

Herb Gardening in the Sonoran Desert

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



Our Philosophy

- Healthy soil encourages healthy plants
- Healthy plants require fewer pesticides and fertilizers (inputs)
- Limit external inputs
- Reduce water usage
- Garden with our climate not against it
- Encourage a natural ecosystem



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

What is an Herb?

- Any Plant used for Flavoring, Food, Medicine, or Perfume.
- Herbs: Leaves & Flowers
- Spices: Seed, Bark, Root



Growing Habits of Herbs



- Annual Herbs: Live Only One Season
- Biennial: Live Two
 Seasons
- Perennial: Live Longer than Two Seasons

The Mint Family

- Typically Perennial
- Grow well from Seedling Transplants
- From Dry, Rocky
 Mediterranean Scrubland
- Like well Draining Soil
- Readily Hybridize in the Wild



Basil



- Summer Annual
- Loves the Heat
- Grow from Seed or Transplant
- Italian, Lemon,
 Thai, Tulsi

Lavender

- Used in Soaps and Candles
- Difficult to Grow
- Likes Infrequent Watering
- Goodwin Creek



Lemon Balm or Bee Balm



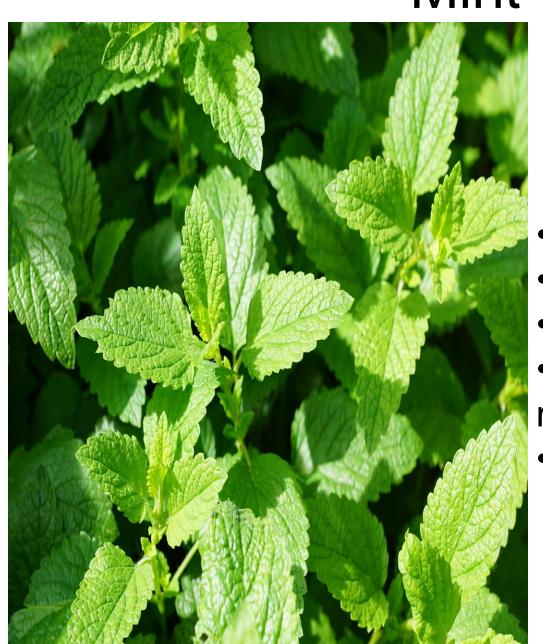
- Nice Citrus Notes
- Goes Well with Fruit.

Marjoram

- Related to Oregano
- Mild Floral Flavor
- Works Well with Traditional Herbs



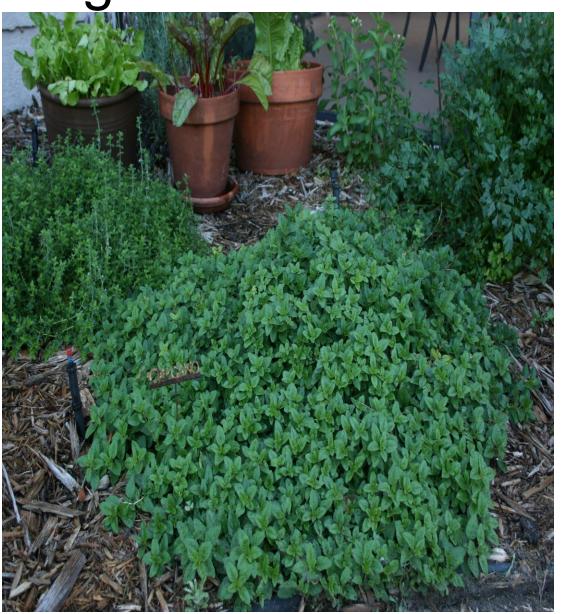
Mint



- Native to Damp Areas
- Plant Separately
- Propagates Easily
- Spearmint, Peppermint most Common
- Many Flavors

Oregano

- Spreading Herb
- Plant Separately
- Greek and Italian
- Many Flavors
- Divide Occasionally
- "Mexican" Oregano is actually a Verbena



