

Respiratory Herbs



This product was developed by the Sustainable Agriculture Research and Education (SARE) program with funding from the National Institute of Food and Agriculture, U.S. Department of Agriculture (NIFA-USDA). Any opinions, findings, conclusions or recommendations expressed within do not necessarily reflect the view of the U.S. Department of Agriculture. U.S. Department of Agriculture is an equal opportunity provider and employer.

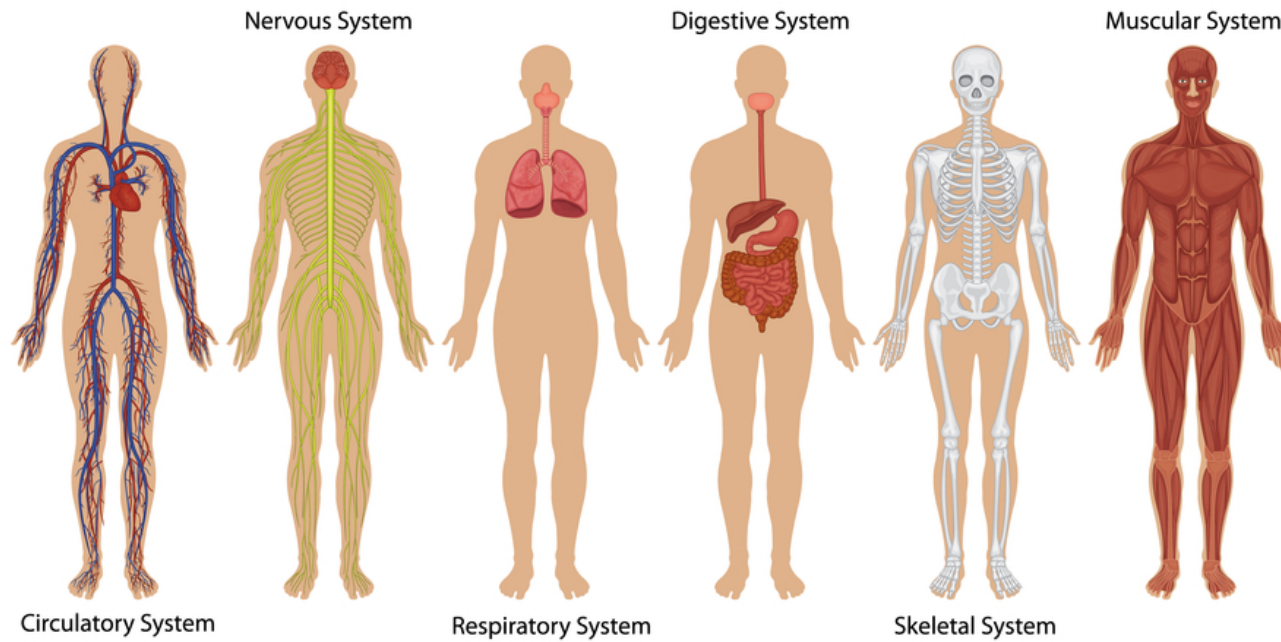
Designed for NWTC 2014 by Erika Van Ryzin of Green Heart Natural Health

