



LAVENDER:

A yearlong study of Lavender by the
Horticulture Study Group, Pioneer Unit, HSA
2025

HSG Leaders: Madeline Johnson & Phoebe Lake



MEMBERS OF THE HORTICULTURE STUDY GROUP

Growers:

- Courtney Kieke
- Deb Pruitt
- Diana Sellers
- Irene Spurrier
- Jana Rinehart
- Joanna Hagler
- Julia Johnson
- Karen Springer
- Leslie Conrads
- Linda Rowlett
- Martha Neva
- Royceanna Kendall
- Shawn Helm
- Susan Bame
- Vickie Wiste
- Wendy Matthews

Auditors:

- Cammie Beierle
- Dawn Wilson
- Ginger Heath
- Sally Reynolds



Some of our members visited Hill Country Lavender Farm in Blanco, Texas this past June.

BOTANY & CHEMISTRY



Presented by Phoebe Lake & Wendy Matthews

DO PLANT NAMES MATTER?

Yes, they do!

Genus, then species

Lavandula angustifolia

Variety differs slightly from the species-

Lavandula dentata var. candicans



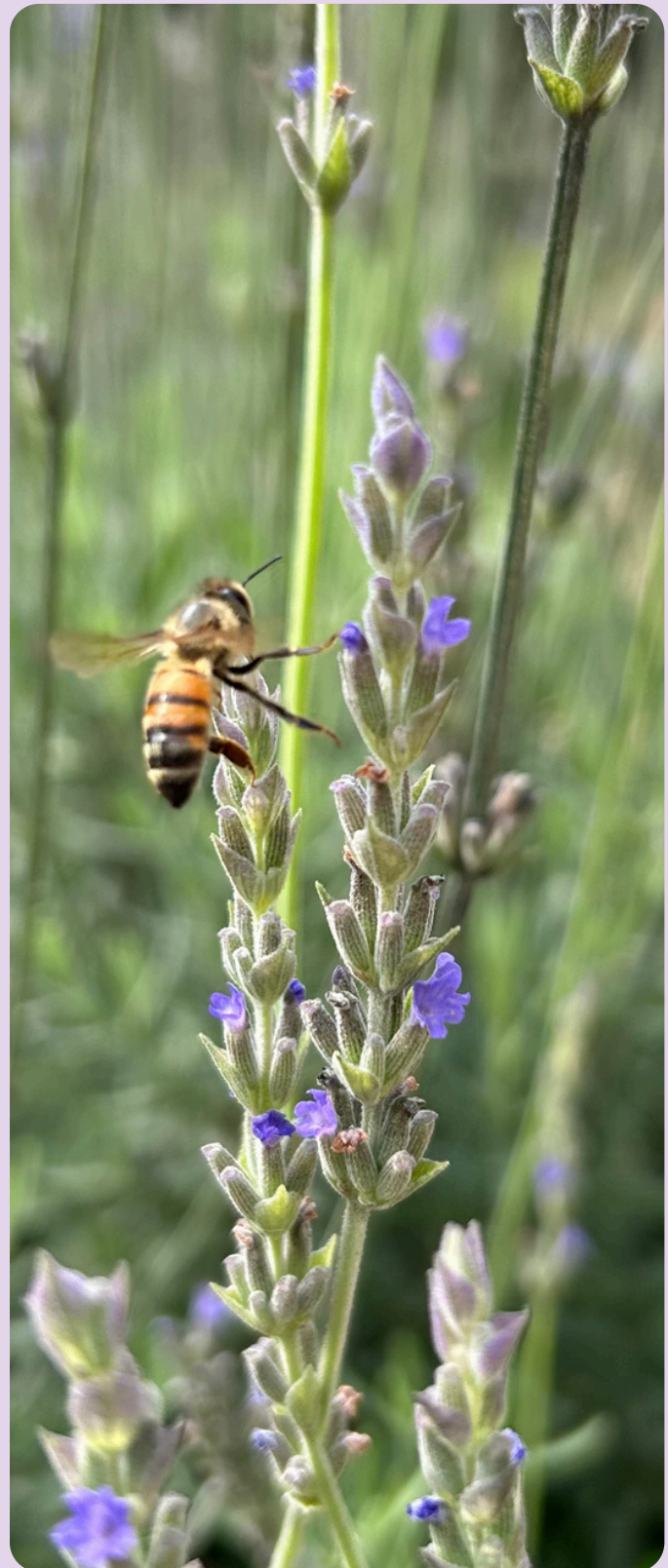
A cultivar/selection-

L. angustifolia 'Munstead'

Subspecies occurs in a different geographic area-

Lavandula stoeches ssp pendunculata

LAMIACEA FAMILY



- Lamiaceae have square stems, aromatic foliage, and leaves are simple (not separated into leaflets) and are opposite on the stem.
- There are about 45 species of Lavender with 450 varieties and cultivars.
- Lavender is considered a sub-shrub which means it's mostly herbaceous, but is woody at the base.