Rosemary



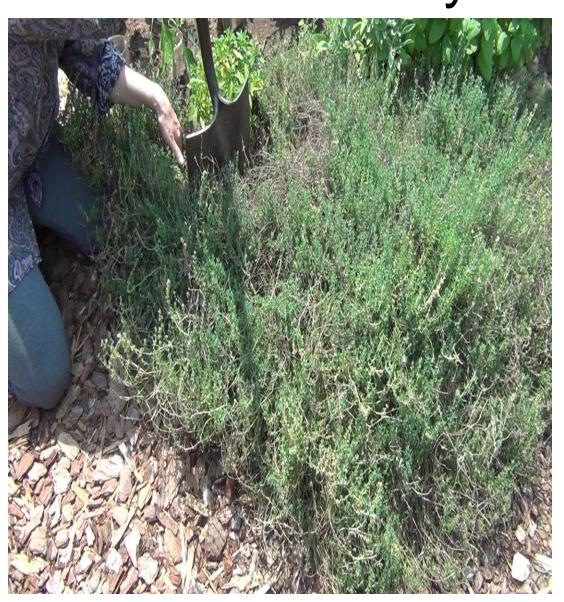
- Upright and Trailing Types
- Drought Tolerant
- Easiest to Grow

Sage

- Latin word for "health"
- Largest Genus in Mint Family (Salvia)
- Grows from seed or transplant
- Purple and Variegated Varieties Available



Thyme



- Slow Grower
- Many Types
- Common or "English" Thyme is Standard.
- Divide Occasionally

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Other Mint Family Herbs

- Bergamot
- Horehound
- Hyssop
- Perilla (Shiso)
- Savory



Carrot Family Herbs



- From Milder Climates
- Tend to be Cool Season
 Biennial or Annual
- Grow well From Seed
- Can be Used as Herb,
 Spice, or Vegetable
- Excellent Companion
 Plants

Celery

- Grown for Leaves and Ribs or Stalks
- More Leafy in our Climate
- Mirepoix Staple



Cilantro



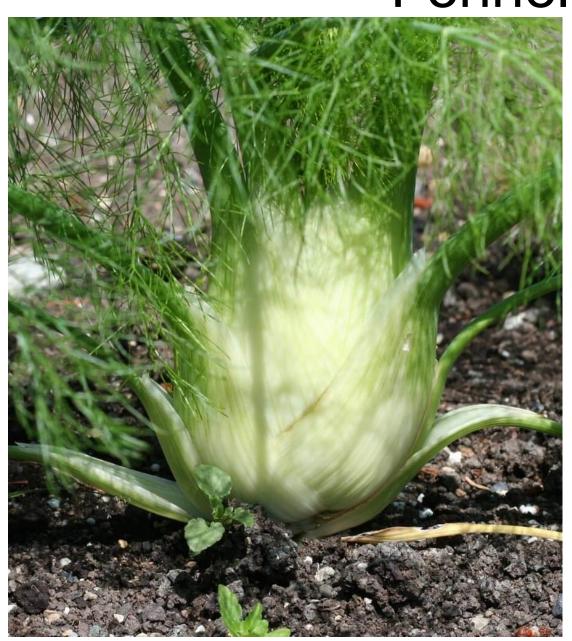
- World's Most
 Consumed Herb
- Grow "Slow Bolting" Types
- Harvest Seed as Corriander

Dill

- Great Butterfly Attractor
- "Mammoth" Type does Well
- Taste of Pickles
- Goes Well with
 Fish



Fennel



- Leaves used as Herb
- Stalk Used as a Vegetable
- Can Live Several Years
- Delicious Seed

Parsley

- Flat Leaf (Italian)
 Grows Well
- Curly Leaf (Hungarian) also good.
- Used Extensively in European Cooking
- Harvest Flat Leaf when Young and Curly when Mature.



