

FALL VEGETABLE GARDENING FOR BEGINNERS

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- Owner of Southwest Victory Gardens
- Former Pima County Certified Master Gardener
- Former President of Tucson Organic Gardeners
- SmartScape Certified





WWW.SOUTHWESTVICTORYGARDENS.COM/DOCUMENTS

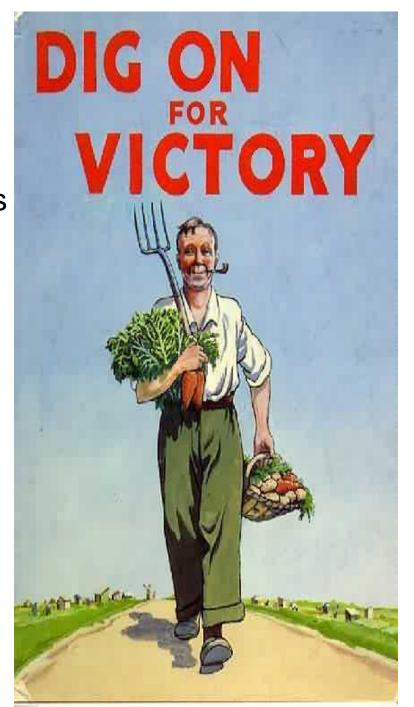
UPCOMING EVENTS IN TUCSON

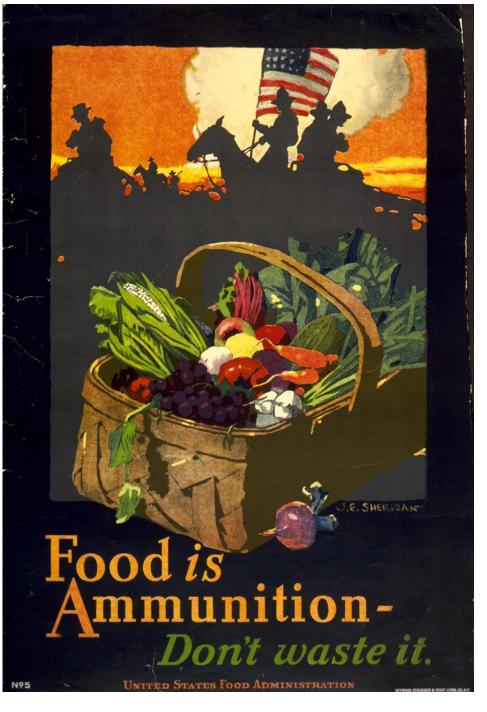
- Uncommon Vegetables September 17th Oro Valley Library
 - DIY: Make your own Potting Mix September 21st CFB
- Heirloom Seeds of Africa September 30th Dunbar Pavillion
 - DIY: Make your own Fertilizers October 5th CFB
- Vegetable Gardening for Beginners October 7th at Dunbar Pavillion
 - DIY: Make your own Worm Bin November 2nd CFB
 - DIY: Protect your Plants from Frost November 16th CFB

www.facebook.com/southwestvictorygardens/events

OUR PHILOSOPHY

- Healthy soil encourages healthy plants
- Healthy plants care for themselves
- Limit external inputs
- Reduce water usage
- Garden with our climate not against it
- Encourage a natural ecosystem
- Build community through gardening



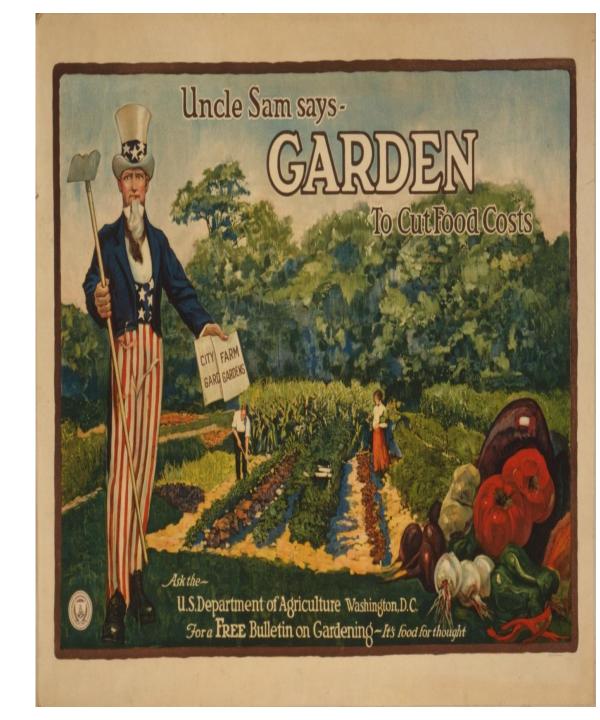


WHAT IS SUSTAINABLE GARDENING?

