## Ligusticum Osha

Family: Apiaceae (Carrot/Parsley family)

Scientific name(s): Ligusticum porteri, L. grayi, L. spp.

Common name(s): Osha, Bear medicine, Porter's lovage, Porter's licorice root

Primary plant part used: Root

**Primary Herb for** 

• High altitude sickness

- Influenza, especially with sore throat and copious thick mucus
- Insect bites and stings
- Constitutional remedy for Type 3's

**Notes on the scientific name:** Ligusticum refers to a related plant that grew in the Liguria region in Italy (probably lovage/Levisticum sp.). Thomas Porter was a Professor of Botany and plant collector.

Notes on common names: Osha is probably a Native American word for this and related plants. Many of the common names begin with Porter's followed by another name such as Porter's licorice root. One of its closest relatives with a similar sounding common and botanical name is Lovage, in the genus Levisticum Notes about other species: The Apiaceae in general are hard to identify amongst themselves, and Ligusticum is no exception with its typical carrot-y look. There are a number of species of Ligusticum growing in North America, and they can be difficult to tell apart. Start by separating them by the regions that each species grows in. There is plenty of overlap, but it's a beginning. Afterwards, you will need a book with a good key, and a wealth of patience to help determine which species lay in front of you. A suggestion: before you go searching for this plant, do a lot of homework, look at photos, drawings and learn the differences before you go alooking for osha.

As far as medicinal differences, some Ligusticums are used interchangeably, with each herbalist having their own opinion of the worthiness of each species. They have a strong characteristic smell and taste, which is often used to help determine their potential potency. I have stuck with Ligusticum porteri as bespeaks my traditionalist attitudes and having seen results with this species.

**Botanical characteristics**: The Ligusticums have a typical Apiaceae look and smell, with divided leaves and the characteristic umbel inflorescence with small white flowers. Other notable characteristics:

- The root and the root crown may be the easiest way to distinguish Ligusticum from other look-alike genera.
- There is a very distinctive smell and taste to these plants. However, please remember that there are poisonous similar-looking plants. Learn these!
- A useful distinguishing characteristic trait for this genus are the fibers originating from the root crown. To find these, scuff away the dirt at the base

- of the plant and look for these hair-like appendages sticking up from the crown.
- ☆ Habitat for Ligusticum porteri- higher elevations in the Rocky Mountains. I have seen it as low at 5500' in New Mexico though typically more often between 7,500 and 10,000 feet.

#### **Interesting tidbits of Ligusticum**

The leaves and seeds are also odiferous and can be used for cooking; use sparingly. In Traditional Chinese Medicine (TCM), a similar species-L. wallichii- is used

**Opening Medicinal Notes-** I use osha extensively in first aid. Besides its more pedestrian uses (i.e. antimicrobial) it also offers up some unusual combined medicinal traits, especially found within one plant. These include its antivenomous properties and its usefulness for high altitude sickness. As a cursory glance at the uses below suggest, osha makes for a valuable medicine in many arenas. Its diversity of tastes may be one of the factors that make it unique. While its flavor is not pleasing to all, many folks find it divine.

Ligusticum porteri is the one most commonly referred to as osha, other species have been used, but this species remains the most common in clinical practice

# Wildcrafting Notes- Please read the Wildcrafting chapter before gathering any plants

This plant is extensively collected and is being depleted in its region. So please use caution gathering osha. It is not particularly delicate and I have seen it grow well in logged areas, but the sustained collecting and habitat destruction are taking their toll. If this plant ever reaches the herbal hit parade in popularity, it could easily be endangered. To its advantage, it can be easily overlooked and lives off the beaten track.

First, get ye to the Rockies. Next, ask a trusted and trusting wildcrafter or botanist and find a place you can ethically harvest this noble plant from.

If you want to wildcraft this plant, I recommend driving the back roads where it grows. When you size up an area that seems suitable for sustainable wildcrafting, don a backpack, hike away from the road, and look for stands that are less accessible (but not in old growth, perhaps in areas previously logged).