Other Carrot Family Plants



- Angelica
- Chervil
- Culantro
- Lovage
- Mitusba

Laurel Family

- Avocado Leaf
- Bay Laurel
- California Bay
- Sassafras or File



Other Common Herbs



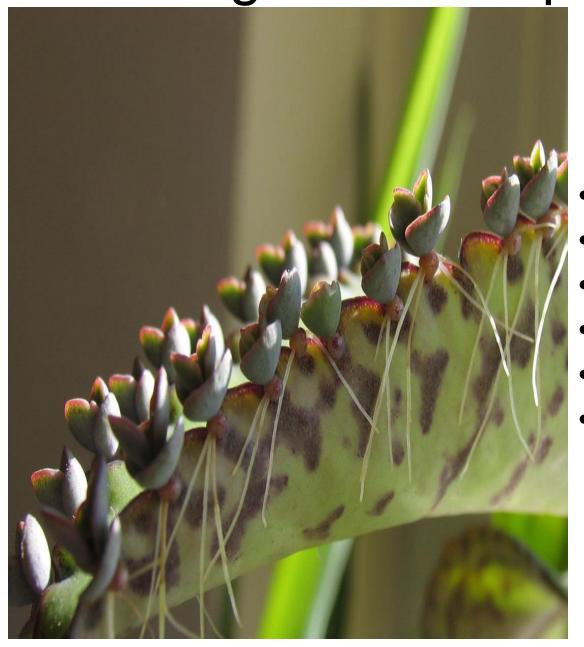
- Borage
- Epazote
- Lemongrass
- Lemon Verbena
- Nasturtium
- Tarragon

How to Plants Reproduce

- Sexual Propagation
- Asexual Propagation



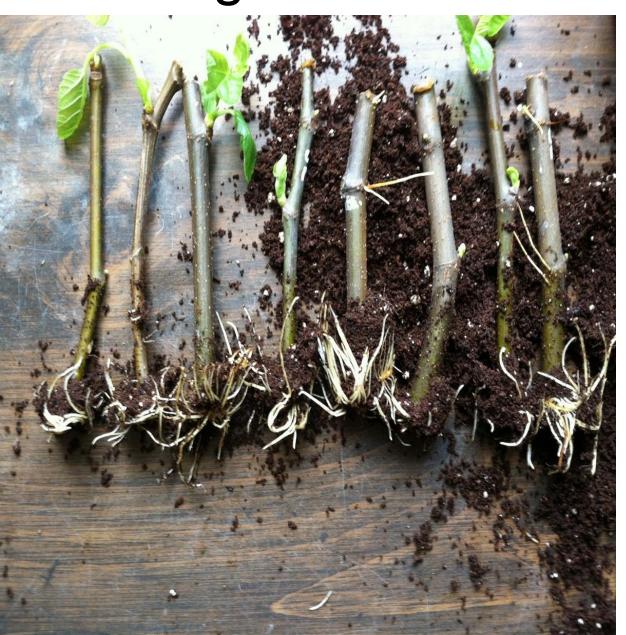
Vegetative Propagation



- Layering
- Division
- Bulbs and Corms
- Rhizomes & Stolons
- Grafting
- Cuttings

Advantages

- Cloning
- Head Start
- Bigger, Stronger,
 Faster



Division



- Perennial Plants
- Divide Every Few Years
- Mint, Oregano, Thyme,

Cuttings

- Stem of Mother Plant that Forms Roots When Cut
 - Versatile
 - Low Success Rate
 - Easy!



What are Cuttings



- Section of Stem, Leaf, or Root
- Forms New Roots
- Eventually new Shoots

Why Cuttings Work

- Adventitious Roots
- Latent Roots
- "De Novo" Roots



Cuttings from Herbs



- Most herbs can be propagated from cuttings
- Rosemary, Sage,
 Lavender, Geranuium,
 Marjoram, Lemon Verbena,
 and More!

Some Cutting Tips



- Prep Materials
 Beforehand
- Be Clean
- Select Appropriate
 Varieties
- Take Hardwood
 Cuttings in Winter

More Cutting Tips

- Use Rooting Hormone
- Keep Humid
- Maintain Moisture
- Trim Leaves
- Keep Constant



Preparing a Stem Cutting

- Take Hardwood
 Cuttings when Dormant
- Remove Leaves from Evergreen Cuttings
- Thickness of a Pencil
- Pay Attention to Direction of Stem



Growing Medium

- Must Support Root Growth
- Not Hold too Much Moisture
- Nutrients not Important
- 50% Coco Chips and Fiber
- 50% Perlite



Maintaining Cuttings



- Oxygen Exchange Important
- Low Light Ok
- Keep Warm
- Maintain Humidity

Moisture

- Use Cover or Create Humidity Chamber
- Mist Daily
- Gas Exchange
 Important



Hardening Off



- Gradually Decrease
 Misting
- Transfer to Potting Soil
- Move Outdoors

Resources

- Tanks Green Stuff
- •EcoGro
- Reading List
- Gardening Clubs
- Local Businesses
- Friends and Family







Thank you! www.southwestvictorygardens.com/Documents (520) 576-7085