- Reducing or Eliminating the Use of Inputs
- Focus on improving soil
- Enhancement of entire ecosystem
- Reduction of water use
- Working Smarter

WHY GARDEN?

- It's Fun
- Variety
- Year Round
- Healthy
- Community
- Cost





THE CHALLENGES

- Learning Curve
- Poor Soil Quality
- Extreme Weather
- Water Scarcity/Quality
- Mother Nature/Bugs
- Maintenance



TUCSON ORGANIC GARDENERS PLANTING GUIDE

FOR TUCSON AND THE LOW DESERT

Jan 1 - Feb 15

FROM SEED

Arugula, Broccolt, Cabbage, Chinese Cabbage, Caultflower, Celery, Cliantro, Collards, Dtll. Fennel, Kale, Lettuce, Mustard Parsley, Bulb Onion (See Graphic), Potato

FROM SEEDLING TRANSPLANT

Artichoke, Broceoli, Cabbage, Chinese Cabbage, Caultflower, Celery, Clantro, Collards, Dill, Fennel, Kale, Lettuce, Mustard, Parsley, Spinach, Swiss Chard.

April 15 - May 31

FROM SEED

Amaranth, Basil, Cantaloupe, Cowpea, Cucumber, Malabar Spinach, Melon, Okra, Sorghum, Sweet Potato Slips, Summer Squash, Watermelon

FROM SEEDLING TRANSPLANT

Basil, Eggplant, Pepper

July 15 - August 31 FROM SEED

Bush Beans, Pole Beans, Corn (all types), Cowpea, Cucumber, Cantaloupe, l'Itols Onion (See Graphic), Pumpkin, Sorghum Summer and Winter Squash

FROM SEEDLING TRANSPLANT

Tomato (July 15 - Aug 15)

Oct 15 - Nov 15

FROM SEED

Beets, Carrots, Garlic, Greens, Lettuce, Mustard, Pea, Radish, Turnip, Wheat (December - January)

FROM SEEDLING TRANSPLANT

Broccoli, Cabbage, Chinese Cabbage, Caultflower, Celery, Cilantro, Collards, Dill, Fennel, Kale, Lettuce, Mustard Parsley, Spinach, Swiss Chard

LATE WINTER

SPRING

LATE SPRING

EARLY SUMMER

MONSOON

EARLY FALL

LATE FALL

March 1 - April 15

FROM SEED

Amaranth, Basil, Bush Bean, Corn (Sweet), Cucumber, Jerusalem Artichoke, Malabar Spinach, Meion, Pumpkin, Sesame, Sorghum, Summer and Winter Squash, Tobacco, Watermelon

FROM SEEDLING TRANSPLANT

Basil, Eggplant, Pepper, Tomato, Tomatillo

June 1 - June 15

FROM SEED

Pole Beans, Cantaloupe, Cowpea, Meion, Sweet Potato Slips

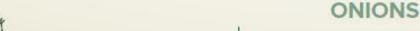
Sep 1 - Oct 15

FROM SEED

Arugula, Beet, Bok Choy, Broccoll, Brussels Sprouts, Cabbage, Carrot, Cauliflower, Celery, Chia, Chicory, Chinese Cabbage, Cliantro, Collards, Escarole, Fava, Garbanzo, Greens, Kale, Kohlrabi, Leek, Lentils, Lettuce, Mache, Mustard, Onion (See Graphic), Parsley, Parsnip, Pea, Radish, Rape, Rutabaga, Turnip, Spinach, Swiss Chard

FROM SEEDLING TRANSPLANT

Broccoli, Brussels Sprouts, Cabbage, Chinese Cabbage, Cauliflower, Celery, Cilantro, Dill. Fennel, Kale, Lettuce, Mustard, Parsley, Spinach, Swiss Chard



