


Herb Gardening

"Herban" Gardening for Urban Gardeners

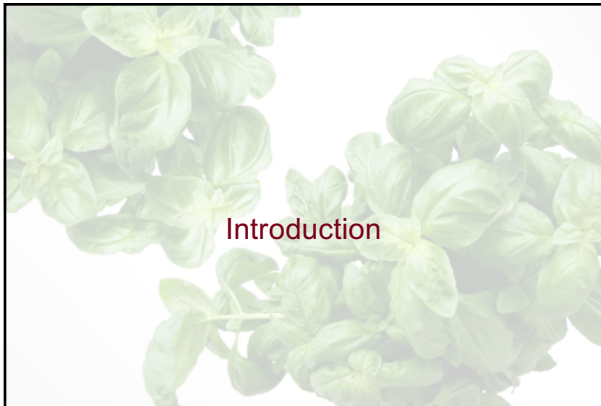
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Introduction





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What are herbs?

- *A plant or plant part valued for its medicinal, savory, or aromatic qualities*
- Pronunciation Guide
 1. In England & the UK, the "H" is pronounced (*"herb"*)
 2. In America, the "H" is silent (*"-erb"*)





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Why do herbs taste good?

- Essential Oils
 - Generated naturally as a part of growth in all parts of the plant
 - Repels pests
 - Attract pollinators & other beneficial insects



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Fine & Robust Herbs

The strength of the flavor

- | | |
|--|---|
| Fine (Mild) Herbs <ul style="list-style-type: none"> • Basil • Dill • Chives • Cilantro • Fennel • Mint • Oregano • Parsley | Robust Herbs <ul style="list-style-type: none"> • Rosemary • Sage • Thyme |
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Herbs or Spices

- Similarities
 - Both are obtained from plants
 - Both add flavor/aroma to food
 - Both are best fresh but store well
- Differences
 - Herbs = leaves
 - Spices = everything else (roots, flowers, fruits, seeds or bark)



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Common Herb Families

The Mint Family (*Lamiaceae*)

- Basil
- Catnip
- Lavender
- Mint
- Oregano
- Rosemary
- Sage
- Thyme



The Carrot Family (*Umbelliferae*)

- Chervil
- Cilantro
- Dill
- Fennel
- Lovage
- Parsley



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The Mint Family Characteristics

- Characteristics
 - Small shrub-shape
 - Square stems
 - Small *bilabiate* ('2-lipped') flowers
 - Flowers do not affect leaf flavor
- Mints are Herbs
 - Valuable for leaves
 - Tolerates excessive heat & dry soil
 - Can be invasive



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The Carrot Family Characteristics

- Characteristics
 - Upright & leggy habit
 - Furrowed & U-shaped stems
 - Flat *umbellifer* ('umbrella-like') flower clusters
 - Deep taproot
- Carrots as Herbs
 - Valuable for leaves & seeds
 - Prefer regular watering, with deeper & looser soil





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Choosing Plants



- Considerations
 - How much sun do you get?
 - What do you like eating?
 - How much do you need?
- Recommendations
 - Grow from seed indoors (*Feb-Mar*) **OR** purchase transplants (*May-June*)
 - Choose unique flavor varieties
 - Consider hard-to-find herbs

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Growing Requirements

- Ample Sunlight
 - Full sun = **8+ hours** per day
 - Part sun = **4-6 hours** per day
- Regular Water
 - Use clean (potable) water
 - Water deeply when needed
- Healthy Soil
 - Loose texture with organic matter
 - Minimal additional fertilizer required

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Care & Maintenance

- Care
 - Apply mulch around plant
 - Remove damaged stems & yellowed leaves
 - Water in the morning
- Maintenance
 - Pinch (mint family) herbs to encourage bushy growth
 - Remove flowers prior to blooming
 - Harvest regularly



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Pinching Demonstration (Mint Family)