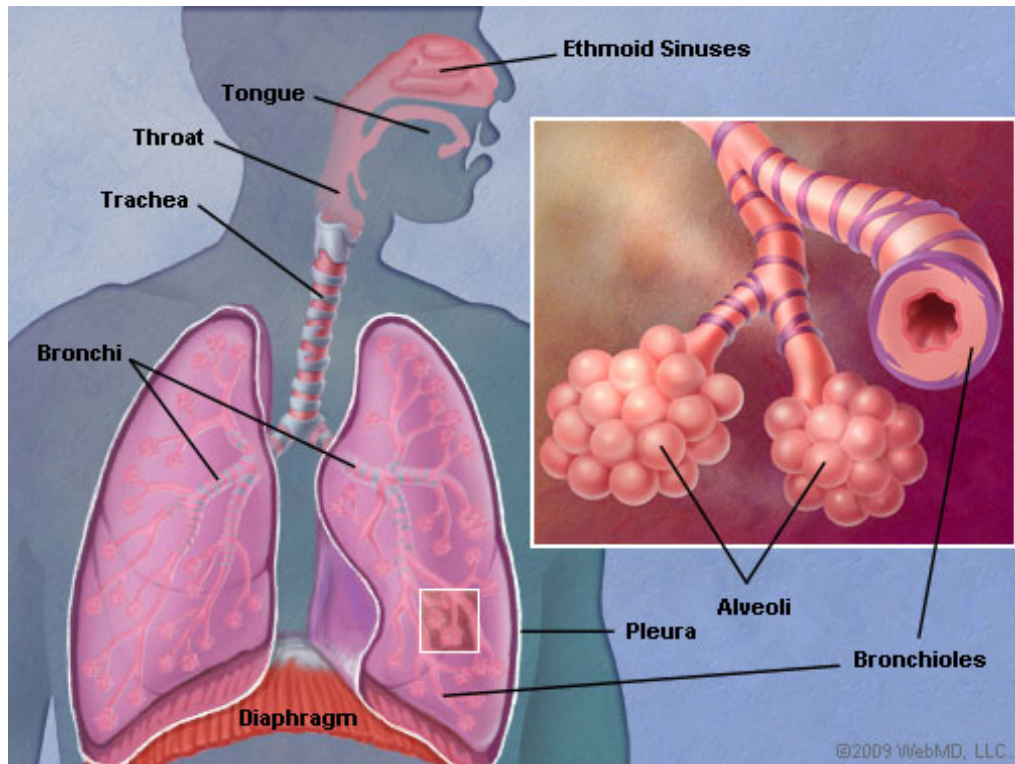
Disclaimer

- The information in this lab is introductory. It is not meant to take the place of medical assistance or information from an experienced herbalist. The USDA, FDA and other regulatory bodies have not verified the information presented here.

Body systems we explore

Human Body Systems





Sinus

Throat

Lungs

Sensitive to...

Dampness

Extreme dryness

Air cleanliness (dust pollen mold)

Air contaminants (chemicals ,
oxidants, perfumes,)

Lack of body movement

Held back emotions / extreme sorrow

Benefits with....

Antioxidants, vitamins, herbs, &
occasional essential oils

Deep breathing exercise

Calm breathing meditations

Walking

Courage to allow feelings to flow

Rib cage flexibility

Non - restrictive clothing

CLEAN AIR

Respiratory terms to know

- Expectorant
- Demulcent
- Mucilage or mucilaginous – a slippery, almost slimy feeling material. Often has soothing, cooling effects. Coats, reduces inflammation.

Expectorant

- Something that actually is an irritant to the lungs.
- Makes the lungs increase secretions (mucous) in response.
- Makes you have more 'stuff' to cough and expel.
- Diterpene lactone “marrubiin” is the active compound
- Over the counter cough medicines use guaifensin as an expectorant

Demulcent

- Something that relieves irritation or inflammation
- Especially of the mucous membranes
- A protective film is formed
- From the Latin 'demulcere' to pet or caress

Herbs & remedies for the respiratory system

1. Cough pastille: licorice root, marshmallow root, horehound leaf

We make this, then learn about the herbs involved while we are under the steam inhale.

2. Steam inhale: Oregano. Also try Rosemary, Hyssop, or Horseradish. All of these grow readily in our climate. We use some of these in lab.