- The leaves are elliptical and silvery-green and are covered in fine hairs, which protect the plant from moisture loss and herbivorous animals.

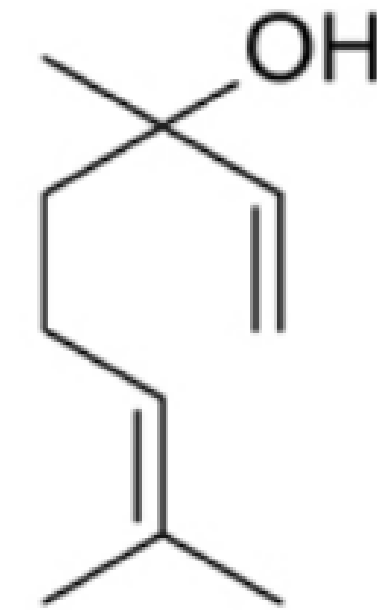
SOME LAVENDER VARIETIES

Common Name	Botanical Name	Characteristics	Varieties
English Lavender Old Fashioned Lavender True Lavender	<i>L. Angustifolia</i> <i>L. officinalis</i>	Winter hardy, can be an annual, compact growth habit. Less tolerant of heat and humidity. Best for culinary, medicinal, perfumes	Munstead (seed) Hidcote (seed) Vera (seed) Ellagance; Super Blue
French	<i>L. Dentata</i>	Annual, pretty fragrant foliage Not cold hardy	
Portuguese aka Spike	<i>L. latifolia</i>		
Spanish (sometimes called French)	<i>L. Stoechas</i>	Tolerates heat; hardy; "rabbit ear" blooms don't have a strong fragrance	Otto Quast Kew Red
Fernleaf aka French Lace	<i>L. Multifida</i>	Profuse showy blooms but not strong lavender fragrance. Hardy	
Sweet	<i>L. Heterophylla</i>	Somewhat tender, May/June bloomer, Good cut flowers, half hardy	
L. X gingsii		Somewhat tender; Heat tolerant	Goodwin Creek
Lavandin	<i>L. X intermedia</i>	Naturally occurring hybrids; Handles heat, 3-4' tall	Provence; Grosso Phenomenal Bridget Chloe

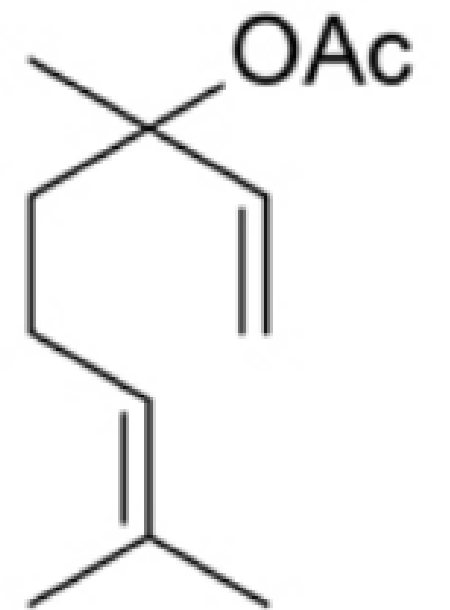
LAVENDER ESSENTIAL OIL

Why do Herbs Smell?

