch as soon as plants are 4 -6” tall. 50



Watermelon

Harvest when the color becomes dull, and the tendril next to the melon dies.



Peanuts



When: Plant peanuts in May

Variety: Carwile's Virginia

How:

1. Fertilize with 1 cup every 12 square feet
 2. Plant in a sandy soil high in organic matter.
 3. Plant shelled raw peanuts 1-3 inches deep.
 4. Space 6-8 inches apart.
 5. Keep soil moist until flower; then water less.
 6. Poor production with too much watering
 7. Harvest 120-150 days after planting.
 8. Pull up the entire plant and dig all around
 9. Let the pods dry on the vine.
- Seeds – Southern Exposure Seed Exchange

Experiment

Try new varieties and new vegetables

But, grow known varieties mainly

And weed, weed, weed

*An addiction to gardening is not all bad
when you consider all the other
choices in life . . . Cora Lea Bell*



Thank You!