3. Tea: mullein leaf – make it at home

Making Lozenges / Pastilles Type Cough Drops



Pastilles

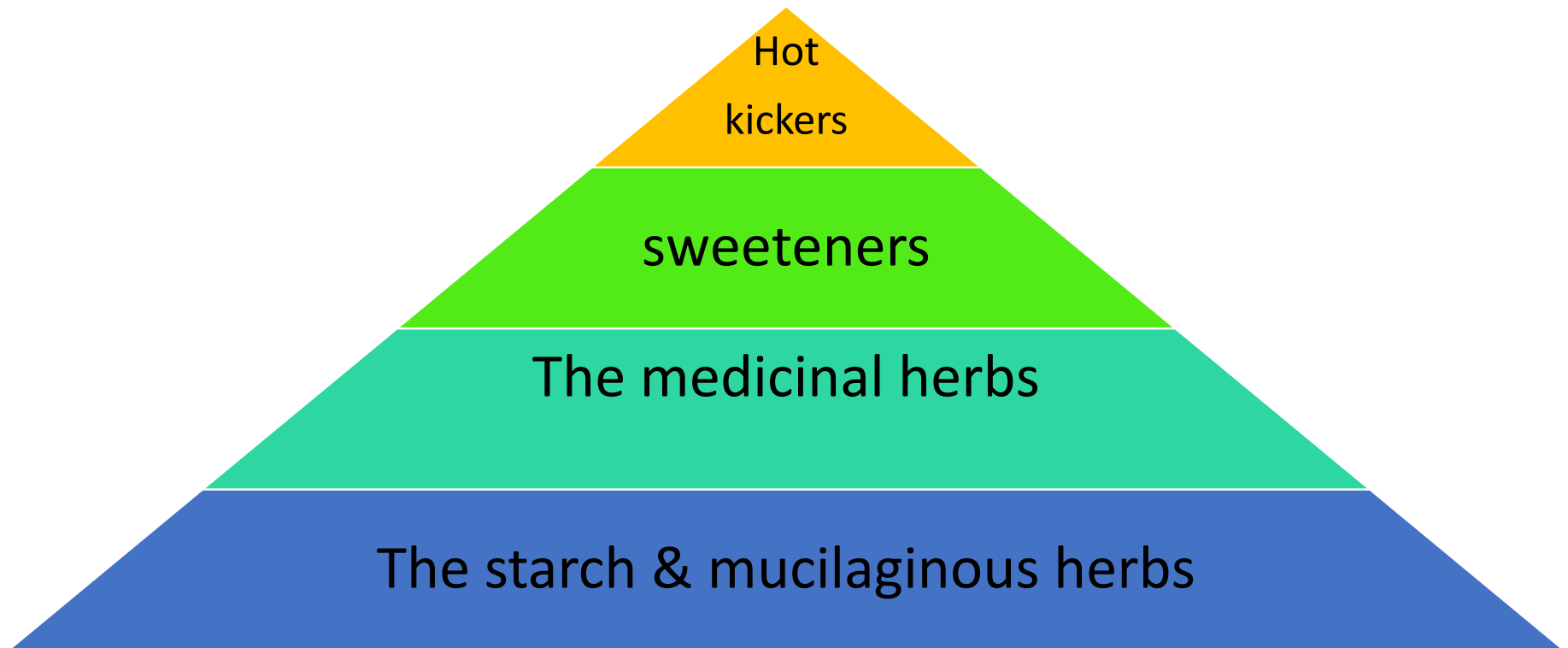
- A small round ball
- Hardened, but can be a bit soft
- Used to deliver herbs for throat/respiratory ailments especially
- Can deliver herbs for any ailment

- Similar to Green's "Electuaries" on page 247
- Also called "troches" or medicated lozenges.