- Monoterpenes constitute about 90% of the compounds in plant essential oils
- Tend to be soluble in oil and ethanol but not in water
- Target nervous system of plant pests
- A number of monoterpenes have pharmacological properties



Linalool



Linalyl acetate

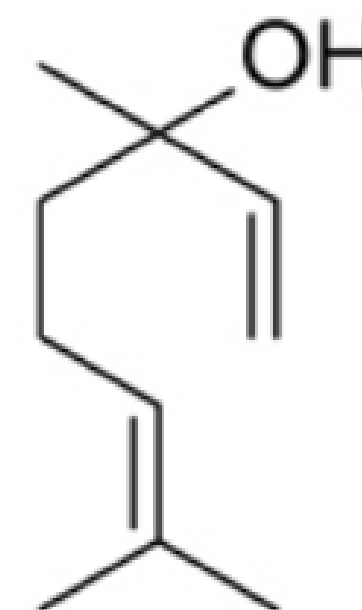


MAJOR COMPOUNDS OF:

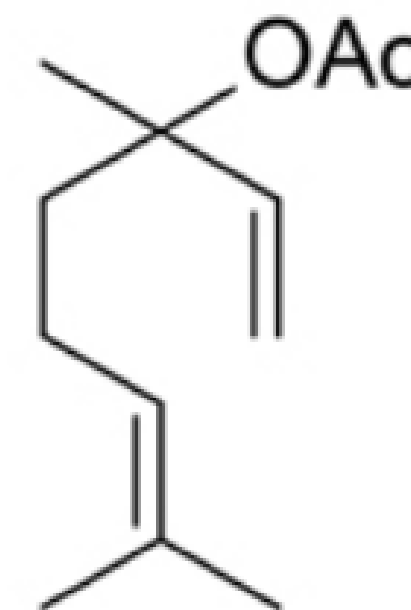
There are hundreds of compounds in Lavender Essential Oil.

The top two account for almost 50%

Linalool	monoterpenoid alcohol
Linalyl acetate	monoterpenoid acetate ester of linalool
Borneol	bicyclic monoterpenoid alcohol
Terpinen-4-ol	monoterpenoid alcohol
Lavandulyl acetate	acetate ester of Lavandulol (monoterpenoid alcohol)