Back To Basics: How to Prune Basil Plants
Source: YouTube, Runtime: 4:33


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Pests & Problems

- Few pests bother herbs
 - Cutworms (young plants)
 - Aphids
 - Spider mites (hot weather)
 - Rusts & mildew (fungi) on mint family herbs
- Identify the source of the problem & use *Integrated Pest Management* practices




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Harvesting


- Harvest mid-morning
- Use clean hands, tools & containers
- **Mint family herbs**
 - Harvest from the top-down
 - Cut stems to another set of leaves
 - Leave at least 4 inches
- **Carrot family herbs**
 - Harvest from the outside-in
 - Cut stems to the base of the plant
 - Cut less than 1/3 of the stems



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Using Culinary Herbs

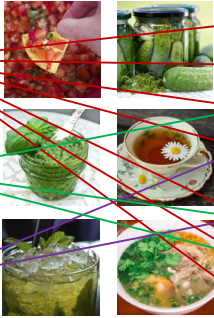


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Using Culinary Herbs

- Fresh
 - Garnish
 - Salads
 - Seasonings
- Dried
 - Sauces & purees
 - Soups & Stews
- Frozen
 - Teas
 - Cocktails



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Cooking with Herbs



- Flavor
 - Cut or bruise leaves to release flavor
 - Dried herbs are stronger than fresh herbs
 - Ground herbs work faster than whole herbs
- Cooking Methods
 - Raw Recipes: add herbs & rest for 1-2 hours
 - Fast Recipes: add herbs at the end
 - Slow Recipes: add hardy herbs at the start & remove before serving
- Substitutions
 - 3 units fresh = 1 unit dried
 - 1 unit whole = ¼ unit ground




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Short Term Storage – Fresh (Tender) Herbs

- Tender Herbs have soft stems and the leaves bruise easily
 - Basil, Cilantro, Dill, Mint, Parsley
- Good for 5-7 days
- Steps
 - Trim stem ends & put in jar of water (like a vase of flowers)
 - (Using within 1 day)
Leave on the counter
 - (Using within a week)
Cover with a plastic bag & store in the refrigerator*

* NOTE: don't store basil in the refrigerator

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Short Term Storage – Fresh (Hardy) Herbs

- Hardy Herbs have woody stems and sturdy leaves
 - Chives, Oregano, Rosemary, Sage, & Thyme
- Good for 5-14 days
- Steps
 - Wrap in damp paper towel
 - Put wrapped herbs in plastic zip-top bag
 - Store in the refrigerator




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Long Term Storage – Drying Herbs

- Good for 1-3 years
- Store dried herbs in a dark, cool & dry place

- Drying Methods
 - Hang in bunches
 - Use dehydrator
 - Use oven
 - Use microwave



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Long Term Storage – Freezing Herbs

- Good for 6 months-1 year
- Add to cooked recipes

- Steps
 - Freeze individual leaves on a sheet pan & store frozen leaves OR
 - Chop herbs and freeze in ice cube trays (*optional*: top with water or olive oil)
 - Store frozen herbs in zip-top baggies



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Common Culinary Herbs

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Basil

Origin

- Southeast Asia, India

Categories



- Mint Family
- Annual, Tender, Fine

Culinary Uses

- Mediterranean food (sweet basil)
- Thai & Indian food (Asian basil)

Comments

- Lots of flavor, shape, and color varieties (e.g. *lemon, ruffled, red*)
- Benefits from aggressive pinching
- May be susceptible to powdery mildew
- There are 2 kinds of basil
 - Sweet (*Genoese*) basil
 - Asian basil

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Chives

Origin

- Europe, Asia

Categories



- Onion Family
- Perennial in MN, Hardy, Robust

Culinary Uses

- Garnish (food), fresh salads

Comments

- Multiple flavor options available (e.g. *garlic chives*)
- Flowers are edible
- Reseeds somewhat aggressively
- Can also propagate through divisions

