



Oregano

# OREGANO

## A Year Studying 7 Varieties

Horticulture Study Group

Pioneer Unit – Herb Society of America



# Horticulture Study Group - 2020

Co-Leaders: Madeline Johnson and Phoebe Lake

## Members

- Barbara Solis
- Becky Nichols
- Betty Pior
- Bonnie Lout
- Cammie Beierle
- Cindy Nash
- Connie Gwyn
- Diana Sellers
- Ginger Heath
- Jana Reinhart
- Joann Reichle
- Joanna Hagler
- Kathe Forrest
- Pam Traylor
- Royceanna Kendall
- Susan Yancey



# Topics Covered at Monthly Meetings\*

- Botany / Chemistry of Origanum
- Cultivation / Propagation
- Pests / Diseases
- Harvesting / Storing
- Folklore / History
- Culinary and Medicinal Uses



\*Most of our meetings were online in 2020 due to the pandemic.

# Botany / Chemistry

## Origanum (pronounced ō – rĭg - à – n ŭ m)

- Family: Lamiaceae (mint)
- > 40 species
- Native to Mediterranean and Eurasia
- Key Chemical Properties
  - **Carvacrol** provides the sharp, pungent flavor that we know as oregano
  - **Sabinene hydrate** provides the sweet flavor associated with marjoram
  - **Thymol** produces the thyme-like aroma



# Oregano Pretenders

These plants contain **carvacrol**. The flavor associated with oregano.

## Mexican Oregano

*Lippia graveolens* or *poliomentha longiflora*



## Cuban Oregano

- *Plectranthus amboinicus* (Lour.) Speng



# Cultivation (back to origanum)

Use the acronym PLANT....

- Place
  - ✓ Plant in a raised area with good drainage and friable (loose soil).
- Light.
  - ✓ Full sun, but in the heat of the summer they appreciate some shade.
- Air.
  - ✓ Good air flow -- keeps the leaves dry - Minimum of 2' away from other plants
- Nutrients.
  - ✓ Need very little fertilizer – every few months during the growing season.
  - ✓ Need very little water once established
- Time.
  - ✓ Last, but not least, plants need time!



# Cultivation in Containers

- Min: 16" diameter and 12" tall
- Good drain holes
- Requires more frequent watering and fertilizing
- Start with good potting soil that does not have too much peat
- Place in sun with afternoon shade



# Propagation

- Seed
- Cuttings



Seedlings of Greek and Zatar



# Pests & Diseases

- Very few but here is what to look for. . .



Mint Rust



Botrytis Rot



Spider Mites



Aphids



Rhizoctonia Root Rot

Prune for better air circulation  
Improve drainage  
Destroy the plant if it has botrytis or rhizoctonia root rot  
Remove damaged leaves if rust fungi

Bag and discard (do not compost)  
diseased plant



Mealybugs

Hard spray of water  
Insecticidal soap  
Neem oil/horticultural oil  
Spinosad

# Harvest Timetable

- Culinary -- Just before flowering
- Ornamental -- When in full bloom
- Expect 2 harvests per season for culinary uses
- When coming into bud, cut back  $\frac{1}{3}$  to  $\frac{1}{2}$
- Cut back again in Fall
- Tip harvest at any time during the growing season
- Harvest in the morning when the oils are their peak



Oregano

# Drying

- Dried oreganos retain flavor better than many other herbs
- Wash the harvested oregano in cold water
- Shake dry before starting any of the drying processes
  - (You don't want to cook the leaves.)
- Drying Options
  - Air Drying
  - Oven
  - Dehydrator
  - Microwave
- Leaves are dry when they crumble in your hand

# Storing

- Dried oreganos are stored in glass jars in a dark, dry area
- Fresh oreganos can be stored as a frozen oil concentrate
  - Pack 2 cups of fresh leaves with ½ c olive oil in a food processor
  - After processing, freeze in plastic bags
  - Good for 1 year if kept frozen