If you find a sizable stand, develop a personal relationship with it. Keep it a secret and come back every few years and witness how fast or slow the plant population maintains itself, and gather mainly from here, so you can tell how harvesting is affecting it. In this manner one can learn the intricacies of plants and help teach others how to keep our world herbal green.

The best time to gather the osha roots is in later Autumn and late Spring. This can be a bit tricky as the elevation where it grows begins to get snowed in early. It may take a few tries before snagging some of this superb herb. I have gathered the roots in summer, they are serviceable, but lack some of its heft.

The roots will stay fresh for a few days, so you have a few days before needing to process them.

### **Notes on Purchasing Osha**

Since this plant is not being commercially cultivated, all osha that is sold is wildcrafted. This makes it critical for the buyer to ask whomever they are buying from, where they get their osha. If the person does not want to divulge their source, at least ask if they know this person to be reliable. From experience, I can say that it is common for people and companies to not divulge their wildcrafter for many reasons (this seems a sad state of affairs for herbalism to me. It's one thing not to divulge your wildcrafting sites, it's another to hog your sources) and most people when prompted with the question of ethics, will come to their own defense. So, be courteous, but pleasantly persistent, this is important stuff. Even if they get defensive or just do not know their source, at least you have started their mental ball rolling and they may ask these questions later. Good for you!

## **Medicinal Preparations**

1) Amulet/Talisman

5) Poultice

9) Tincture

2) Chew

6) Soak

10)Vinegar

3) Compress

7) Syrup

4) Moxa

8) Tea

## **Description of Medicinal Preparations**

- 1) Ligusticum's medicinal properties are readily extracted in a number of menstrua as the above list of preparations attests too.
- 2) This plant is worn and carried as an amulet and talisman- a protective charm. It has a reaffirming smell and feel.
- 3) Chewing the raw, unprocessed root is helpful to alleviate the symptoms of high altitude sickness. Either dry or fresh root is useful. You can also eat the leaves and seeds as food.
- 4) To prepare a compress, make a strong root decoction, soak a cloth in this tea and place over an injured area. It may help to place a hot water bottle over it to maintain the heat.
- 5) A moxa is burning a dried herb (root here), similar to incense, but on or close to a body. It is most often done in Traditional Chinese medicine where a variety of mugwort (Artemisia sp.) is used. The goal is to break up localized stagnation and get energy/chi moving. I have only used osha moxa once, for a one-year-old brown recluse spider-type bite that was still necrotizing. It's a bit of a long story, but it helped and so I place it here hoping others may try it.
- 6) A poultice can be made by mashing up the root and placing it on top of a wound or injury
- 7) A strong decoction of the tea can be made from the root to soak the affected body part.

- 8) Osha makes an excellent syrup, with either sugar or honey. It is one of my favorite sore throat or 'got-something-coming-on' syrups. It has a splendid osha-y taste.
- 9) Osha tea is pretty strong tasting, but it can be used for almost all the listed applications. There are many plants, such as licorice, that can modify it flavor and enhance its effectiveness.
- 10) Tincture is far and away the most common preparation of osha that I use. Partly because it is easy to pack and use from a first aid bag, plus I think osha tincture just works well in this form. In first aid clinics, I often have a big bottle of osha tincture on hand.
- 11) Vinegar. I confess that I have not used osha in this form, but it seems like it may work well for those whom cannot take alcohol.

## **Applications**

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1) Antiallergy	6) Antiviral	11)High-altitude sickness
2) Anticatarrhal	7) Constitutional tonic	12)Protective/Talismanic
3) Antimicrobial	8) Dispersing	13)Respiratory problems
4) Antistagnation	9) Expectorant	14)Singer's throat
5) Antivenomous	10)Heating	

**Application Descriptions**. A word of warning about the terms used here, some of them I have made up of like-sounding words to give a basic idea of an action. I did this as osha does a number of things that do not fit neatly into other categories.