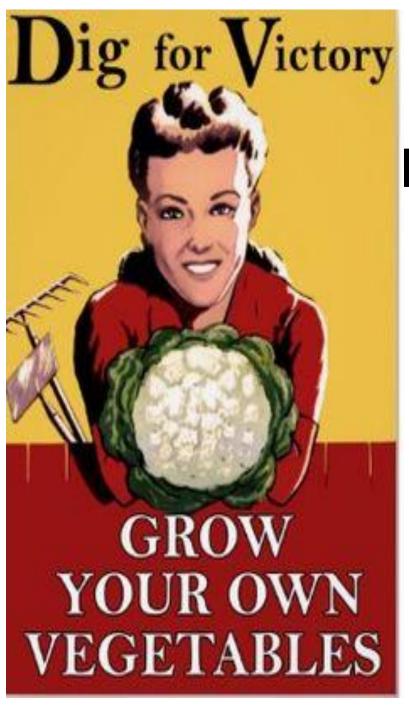
TOHONO G'ODHAM I'ITOIS MULTIPLIER ONION

July 15 - February 1



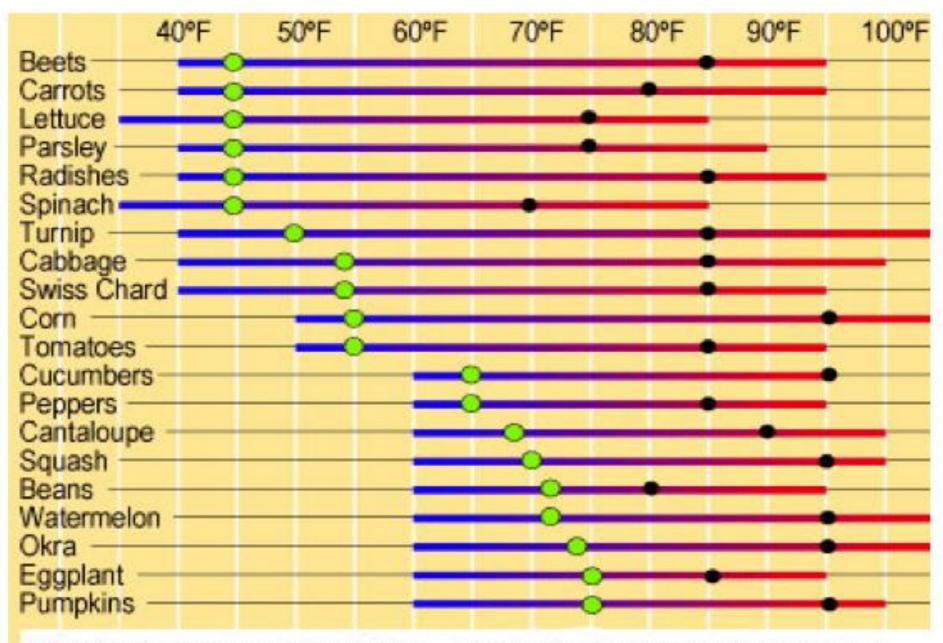






FALL/WINTER PLANTING SCHEDULE

- Leafy Greens and Root Crops
 - Early Fall: Sep Oct
 - Mid Fall: Oct Mid-Nov
 - Late Fall: Mid Nov Jan
 - Winter: Jan Feb

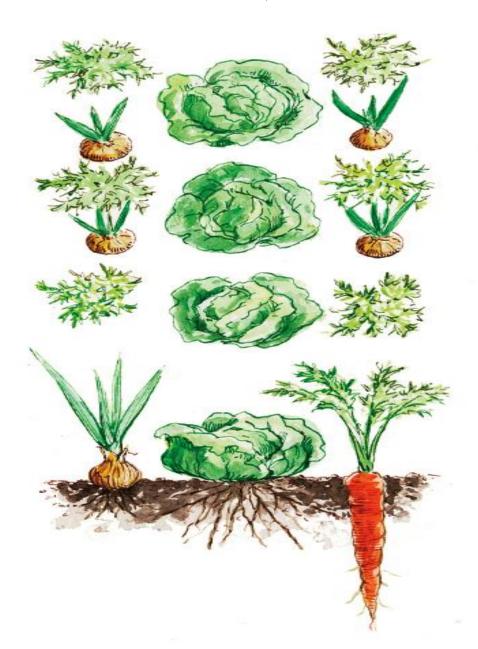


⁼Practical temp. for planting

Optimal temp. for germination

WHAT DOES A GARDEN NEED?