Linalool



Linalyl acetate



VOLATILE CONSTITUENTS

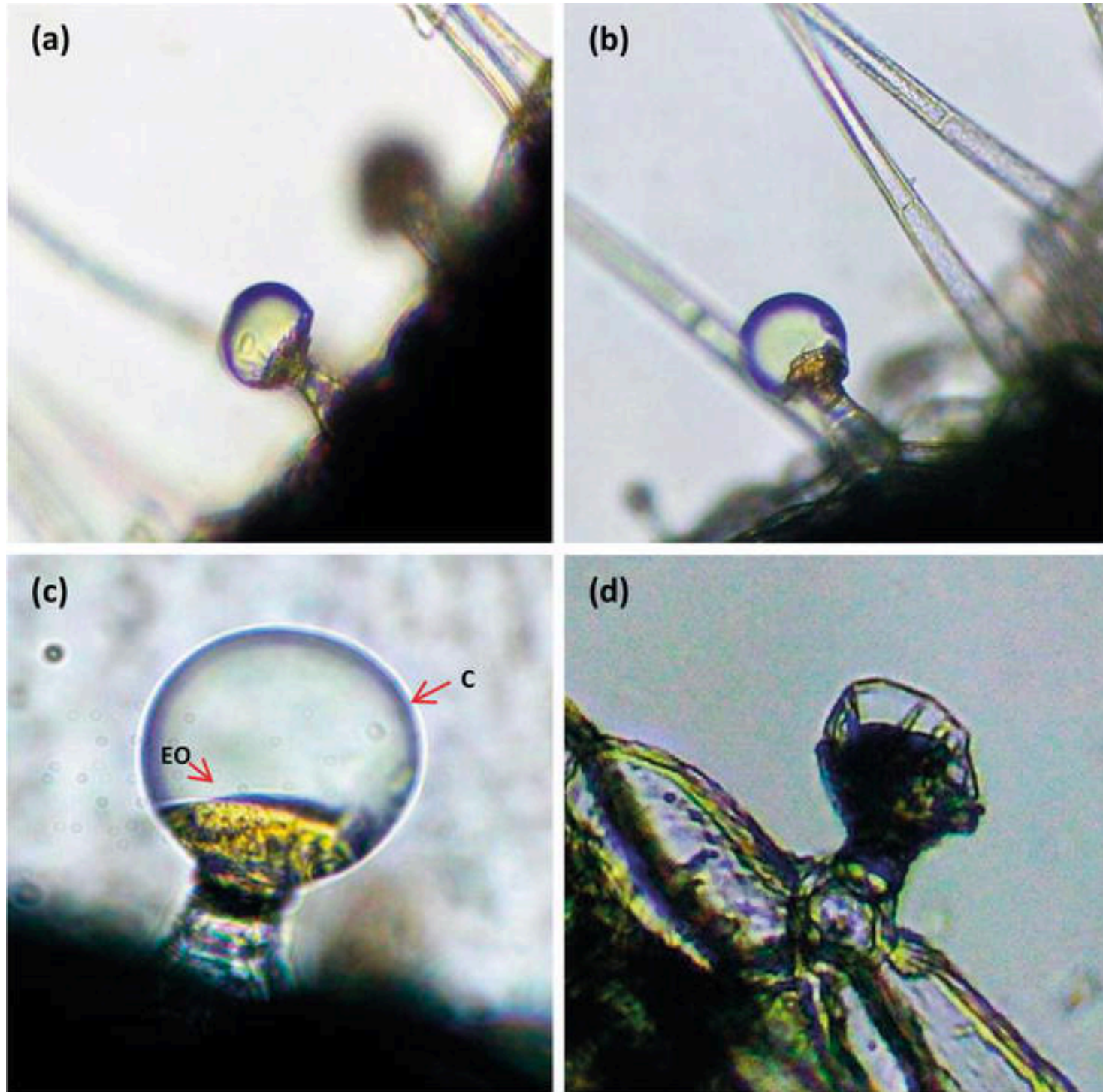


Of Different Types of Lavenders:

% Range of Total Volume

Component	Flavor	<i>L. Angustifolia</i> (vera)	<i>L. stoechas</i> (Otto Quast)	<i>L. x intermedia</i> (grosso, provence)
Borneol	camphrous, woody	0–6.2	0.8–1.4	0–15.7
1,8-Cineole	eucalyptol	0–6.03	8–52.7	5.2–26.1
Camphor	camphor	7.9–51.6	7.9–51.6	2.5–11.1
α -Limonene	citrus	0.8–5.9	0.06–1.3	nd