- 1. **Antiallergy** osha helps with a number of immediate onset-type allergies (see Allergy chapter). It doesn't seem to have a direct antihistamine action, but another mechanism to help ward off allergic symptoms. It works well with other antihistamine-type herbs such as Ambrosia and Euphrasia. (See Dosage 2). While it is not the first plant I use in allergies, if others fail to impress and suppress, than sometimes osha can make a difference. It can be also useful prophylactically for folks going into a known allergy-causing situation.
- **2. Anticatarrhal-** as this old-fashioned term implies, osha is useful for clearing mucous out of the sinuses and respiratory tract. It has a strong 'moving' effect and helps bring up phlegm
- **3. Antimicrobial** osha disrupts and kills a wide variety of microbes making it useful for a number of illnesses caused by troubling vectors.
- 4. Antistagnation- this is a 'constitutional' term implying that osha breaks up and helps move blockages in the body including the seeable such as mucous and unseen, helping move energy or chi. This makes this remedy efficacious when working with people with stagnant and lethargic constitutions and/or disharmonies with these attributes. Osha is excellent to add to blends to lend them this 'breaking-up' property, and sometimes (along with its other medicinal virtues) this tips the scales back towards health. I have seen people struggle with colds, which start to get better and then bring them back down, and adding

- osha (sometimes along with Baptisia) to end this cycle. A very useful quality. See Constitutional types.
- **5. Antivenomous** an ambiguous broad-action term to help to describe osha's interesting ability to mollify, nullify and somehow alter a variety of poisonous substances. The poisons I am referring to are those specifically injected by snakes, spiders (cytotoxic, not neurotoxic) and the Hymenoptera (the insect order including wasps, bees and ants). It may be a combination of flavors and its destagnating qualities to help break up vexing molecules. Whatever the reason, here's what I suggest. If someone gets bit or stung by one of these critters, give them osha. I usually use tincture, that is what I generally have on hand, but I would use whatever form I had. Administer it quickly as its actions are better sooner than later. Dosage, taking constitution into consideration, about ½ to 1 ml every 15-30 minutes. And probably a loading dose of 3 times that. In other words, start off by giving them a butt-load and as long as they are feeling the effect of the bite or sting, keep giving medium amounts. decreasing both amount and frequency with time. But keep dosing it on the high end in the beginning to let osha do its thing. You can also make a poultice or compress to apply locally. Now, if they are going into shock, anaphylaxis, having a hard time breathing, or it just looks bad, seek help now. Go on, forget the fact that you want to see herbs work, you gotta get them professional assistance (think 911). It becomes apparent that one of the most important first aid skills is being able to decipher a potentially dangerous situation from one within your skills of practice.
- **6. Antiviral** you gotta watch what you say about antivirals, for the it's-not-really-an-antiviral league will call you to the carpet and point out that the chemistry of this or that plant proves that they are not *truly* antiviral. So don't tell anyone, but I think that osha is antiviral. I say this because it can really help out a bad case of influenza.
  - So more seriously, osha is an herb to consider whenever you got a cold or other viral complaint, especially if there is also a sore throat involved. Try to get it in a preparation, say a throat spray with propolis, that helps hold it in place against the back of the throat(honey helps here). It combines well other antivirals including propolis, Thymus, Baptisia, Hydrastis, Berberis, along with many others (see list below). Dosage- start with a healthy dose of ½-2 ml, and take about ½ ml or more every 2-4 hours.
- **7. Constitutional Tonic**. While osha has many acute ailment applications, it is also useful as a constitutional tonic for the Kaphic-type; see below
- **8. Dispersing** is a positive spin on its antistagnant properties.
- **9. Expectorant** Osha helps break up phlegm, especially thick and full mucous. It has a pungent bite, so it may work best with someone with a cold constitution. Hot tea is a helpful way of beckoning these benefits. Though it is a root, it has volatile properties, so cover it when making tea to prevent all the fumes from escaping. The tincture can be put in hot water to make it warmer