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# Folklore / History



- The gods love origanums
  - Greek god, Aphrodite, grew sweet marjoram in her garden on Mount Olympus as a symbol of happiness
  - Roman god, Venus, associated origanums with bringing love
  - Egyptian god, Osiris, considered it sacred so it was woven into crowns to be worn during rituals
- In nosegays it symbolizes happiness for betrothed couples and lovers
- Marjoram planted in graveyards brings peace to souls of the dearly departed
- Marjoram oil and fresh leaves in bath water relaxes the body
- Syrian oregano (*Origanum maru*), Bible Hissop, purifies.
  - “Purge me with hyssop, and I shall be clean: wash me and I shall be whiter than snow.” Psalms 51: 7
- Oregano was brought to the U.S. by GIs returning from World War II.



# Non-Culinary Uses of Oregano

- Rich in Vitamins A, C, K and dietary fiber
- Food preservative
- Insect repellent
- Essential oil in a bath for relaxation
- Stems heated in a bag can be applied to relieve arthritic pain
- Oregano teas can soothe sore throats and stuffy noses

Visit the AROMAVITA Store ★★★★★ 414  
Aromavita Oregano Oil Soap - Natural Plant Therapy Hand Soap or Body Wash - Topical Therapeutic Skin Cleanser for Acne, Eczema, Foot and Nail Problems

Amazon's Choice for 'oregano oil soap'



Brand: Bakto Flavors ★★★★★ 8  
OreganKnow Healing Ointment, 1 OZ (30 g)



# The Study Objective

- Compare the growth habits of 7 varieties
  - Rate of growth
  - Plant form (in terms of height and diameter)
  - Tendency to flower
  - Preference for ground vs. container
  - Overall performance in our region



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# Measurements (monthly)

- Plant measurements
  - Tallest portion of plant
  - Widest portion of plant
  - Typical leaf size
- Soil and light measurements
  - pH
  - Moisture
  - Light
- Photos



Oregano

*Photos taken in May and June*



Oregano

Hilltop



Kirigami



Marjoram



Hot & Spicy



# Varieties Studied

- ❖ Hilltop
- ❖ Kirigami
- ❖ Sicilian
- ❖ Italian
- ❖ Marjoram
- ❖ Greek
- ❖ Hot & Spicy



- ❖ \*Zatar



Italian



Greek



Sicilian





# The Study

	GROUP A1	GROUP A2	GROUP B1	GROUP B2
HILLTOP	G	C	C	G
KIRIGAMI	HB	C	C	HB
SICILIAN	C	G	C	G
ITALIAN	G	C		
GREEK			G	C
HOT & SPICY	C	G		
MARJORAM			G	C

G –ground planting

C – container planting

HB -- hanging basket planting



Oregano

It's not always pretty!



# Sicilian (container)



# Sicilian (ground)



# By the numbers...

**Sicilian Oregano (7 observations)**

**Average Rate Change in Growth**

	All	Ground (n=3)	Container (n=4)
Height (Main Stem)	1.6	1.8	1.4
Diameter (at greatest width)	2.0	2.8	1.5

Reading the numbers:

The average height of \_\_\_ observations was \_\_\_ times taller in November than it was in April.

# Hot & Spicy (Container)



# Hot & Spicy (Ground)



# By the numbers...

## Hot & Spicy Oregano (4 observations)

### Average Rate Change in Growth

	All	Ground (n=3)	Container (n=3)
Height (Main Stem)	1.5	1.4	1.6
Diameter (at greatest width)	3.2	2.0	4.4

# Italian (container)



# Italian (ground)



# By the numbers...

**Italian Oregano (4 observations)**

**Average Rate Change in Growth**

	All	Ground (n=2)	Container (n=2)
Height (Main Stem)	2.6	2.6	2.5
Diameter (at greatest width)	2.7	2.2	3.2