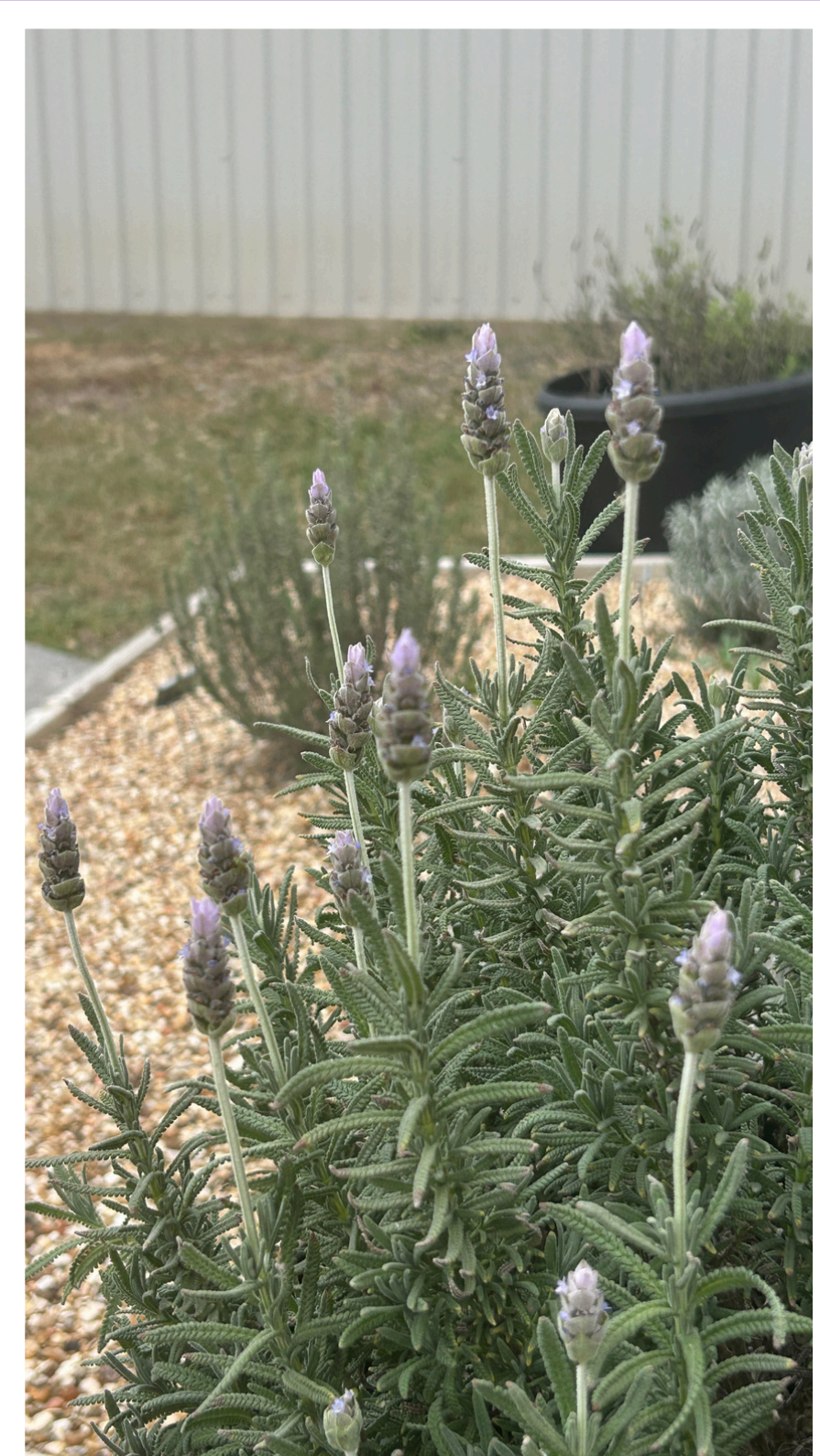
GLANDULAR TRICHOMES



The fragrance comes from oil glands embedded in the plant's hairs (trichomes) found on the flowers, leaves, and stems.



CARING FOR LAVENDER



Presented by Shawn Helm & Julia Johnson

PLANTING & CARE

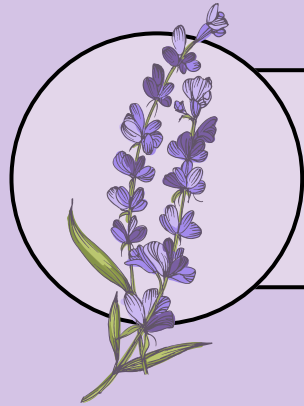


Lavender enjoys a bed of dry, gritty soil with gravel mulch in full sun. Amend heavy soils with gravel, limestone, or sand and only plant where you have excellent drainage & good air flow.



Heat and Humidity strain lavender's robust drought tolerance, and may limit their lifespans to as little as 3 - 5 years in Texas.

MAJOR PROBLEMS



Phytophthera - Fungal Root & Crown Rot

- #1 Killer of Lavenders in Texas
- Thrives in damp soil & high humidity
- Plant looks healthy one day, dead the next
- Best Practice: PREVENTION!



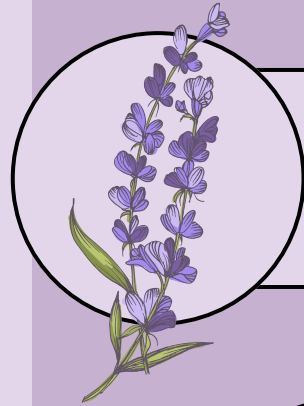
Best Care Practices

- Follow planting tips: Full Sun, Well-draining, Good Air-Circulation, Gravel Mulch, and Minimal Watering.
- Preventative Fungicide Soil Drench
- Immediately remove dead or diseased plants.

Symptoms:
Wilting,
Discolored Roots,
Die-off



DIY FUNGICIDE SOIL DRENCH



Chamomile Drench

- Steep 8 bags of Chamomile Tea in 2 cups of water for 24 hours
- Strain, Dilute to 4 cups, then pour around the base of lavender plants once a month for fungus prevention.

* Chemical free and bee safe!



COMPANION PLANTS

Herbs & Flowers



Avoid “thirsty”
plants like ferns
and mints.

Vegetables



Can deter certain
garden pests

Beauty



Plant for Beauty
and Aroma

HARVESTING

- Best in early morning, when first open or full
- For oil or distillation - remove the flowers from the stem first before processing
- For drying - hang tied in bunches in a warm, dry/airy, shaded space (shed or kitchen)
- Flowers best June & July, better in second and subsequent years





WINTERIZING

- Gravel mulch, especially around the base of the plant can help prevent root rot during cold wet spells.
- Consider covering with frost cloth if temperatures get below 20F.
- Water occasionally if it is an especially dry winter.