- **10.Heating** is another constitutional property of osha. This herb brings pungent, bitter warmth and so is better for people with cold constitutions and not for wiry red-hot tweekers; see below
- 11.High-altitude sickness (HAS)- is a group of symptoms from being in an unaccustomed elevation, these symptoms generally begin to appear above 8,000 feet. They include; fatigue, headache, shortness of breath and difficulty sleeping (for details see the altitude sickness section). Chewing on a piece of the fresh or dry root of osha can help alleviate these symptoms; it is one of the most specific remedies for this. Sometimes the only was to deal with HAS is to descend and work your way back up more slowly, acclimatizing along the way.
- 12. Protective/Talismanic- osha has a long traditionally-held reputation as a protective device. Words such as talisman, charm and fetish are also used to describe the property of objects to ward off specific or general scary, hurtful, or menacing spirits. These are often hung around the neck either unadorned or in a pouch (see section on talismans). It can be invigorating to wear certain herbs, and osha has this virtue. These can also be placed in ones pocket and rubbed or smelled as the occasion arises. Again, there can be a boon to smelling this root in the thick of it. Sort of a talismanic smelling salt, an agent to clear the mind. Once a student made me a gift of a small leather satchel and I would alternate different roots in it, often between osha and calamus. It feels good to have these plants close to the body; and knowing this is traditional, helps invest their affects.
- 13. Respiratory problems-osha has an affinity for helping a variety of respiratory ailments, looking again at it's quality for clearing cold, damp and boggy conditions alongside it's antimicrobial action. And associated with these actions is its ability for helping breathing difficulties in high altitudes and similarly with its antiallergy action. It is a useful constitutional tonic for larger, anabolic, heavy-phlegmed kaphic individuals. I use it often in formula in many of the above and below named conditions including; sore throats, HAS, influenza with phlegm, allergic asthma, and to dissolve and bring up excess phlegm.
- **14.Singer's throat** I came upon this use while manning my herb booth at music festivals (a tip of the hat to GrassRoots Festival). Singers would sometimes come by with what is sometimes called Preacher's throat, and various other appellations, which is basically a sore throat from one working their voice hard. Chewing the root of osha is an admirable antidote to this troubling affliction, and using a tincture spray is also helpful.

## **Applications**- the quick review

- 1) **Antiallergy** Use root tincture or chew during histamine flare-ups such as hives or non-life threatening allergic reactions. Results should be seen soon after administration.
- 2) **Anticatarrhal**-Helps bring up phlegm in the sinuses and throat
- 3) **Antimicrobial**-Useful for a number of microorganisms such as bacteria and viruses.

- 4) **Antivenomous**-One of the best herbs to repel the actions of venomous bites and stings. Use liberally. Take internally and apply externally.
- 5) **Antiviral**-For sore throats from the flu; most preparations are helpful
- 6) **Constitutional tonic-**For kaphic-type persons with a tendency for cold, damp, boggy and stagnant conditions
- 7) **Expectorant**-Helps bring up (especially copious thick) mucous
- 8) High-altitude sickness- Chew small pieces for altitude sickness
- 9) **Protective/Talismanic** Hang a piece around the neck or first aid area for protection
- 10) **Singer's throat** Beneficial for singers' throats that are hurt from use. Chewing a small piece of root and. alternate with licorice.

**Constitutional types**-(see constitutional types in beginning of chapter)

- **★** Best suited for Type 3
- → **Type 1-Vata**. Thin, catabolic, airy, exomorphic.

Osha is generally not best suited for this type of constitution, though it seems they are either entranced or repelled by its strong, pungent flavor. Its protective quality may be important for vata types, as they are easily dislodged of their mind-frame in emergency first aid situations, and osha helps counteract this tendency by its smell and whatever property it is that makes it so.

In general it should be used sparingly for this type of constitution as it is a bit pushy, just watch the grimace to its tang.

- → **Type 2-Pitta**. Medium, muscular, type A, inflammation, mesomorph Osha is useful here; Pitta-types can easily endure its flavorful nature and its heating qualities, though it is not as specific for them as Type 3. Medium amount of the medicines may work well here.
- → Type 3-Kapha. Heavy, anabolic, sluggish, endomorph, Here is where osha can have its greatest constitutional affect. While all doshas can benefit from its many qualities, Type 3'ers can gain the most from its ability to warm and purge. The dosage is strongest here as well as there is a general tolerance to this plant. This medicine is a constitutional tonic here, to help clear kapha type disorders.

#### **Overall Constitutional Review**

➤ This plant is best-suited for type 3, kaphic body and disharmony types. Osha's actions of warming, heating and dispersing (breaking up stagnation) are the hallmark of Type 3. Or for symptom patterns that exhibit this such as copious amounts mucous, and true lethargy (rather than anxious tiredness).