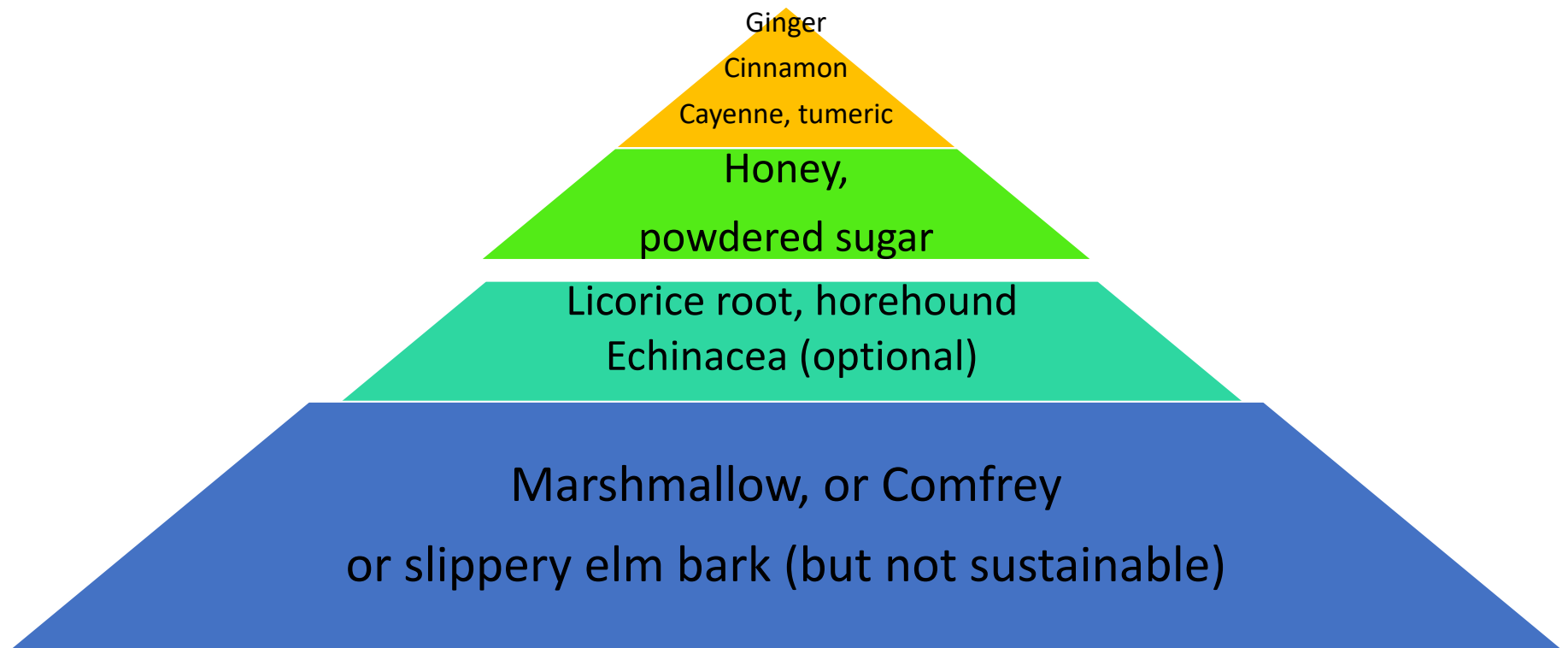
Pastilles- Throat coat

- A thick liquid (honey)
- Mixes with a starchy substance (marshmallow root) that binds the ingredients together.
- Powders; (the medicinal herbs, finely ground)
- Extracts; licorice root decoction
- Horehound “tea”
- Sweeteners, honey, powdered sugar
- A mucilaginous herb to sooth & coat the throat
- Kickers – ginger, cinnamon, turmeric, cayenne

Formulating a throat coat herb



Formulating a throat coat herb



Ingredients in Herbal “Cough” Drops

Hot kickers to use in small amounts:



Turmeric has antiviral and antibacterial properties that helps fight flu naturally



Ginger acts as a natural decongestant and also as an antihistamine (like benadryl or claritin) that prevents allergy symptoms.



Cinnamon like honey, has anti-viral, anti-bacterial, and anti-fungal properties, it fights viruses and inhibits the growth of harmful bacteria

Ingredients in Herbal “Cough” Drops

Sweeteners – needed to mask the “bitter pill”



Honey

It has been in use for time immemorial around the world, in various traditional medicines and is known for its antiseptic, antibiotic, anti fungal, and antibacterial properties.

Powdered sugar

Adds dryness to the mix. Helps keep the pastilles separate.

Also, taste the licorice root extract, it is a little sweet.

Ingredients in Herbal “Cough” Drops



The medicinal herbs:

Licorice root. The root will be decocted in a small amount of water. We start with 5-6 tablespoons of water and 1 T licorice root. Simmers for several minutes and the volume of water is reduced to about 1 Tablespoon. The liquid has a little sweetness to it. Dip your pinky in and try it (after it cools).

Echinacea this is dried leaf and stem and can be added to the simmering liquid partway through. Add about a teaspoon if desired. The “tea” made from this contains immune boosting compounds that can help fight a cold or respiratory infection. If decocting the root, add it at the beginning with licorice root.

Horehound. This is a bitter tasting herb and about a teaspoon of powder is added to provide cold relief. If you don’t have the horehound in powdered form, just add the dried or fresh herb to the liquid mixture you are decocting. Add more liquid as the horehound will absorb some.