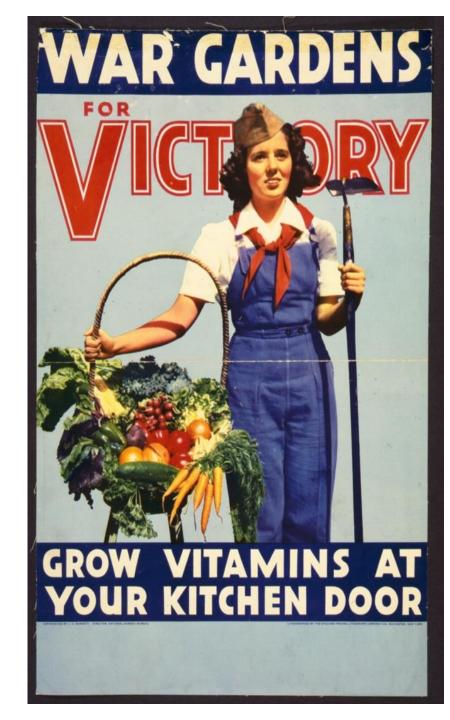
- •Sun
- Water
- Healthy Soil
- Seeds and Plants
- Garden Buddies
- Love



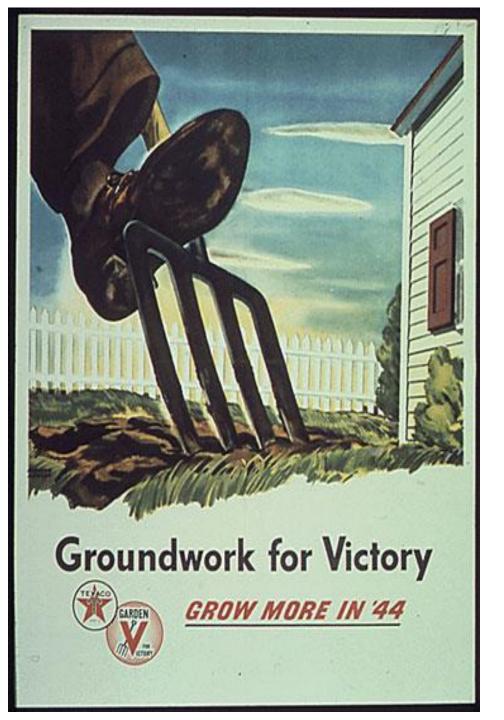
SITE SELECTION

HAPPY GARDEN REQUIREMENTS

- 6-8 Hours <u>Direct Sunlight</u>
- Need a Water Source
- Protection from predators
- Afternoon sun protection
- Cool and Warm Season
 Garden locations
- Close to Kitchen







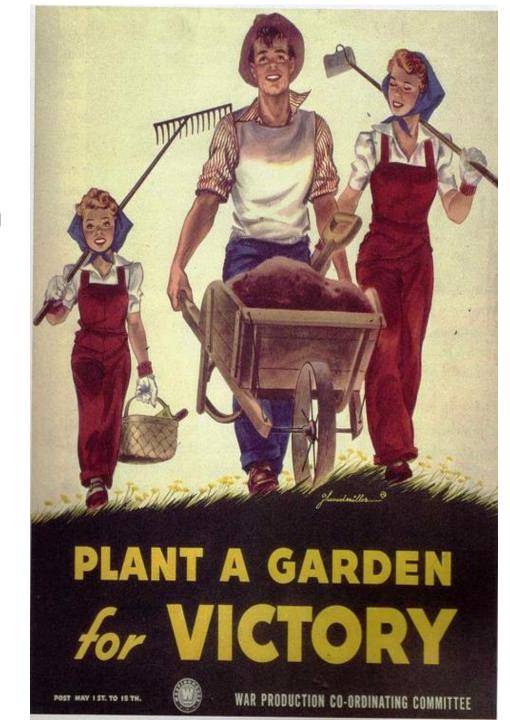
IN-GROUND SUNKEN BEDS

- Traditional growing method for the desert.
- Can be lower water use
- Requires more time and labor to achieve good soil quality.