# Marjoram (container)



# Marjoram (ground)



# By the numbers...

**Marjoram (3 observations)**

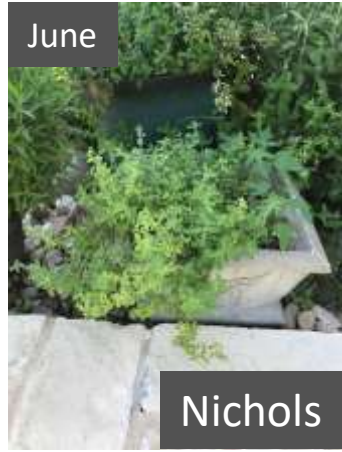
**Average Rate Change in Growth**

	All	Ground (n=1)	Container (n=2)
Height (Main Stem)	1.7	0.7	2.2
Diameter (at greatest width)	2.4	2.6	2.6

# Hilltop (Container)



Gwyn



Nichols



Gwyn

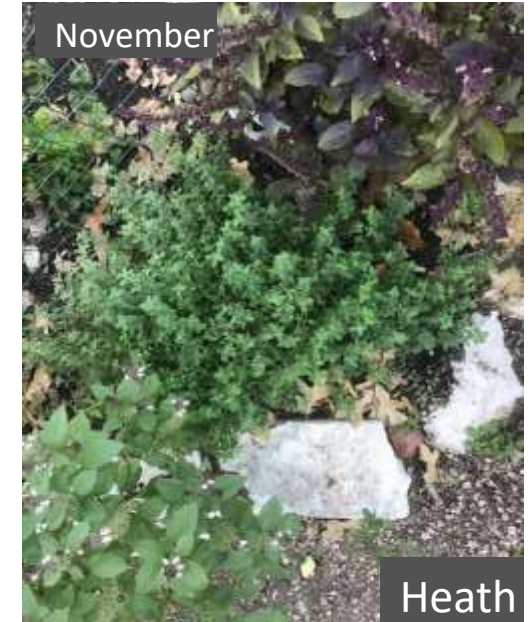


Nichols

# Hilltop (Ground)



Heath



Heath



Johnson



Johnson

# By the numbers...

## Hilltop Oregano (7 observations)

### Average Rate of Change in Growth

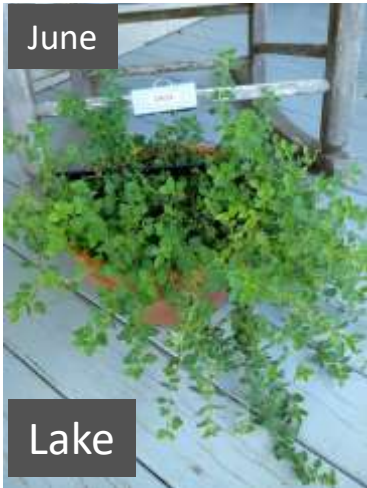
	All	Ground (n=3)	Container (n=4)
Height (Main Stem)	1.5	1.4	1.5
Diameter (at greatest width)	2.3	2.3	2.3

# Greek

Ground



Container



From Seed



# By the numbers...

**Greek Oregano (3 observations)**

**Average Rate Change in Growth**

	All	Ground (n=1)	Container (n=2)
Height (Main Stem)	2.4	3.3	1.9
Diameter (at greatest width)	3.0	2.9	3.1

# Zatar (from seed)



# Kirigami (November)





# Key Takeaways

- Kirigami is very difficult to grow
- Slow to flower
  - Italian
  - Sicilian
  - Hot & Spicy
- Vigorous Growers
  - Hot & Spicy
  - Greek
  - Italian
- All varieties did very well in containers
- All varieties continued to perform well following the polar vortex



Oregano

We had fun!

# HSG Member Sharing

# Culinary Uses – Tasting the Difference

- Oreganos differ in flavor intensity
- Wide range of culinary uses from salads and appetizers to main dishes
- The Pioneer Unit Culinary Group collected recipes for you to try
- Time for your taste test
  - 6 different oregano spreads on your table
  - Each is labeled
  - We will poll you for your top 2 after you finish tasting