MEDICINAL QUALITIES



Presented by Linda Rowlett, Irene Spurrier, & Susan Bame

CALMING BENEFITS

Inhalation

- Olfactory system transmits messages to the limbic system
 - Linalool is the key chemical compound influencing stress and emotional responses
 - Result is improved sleep and reduction in anxiety
-



Topical

- Oil massaged into skin can relax muscles
- Applied behind the ears, on the temples or neck has a sedative and relaxing effect



ADDITIONAL BENEFITS

Lavender Teas

- Soothe upset stomachs, bloating and indigestion
-

Topical Application of Essential Oil

- Faster healing of wounds by increasing collagen and tissue restoration through its anti-inflammatory and antioxidant properties
- Decreases the pain and itch of bug bites and bee stings



NUTRITIONAL BENEFITS



- Antioxidants
- Vitamins A and C
- Calcium
- Iron



METHODS OF OBTAINING HEALTH BENEFITS



Aroma



- Diffusers
- Oils
- Lotions
- Bath Products
- Laundry Additives

Ingestion



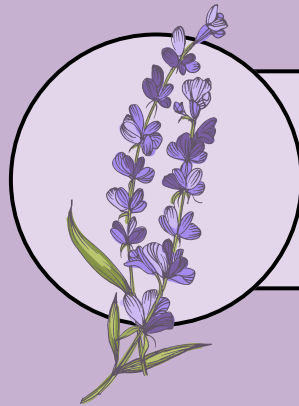
- Tea
- Tinctures
- Gel Tablets
- Food

Topical



- Salve
- Essential Oils

CONCERNS



Side Effects & Precautions



Taken by Mouth:

- Constipation
- Diarrhea
- Headache

Applied to Skin:

- Skin Irritation

Special Precautions:

- Pregnancy & Breastfeeding
- Essential Oils & Children
- Pre & Post Surgery
- Interactions with Sedatives



CULINARY USES



Presented by Diana Sellers & Deb Pruitt

CULINARY GUIDELINES

Choose the Appropriate Variety:

- L. angustifolia provide a sweeter flavor such as Munstead and Hidcote
- L.xIntermedia but ONLY Provence
- Avoid L. stoechas and Lavandin which are bitter

Use the Buds (dry or fresh):

- Dry buds are stronger

Add Lavender Scent to a Recipe:

- Infuse the liquid (water, broth, milk, cream) with lavender buds
- Remove the buds before adding to the recipe

Beverages and Ice Cream:

- Steep lavender buds in the liquid but remove the buds before serving



LAVENDER LEAVES



Edible, but...

Better to use in Infusions

- Vinegars
- Oils
- Sugars
- Simple Syrups



Teas

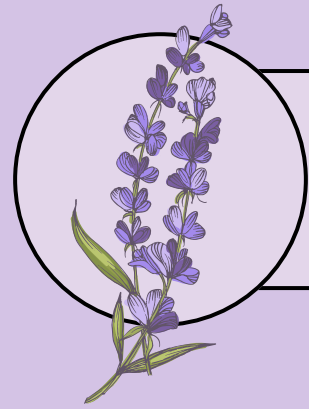
- Combine with other herbs
- Lavender, Lemon Balm, and Chamomile



What to do with
LAVENDER LEAVES



BEVERAGE & DISHES



Ways to Savor Lavender



- Lavender Lemonade
- Lavender Fudge
- Lemon Lavender Bread
- Lavender Chicken Salad
- Lavender Honey Goat Cheese
- Lavender Scones
- Lavender Syrup
(great in coffee and tea)
- Lemon Ginger Cupcakes w/
Lavender Cream Cheese Frosting