Ingredients in Herbal “Cough” Drops



The carrier or base mixture:

Marshmallow root. The powdered root is very mucilaginous. This is the ingredient that will actually coat your throat and let the other medicinal herbs “stick” to it.

Comfrey root this is dried powdered root is also mucilaginous and can be substituted in place of marshmallow root. Some herbalists say not to take this herb internally due to the chance of alkaloids that can cause liver issues.

Slippery Elm bark. This is another mucilaginous herb that is not harvested in a sustainable way, so please don't use it. The other two herbs serve this same purpose well.



How to Make Herbal Lozenges – small batch for lab Val's sore throat rabbit pellets



Lozenges / Pastilles / Troches

1. 1-2 teaspoon licorice root pieces in 6 Tablespoons water bring to a simmer for 15 minutes. Add 1 t. Echinacea root and ginger root if desired to this pot.
(1. If using horehound leaf or echinacea leaf, add them at about ten minutes and simmer for the last 5 minutes with any roots)
2. Decant or strain 1 T of the extract into bowl
3. Mix in 1 T honey
1. Sprinkle in 1 teaspoon horehound powder if you have not previously added the leaf/powder to the decocting pot, mix well.



How to Make Herbal Lozenges – small batch for lab Val's sore throat rabbit pellets



Lozenges / Pastilles / Troches

1. Sprinkle in any “Hot” kicker-herbs in small amounts, $\frac{1}{4}$ - $\frac{1}{2}$ teaspoon
2. Add 3 Tablespoons Marshmallow Root powder, a little at a time, mixing as you go until it turns into very thick dough that pulls away from the sides of the bowl.
3. Sprinkle 1 Tablespoon of powdered sugar over the dough.
4. Form into tiny balls coated with powdered sugar.
5. Take home on wax paper, put in oven under light to dry overnight

Slippery Elm Bark *Ulmus Fulva* & Sustainability.

Herbalist & Dutch Elm Disease are threatening to push Slippery Elm to the threatened list.

Trees are WILD CRAFTED. To harvest either cut down for greatest harvest, or striped standing and left to die. No known re planting efforts are being made. Trees are usually 50 to 100 years old. Only the inner cambium layer against the wood is used. 4 oz has a market value of \$10

There are many alternatives to slippery Elm Look for herbs listed as mucilaginous. Some are Crushed Flax Seed, Comfrey Root, Marshmallow Root, Cranesbill Geranium combined with Marshmallow Root, Fenugreek Seed.



Tree poaching ...
\$150 .00 for 50 # of dried bark. DANIEL BOONE NATIONAL FOREST, Ky. — “The 20-foot tree stands half naked, much of the bark stripped from its trunk. It has only months to live.” U.S. Forest Service botanist David Taylor



The only known controlled (not wild crafted) grower of Slippery Elm

www Botanical Plantations .com

CULTIVATING ORGANIC SLIPPERY ELM, BLACK COHOSH, & GOLDENSEAL

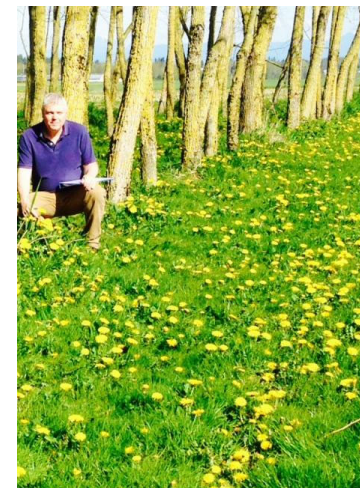
With farms located in Washington, Kentucky, and Missouri, Botanical Plantations has invested the necessary time and resources into cultivating Slippery Elm trees, Black Cohosh, and Goldenseal; making them the first to offer a sustainable alternative to wild harvested Slippery Elm bark.

Trees like the humid St Luis area.

Trees are harvested when 10 years old.

Sells in 50 # quantities cut and sifted for \$9.00 #

Powders available but are mixed with an anti – caking agent because other wise the product would lump together strongly because of the mucilaginous nature of it.