RAISED BEDS

- Less work than sunken beds
- Start with better soil
- Higher initial cost
- Season Extender
- Roots can be an issue







CONTAINERS

- Can be placed on patios/decks
- More Frequent Water
- Limited Varieties
- Can be moved to

Protect from frost





Characteristics of Soil

Desert Soil

- Low Populations of Micro-Organisms
- Low in Organic Matter
- Lacks Nutrients
- Compacted
- High Ph



Healthy Soil

- High Population of Micro-Organisms
- High in Organic Matter
- No Toxins/Pesticides
- Balanced Nutrients/Ph
- Porous
- Good Tilth/Structure

The Soil Food Web Arthropods Shredders Nematodes Root-feeders Arthropods Predators Birds Nematodes Fungal- and bacterial-feeders Fungi Mycorrhizal fungi Saprophytic fungi Nematodes **Plants** Predators Shoots and Organic Protozoa Amoebae, flagellates, Matter and ciliates Waste, residue and **Animals** metabolites from Bacteria plants, animals and microbes. Third Fifth and higher

First trophic level: **Photosynthesizers**

Second trophic level:

Decomposers Mutualists Pathogens, Parasites Root-feeders

trophic level:

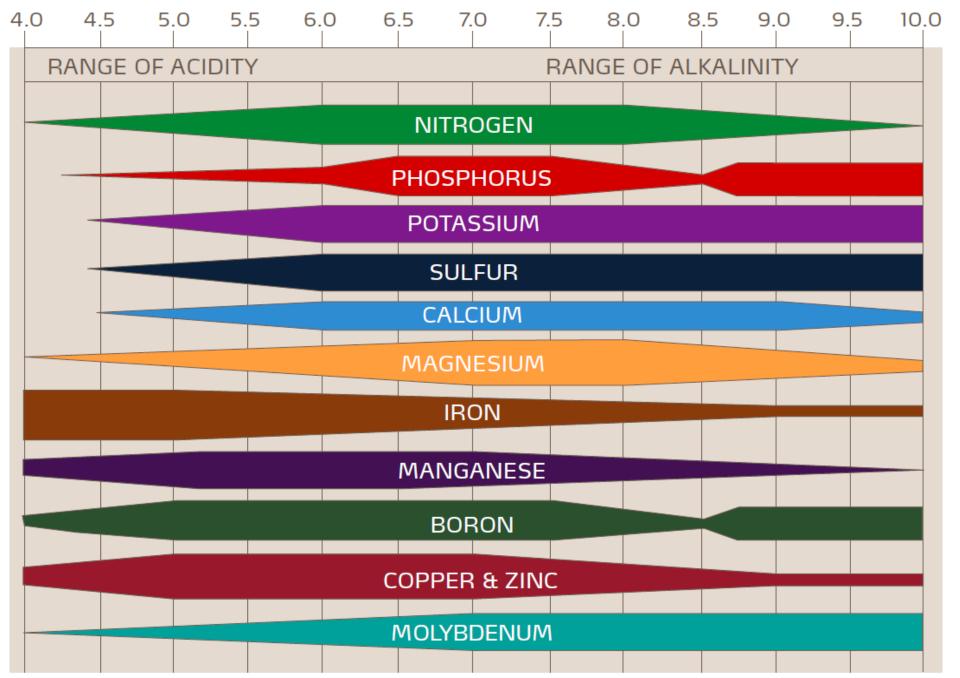
Shredders **Predators** Grazers

Fourth trophic level: Higher level predators

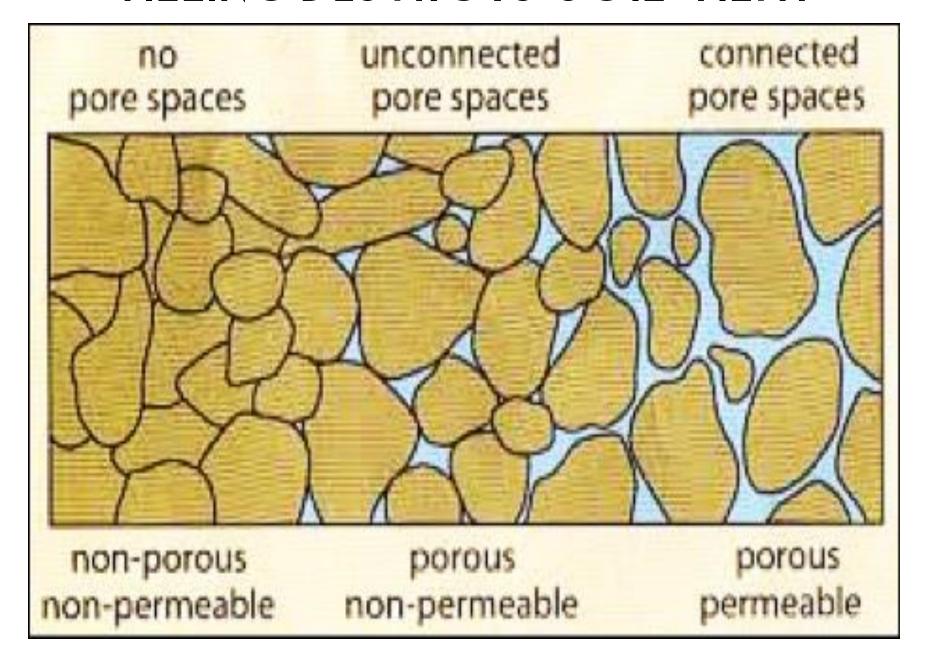
trophic levels: Higher level

predators

The Influence of Soil pH on Nutrient Availability

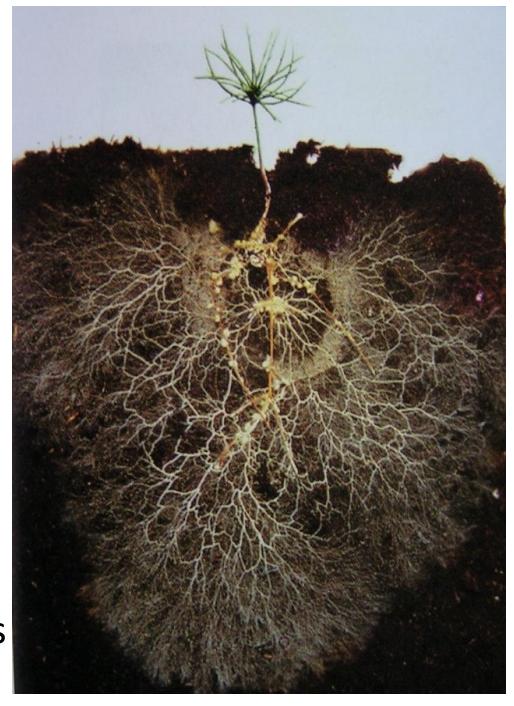


TILLING DESTROYS SOIL TILTH



BUILDING HEALTHY SOILS

- Eliminate Synthetic Pesticides/Fertilizers
- Encourage the Soil Food Web
- Use Compost and Compost Teas
- No Till or Low Till
- Use Supplements if Needed
- Grow Roots Not Plants





BUILD THE SOIL WITH COMPOST

- Adds Soil Life
- Improves Tilth and Water Holding Capacity
- Balances Ph
- Eliminates Food Waste
- For New Gardens,
 Replace 50% of Native
 Soil with Compost.

PROTECT AND FEED THE SOIL WITH MULCH

- Mulch, Mulch, Mulch
- Wood Chips for Trees and Shrubs
- Alfalfa Hay for Vegetable Gardens
- Avoid Straw
- Biologic not Geologic