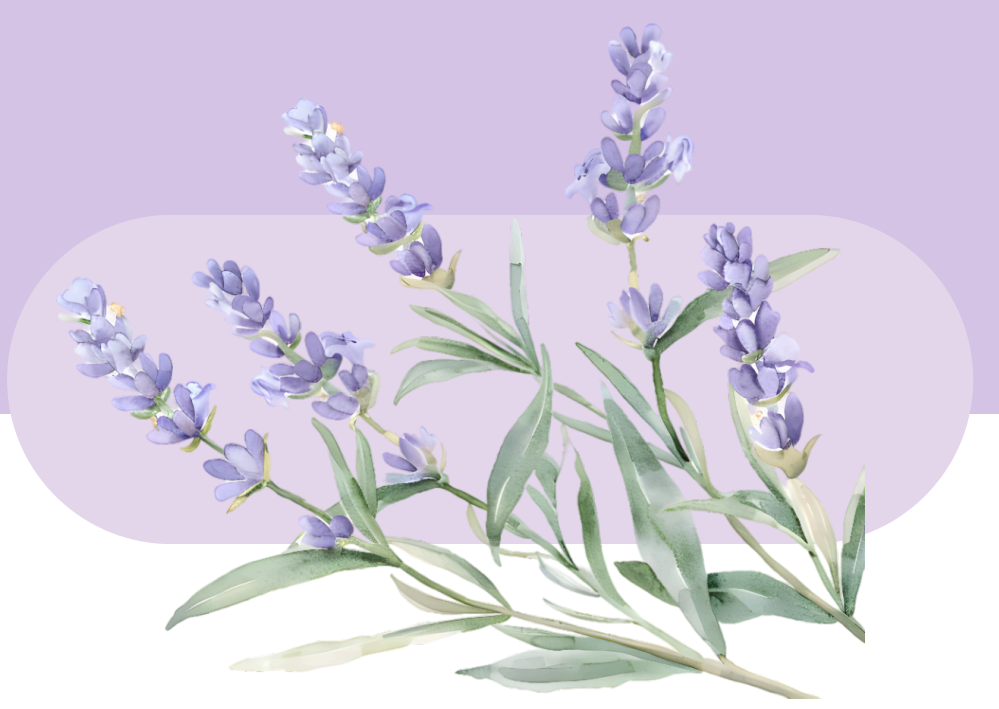


COOKING WITH
lavender



mklibrary.com

CRAFTS



Presented by Cammie Beierle & Vicki Wiste

SO MANY OPTIONS!

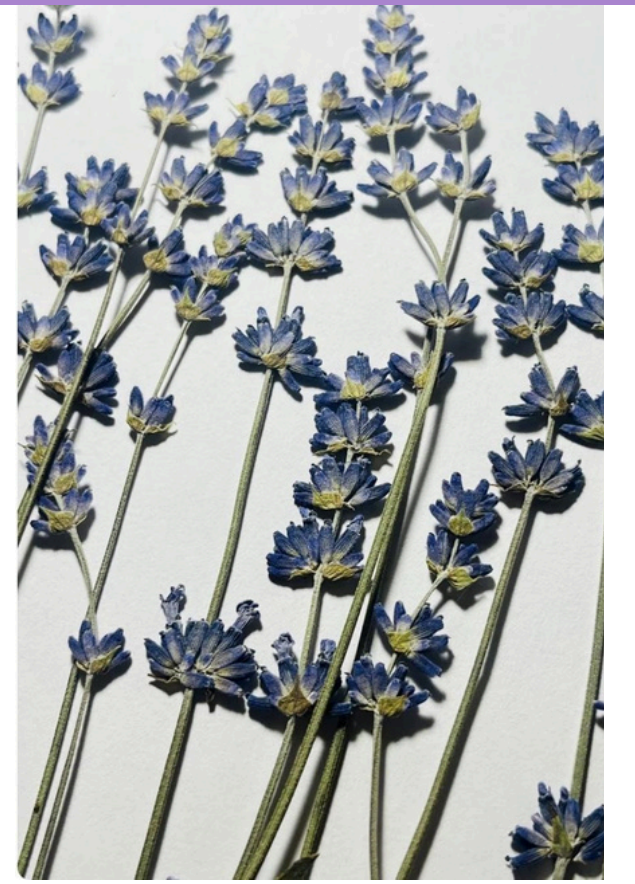
- Wreaths
- Sachets
- Soaps
- Candles
- Wands
- Teas
- Sprays
- Eye Pillows
- Dried Flower Arrangements
- Dolls or Angels
- Lip Balm
- Salves
- Exfoliating Hand Soap
- Body Butter
- Scrubs
- Lavender Heat Pads
- Clay Masks
- Foot Soak
- Dryer Bags



If you want it to smell good and create a relaxing environment, then use lavender!



If you want it to smell good and create a relaxing environment, then use lavender!



CRAFTING WITH FRIENDS IS SO MUCH FUN!