Mountain Rose Herbs 'scaled up' Herbal Lozenges



Marshmallow Root powder ½ cup

Licorice Root pieces - 1 Tablespoon

Water 1 /2 cup Boiling

2 Tablespoons honey



Mix in a bowl. Roll out on a powder sugared surface with a rolling pin. Use a bottle cap to cut into little circles. Allow to dry. Store.

Note that this recipe omits the bitter (but effective) horehound herb.



Steam Inhale

Steam Inhales for Respiratory Health

Affects entire system

Release congestion

Clear phlegm

Ease allergies

Reduces cough

Reduce bronchial inflammation

Sooth and cool

Increase resistance to sickness,
virus, bacterial

Reduce stress

Reduce nose bleeds



Steps to a Steam Inhale for The Respiratory System

Select fragrant herbs for respiratory health

Heat 2 cups of water to a boil

Add ¼ cup herbs to large bowl on a table top (NOT on the stove)

Pour hot water over herbs

Immediately drape a large towel over head then lean forward over bowl to capture steam on face and just breathe

CautionHOT Adjust towel so steam is comfortable

Relax and breath in “steam herbal air” for 5 to 10 minutes



Oregano

Origanum vulgare

Leaf

Anti-viral

Anti-bacterial

Anti-fungal

Anti-inflammatory

Anti-spasm

Reduces pain

Reduces phlegm / mucus

Stimulates immune system

Reduce cough reflex

Inhibits allergic reactions – histamine- with Rosmarinic Acid



Rosemary *Rosmarinus Officinalis* Leaf

Tonic

Expectorant – clears phlegm / mucus

Anti-Inflammatory

Anti-Oxidant

Anti-Spasm

Anti-Septic (kills bacteria)

Reduces pain

Reduces fever

Reduces Headaches

Stimulates capillary circulation

Reduces irritation from allergic reactions



Hyssop

Hyssopus Officinalis

Leaf

Tonic

Anti-inflammatory

Anti-spasm

Anti-viral

Expectorant

Sore throat treatments – calming

Clears phlegm from the lungs

Clears inflammation in mucus membranes
(respiratory)

Strengthen immune system

Safe for children

Avoid in pregnancy –menstrual stimulant



Horseradish *Cochleria armoracia* Root

Expectorant

All respiratory problems

Anti-Biotic

Anti-Septic

Bronchial dilatator

Stimulates blood flow to surface

Eases asthma

Fights respiratory sickness

Caution: Strong actions are “local irritant” go slowly



Horehound



A respiratory remedy

For respiratory uses – clearing lungs

- According to Gerard (the early English herbalist)
“Syrup made from the greene fresh leaves and sugar is a most singular remedie against coughing and wheezing of the lungs.”
- Culpepper claims the herb “helpeth to expectorate tough phlegm from the chest, being taken with the roots of the Irris or Orris...”

Both as quoted in the Rodale book

Horehound

- Has been used since ancient times.
- Egyptians called it ‘ the seed of Horus, bull’s blood, and eye of the star.
- “Hoary” means frosty, hairy. That may really be the origin of the English name.

This information and in the next several slide is excerpted from ‘The Rodale Herb Book” Edited by William Hylton



Marrubium vulgare

- Perhaps from the name of an ancient Italian town “Maria urbs”.
- Perhaps named after the Hebrew word Marrob, a bitter juice. One of the five plants the Jewish people used in the Passover feast.
- Greeks used it as an anti-spasmodic and an antidote for the bite of a mad dog...which may have led to its common name of horehound.

Horehound uses

Ancients used it to:

- Cure snakebites
- Ointment for wounds & itching
- Fly repellent
- Worm killer
- With honey to cleanse ulcers
- Juiced to make eye drops
- A laxative in larger doses

Horehound growth

- Well drained soil, sunny
- Spreads by root division
- Or, self seeding



Marshmallow

- *Althaea officinalis* L.

Plant Family: *Malvaceae*

- Known throughout the ancient Egyptian, Arab, Greek, and Roman cultures
- Used continually for at least 2000 years.
- The generic name *Althaea*, (an ancient Greek goddess) was derived from the Greek word 'altheo' meaning to heal or cure, suggesting its healing properties.
- The name of the of genus *Malva*, (*Malvaceae*) is from the Latin 'mollis', or the Greek 'malake' meaning soft, most likely related its softening and healing qualities.