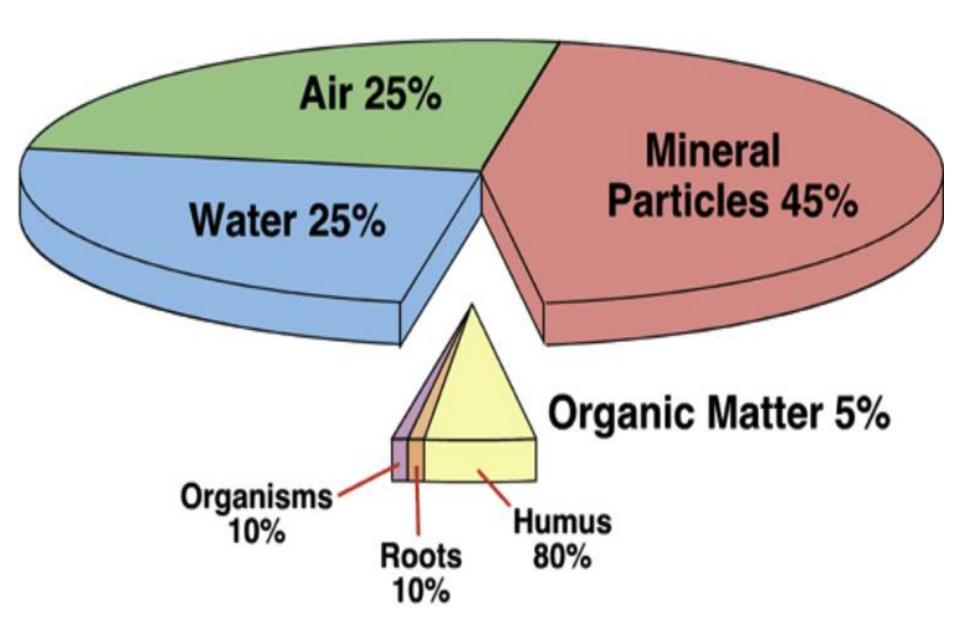
FILLING YOUR CONTAINER OR RAISED BED

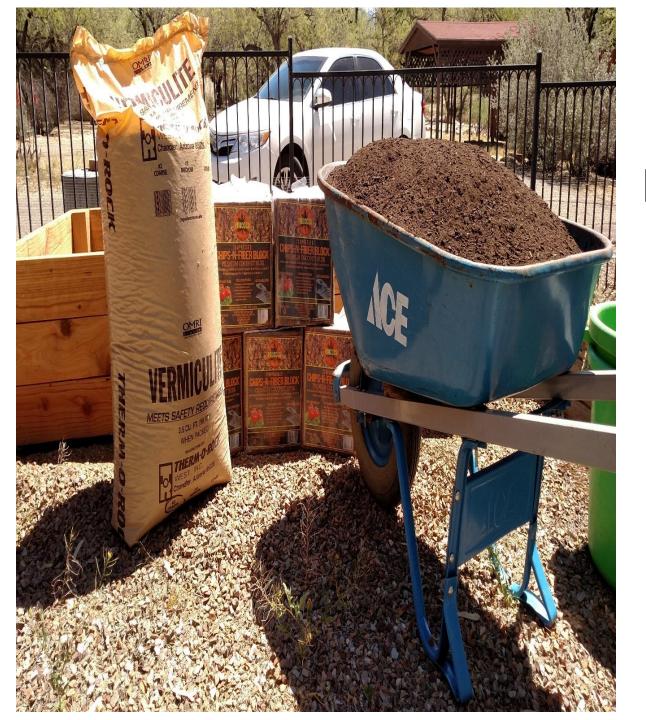
- Avoid Native Soil
- Avoid Peat Based Mixes
- Avoid Woody Mixes
- Avoid Synthetic Mixes
- Avoid Expensive Mixes
- Make your Own and Save
- Gravel Unnecessary
 - DIY: Make your Own

Potting Mix September 21st 9-11am!



WHAT IS SOIL?





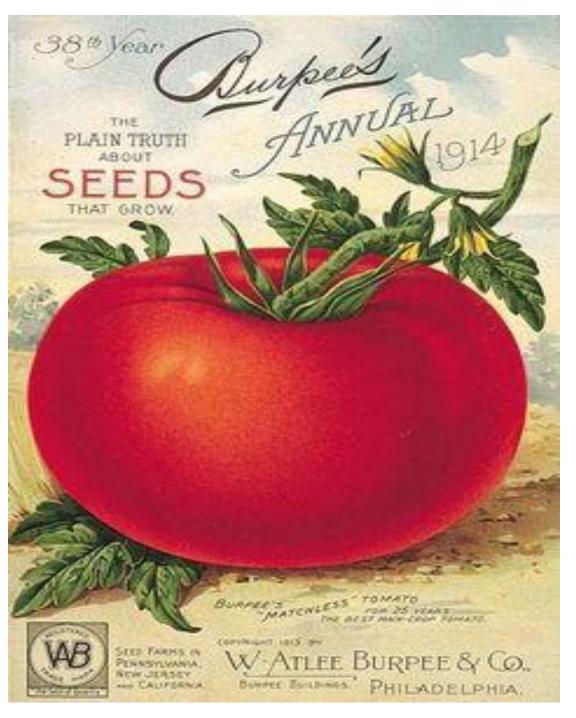
WHAT IS POTTING MIX?