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Cilantro

Origin

- Southern Europe, Middle East

Categories


- Carrot Family
- Annual, Tender, Fine

Culinary Uses

- Latin America, Southeast Asian

Comments

- Sometimes called "Chinese parsley"
- *Bolts* (flowers) in hot weather
- The seeds are called coriander and are used in Indian cooking
- May taste soapy to some people




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Mint

Origin

- Middle East, North Africa

Categories



- Mint Family
- Perennial (some in MN), Hardy, Fine

Culinary Uses

- Middle Eastern (Greek), Southeast Asia (Indian)
- Fresh salads, tea, jellies

Comments

- More than 35 flavor varieties
- Can be invasive; grow in pots
- Propagate through cuttings or root divisions
- Can be overwintered indoors

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Oregano

Origin

- Mediterranean

Categories

- Mint Family
- Perennial, Hardy, Fine

Culinary Uses

- Mediterranean, Latin American

Comments

- Can be invasive; grow in pots
- Propagate through cuttings or root divisions
- Can be overwintered indoors
- Best used dried
- Sweet marjoram (origin: North America) is similar to oregano but has a milder flavor




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Parsley

Origin

- Southern Europe

Categories



- Carrot Family
- Biennial, Tender, Fine

Culinary Uses

- French, Cajun
- Garnish, sauces, fresh salads, tea

Comments

- Eating raw parsley after a meal has been thought help control bad breath
- There are 2 kinds of parsley
 - Flat-leaf (Italian) parsley for cooking
 - Curly parsley for garnish

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Rosemary

Origin

- Spain, Mediterranean

Categories



- Mint Family
- Perennial, Hardy, Robust

Culinary Uses

- Italian, French
- Often paired with meats
- Soups, stews, sauces (long cooking time)

Comments

- Use sparingly; strong taste
- Can be overwintered indoors
- Propagate through cuttings or root divisions

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Sage

Origin

- Mediterranean (Syria)

Categories



- Mint Family
- Perennial, Hardy, Robust

Culinary Uses

- Italian, Middle Eastern, British, American
- Thanksgiving stuffing, butter sauce, potatoes, beans

Comments

- Use sparingly; strong taste
- Can be overwintered indoors
- Ornamental sage (*Salvia*) should not be used as culinary sage
- Sagebrushes & sageworts (*Artemisia*) should not be used as culinary sage

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Thyme

Origin

- Mediterranean

Categories



- Mint Family
- Perennial, Hardy, Robust

Culinary Uses

- Mediterranean, Italian, French, American
- Often paired with meat, poultry, fish & vegetables
- Works well with long cooking times

Comments

- Over 400 varieties of thyme; only some of which are used for culinary
- Can be overwintered indoors
- Propagate through cuttings or root divisions

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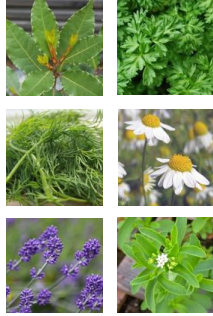
Other Culinary Herbs

Leaves

- Bay
- Chervil
- Dill
- Fennel
- Lemongrass
- Marjoram
- Stevia
- Tarragon

Flowers

- Borage
- Chamomile
- Lavender
- Nasturtiums
- Roses
- Violets



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Learn More

PRO-TIP: Google "site:edu Herbs" (or site:.gov) for research-based advice

Extension Websites

- U of MN Extension:
<https://extension.umn.edu/vegetables/growing-herbs-home-gardens>
- Ramsey County Master Gardeners:
<http://www.ramseymastergardeners.org/>

Online References

- University of Maryland Extension:
<https://extension.umd.edu/hgic/topics/culture-care>
- University of Illinois Extension:
<https://web.extension.illinois.edu/herbs/intro.cfm>
- Clemson Cooperative Extension:
<https://hgic.clemson.edu/factsheet/herbs/>

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