Marshmallow

In moist soil under full sun, marsh mallow is a hardy plant that grows easily from **seeds**, cuttings, or **root** divisions. **Seeds** should be planted in spring (germination in 2-3 weeks), **root** divisions in autumn. Thin them to 1-2 foot spacing.



Marshmallow

- Both leaf and root are used for soothing irritations.
- Soothes and moisten mucous membranes of the respiratory, digestive, and urinary tracts.
- An external soothing poultice for wounds and burns.
- Historically used in desserts & candy and was the "root" of the original marshmallow confectionery.
- Root is best harvested in the fall.



Licorice root

Glycyrrhiza glabra

- antiviral,
 - antimicrobial,
 - anti-inflammatory
 - Caution: may have blood pressure-increasing effects
-
- It is a legume, related to peas and alfalfa.
 - It is not related to fennel or anise which also have a “licorice-like” flavor.



Licorice root

Grows best in well-drained soils in deep valleys with full sun. Root is harvested in the [autumn](#) two to three years after planting.



Licorice

- Used as a flavoring agent for tobacco, particularly U.S. blend cigarettes, to which licorice lends a natural sweetness and a distinctive flavor and makes it easier to inhale the smoke by creating [bronchodilators](#), which open up the lungs. [\[3\]](#)[\[4\]](#)

3. Marvin K. Cook, The Use of Licorice and Other Flavoring Material in Tobacco (April 10, 1975).

4. Jump up to: a b Boeken v. Phillip Morris Inc., 127 Cal. App. 4th 1640, 1673, 26 Cal. Rptr. 3d 638, 664 (2005).



Teas for respiratory

- Make a mullein tea

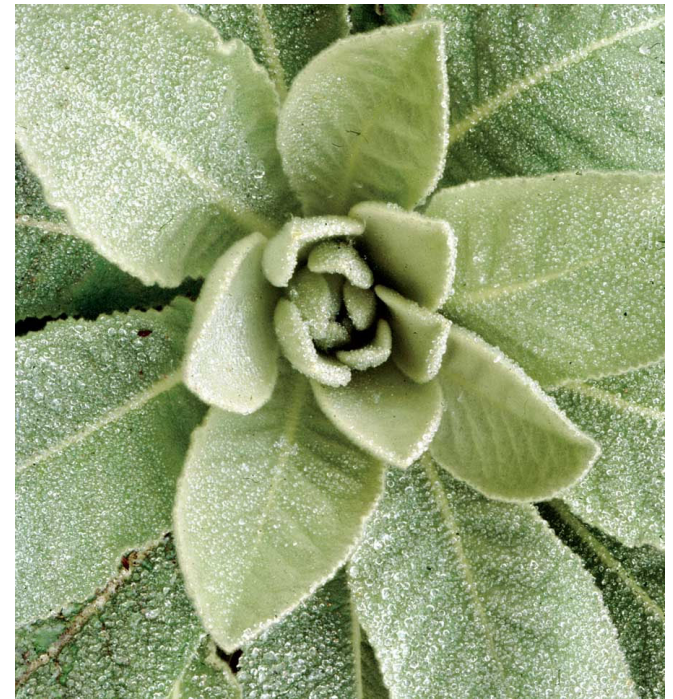
Mullein leaf *Verbascum thapsus*

- Name may stem from the Latin “Mollis” which means “soft”.
- Another effective herbal remedy for respiratory distress. Anti-inflammatory, demulcent, expectorant.
- Make a tea out of 1 Tablespoon leaf in 1 cup water, strain well. Add honey.
- Caution: do not eat the seeds of mullein, they are toxic.



Mullein leaf *Verbascum thapsus*

- Harvest the leaves from the first year's rosette.
- The second year of this biennial is the only year it makes the flower stalk.
- The plant grows well in dry, sandy, disturbed areas. It grows from seed.
- We give a drench of this to cows with pneumonia to help them cough up "stuff".



Other Excellent Herbs for Respiratory Sickness



Especially Safe For Young Children

Fennel

Fenugreek

Elderberry

Tulsi Basil

Lemon Balm

Ginger

Thyme

Oregano