- Compost
- Coco Coir*
- Perlite
- Vermiculite
- Pumice
- Fertilizers
- Amendments

POTTING MIX RECIPES:

- Seedlings & Small Pots
 - 2 parts coco peat
 - 1 part compost
 - − ½ part perlite
 - − ½ part vermiculite
 - Organic fertilizer
- Raised Beds
 - 5 parts compost
 - 4 parts coco fiber
 - − ½ part perlite
 - − ½ part vermiculite
 - Organic fertilizer

- Large Containers
 - 1 part coco peat
 - 2 parts compost
 - ½ part perlite
 - − ½ part vermiculite
 - Organic fertilizer
- Root Cuttings
 - 1 part coco fiber
 - 1 part perlite



SEEDS AND PLANTS

- Heirloom, Open
- Pollinated, Hybrid
- Fast Maturity Dates
- Drought Tolerant
- Hybrids can be Helpfu
- Use Local Sources
- You're not in Kansas anymore!

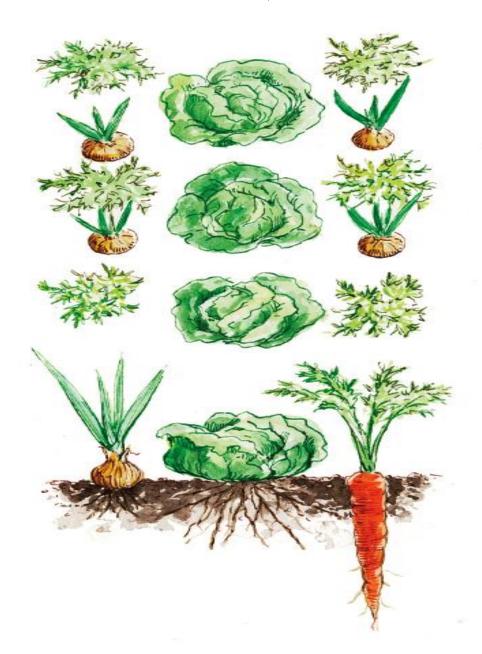
GROW NATIVE

- Native is Best
- Adapted is OK!
- Native Insects
- Native Wildlife



WHAT DOES A GARDEN NEED?

- •Sun
- Water
- Healthy Soil
- Seeds and Plants
- Garden Buddies
- Love



GARDEN PLANNING THE LOVE

- Plan Ahead
- Timed Planting
- Intensive Planting
- Companion Planting
- Crop Rotation
- Plant Diversity
- Native Plants
- Save Seed



TUCSON URBAN FARM ACADEMY

SPRING 2020



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ONIONS

TOHONO O'ODHAM I'ITOIS MULTIPLIER ONION

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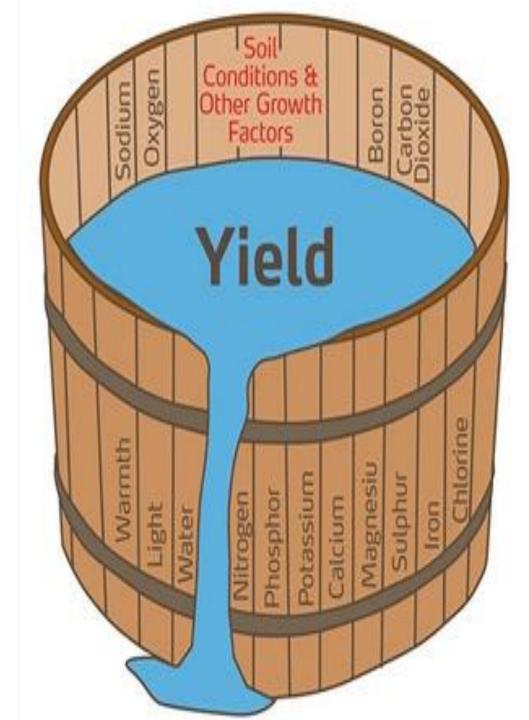






MAINTENANCE ISSUES

- Fall Insects
- Frost Protection
- Grow Healthy Plants
- Law of Limiting Factors
- Start with Low Impact
- Avoid Pesticides
 - DIY: Frost Protection
 Nov 16th 9-11am!





WWW.SOUTHWESTVICTORYGARDENS.COM/DOCUMENTS

RESOURCES

- Community Food Bank
- EcoGro
- Tanks Green Stuff
- ARBICO Organics
- Native Seeds/SEARCH
- Community Gardens

Low-cost garden items
 for sale downstairs





THANK YOU!

WWW.SOUTHWESTVICTORYGARDENS.COM

(520) 576-7085