- ➤ It can be given to all three types, though in modulated amounts, for most of the reasons suggested, especially altitude sickness, venoms, and as a talisman.
- ➤ Its antimicrobial ability can be useful for anyone, but its pungency should be tempered with other modifying herbs as pertains to the body type.

## Key attributes to look for in the person or disorder

- ➤ Heavy, thick, cloying, copious mucous
- ➤ Anabolic body type-gain and hold weight easily
- > Tendency for retention of water and mucous
- ➤ Disturbances tend to stagnate; to be fixed in place and while the symptoms may not be acute, they are hard to dislodge.

#### **Dosage Instructions**

- 1. The dosage of Ligusticum is variable, as people have a range of reactions to its flavor and substance (see notes). For acute ailments, start with a one-drop dosage to check usefulness
- 2. Dosage for allergies and other immediate symptoms from  $\frac{1}{2}$  1 ml, as often as needed
- 3. For acute problems, such as venenous bites, large doses are useful, somewhere around 2 mls. every 20 minutes initially.
- 4. As a tonic; small, regular dosages

#### Combines well with:

1. Armoracia4. Echinacea7. Glycyrrhiza2. Baptisia5. Ephedra8. Hydrastis3. Berberis6. Euphrasia9. Many others

**Toxicity**- Ligusticum has no obvious toxicity that is I have not seen poisonous effects from usage. However it is strong acting and tasting, and I would recommend discreet amounts of it initially and gauge the user's reactions and reactivity.

**Region**: Ligusticum porteri grows in the Rocky Mountains between 5,500 and 10,500 feet. It generally grows in patches and is becoming scarcer due to wildcrafting and habitat depletion. One Ligusticum species-L. canadense-grows in the Southeastern U.S; the other species mainly grow in the Rockies and the Northwest

**Cultivation**- This species has not yet been commercially cultivated though there are some attempts currently underway. This means that all sold material is wildcrafted. If you live in the 'osha zone' perhaps you can be one of the first to successfully cultivate osha, thanks.

#### **Further Notes**

Get out there and gather this sublime plant. Figure out a time you can get to the Rockies in Autumn (see Wildcrafting above). Plan to spend a few days enjoying the surrounding beauty, spend a day or three in the gathering patch, prepare your fresh medicines there, and take in all that is osha.

This is a boffo first aid medicine. With a little caution, begin applying it to some of the circumstances mentioned above. Make up a few of your own. You may come to start wearing or carrying this exalted plant upon your person soon enough.

#### **Story Time**

**Story 1** This one is esoteric. One of my students had a one year old necrotizing spider bite that still hurt and seemed to be getting worse. After many attempted treatments that helped little, an acupuncture friend tried surrounding the bite site with needles to 'move the energy'. Unfortunately the only energy it moved was in my mind, and so on a whiff of inspiration, I pulverized some osha root and made a moxa pyramid (a form of burning plants to release local stagnation, usually using mugwort [Artemisia spp.], with either holding a burning stick of the plant near the skin or lighting a triangle of the hand-rubbed plant on the skin and sweeping it off at the last minute). I then burned a few these directly on the injured tissue, and within a few days it started to get better for the first time in a long while. Thank you Ligusticum.

## Story 2

Firefighters and osha. At a Rainbow Gathering high in the Wyoming Rockies, a huge forest fire began. There were many fires that year in that region due to low precipitation. Reasons were postulated as to the fires origins, but all I can tell you it was scary. So, the largest bucket brigade I have ever seen was formed and water was carried to the more incendiary areas, and people of all Rainbow stripes (as well as forest service planes, dropping fire-extinguishing bombs) worked to bring the flames under control. When the fire was finally subdued, we had a lot of people with smoke inhalation combined with the altitude of over 9,000 feet. Not a good combination, especially for those unaccustomed to these heights. And for those hacking ass-dragging heroes who helped douse the flames, we gave out lots of pieces of osha root in which to chew. And true to form, the osha helped many of those afflicted considerably and quickly.