

Credit: Jennifer Ackerfield July 2021

Botanical Name: *Ligusticum porteri (True Osha)*

Family Name: Apiaceae

This group of plants is commonly referred to as the carrot family. Their variety is wildly diverse and includes many well known foods such as celery and parsley. It also includes several strong medicines like those found in the Angelica genus and Gotu Kola (*Centella asiatica*). The Apiaceae family includes various poisonous plants like Hemlock (*Conium maculatum*) and Cowbane (*Cicuta virosa*).

The genus name *Ligusticum* refers to the Liguria region of Italy, where a distant cousin of Osha, Lovage (*Lovisticum officinale*), is native (Mirjalili & Javanmardi, 2006,

438-452). The species *porteri* was named in honor of the Colorado botanist, Thomas Conrad Porter, who studied and took many samples of the plant in 1873 (Colorado State University Extension, n.d.).

Common Name(s):
Bear Root, Porter's Lovage, Indian Parsley, Colorado Coughroot (Salmón, 2020, 150), Love Root, Porter's Licorice Root (Wilson, n.d.), Snake Root (Redish & Lewis, 2009)

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Mexica
Chirica
2011,
Ute: *kv*
Lakota
Zuni: *K*
Tohono

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Indigenous Stories:
Osha has deep roots in Native Nations, where it is known as bear medicine. There are numerous accounts of its use among the Apache, Pueblo, Navajo, Zuni, White Mountain Apache, Southern Ute, Lakota, Tarahumara, and Zuni people. This is medicine that harne ous
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BOTANICAL INFORMATION

Where does it grow?
Osha typically grow
and is found in the
Utah, Colorado, ar
altitudes and can
forests. (Salmón, 2

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Identification:
Osha shares comr
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roots.
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Closely Related Plants:
Szechwan Lovage *(Ligusticum chuanxiong, L. waillichi, L. striatum)*
Gray's Lovage (Ligusticum grayi)

HERBAL USAGE

Parts Used:
Roots, Leaves. Typically wild-harvested

Energetics/Tas
Pungent, warı

Physiological
Carminative, A
Insecticide, La

Indications:
Bloating/gas, a
headache. Respira

Indigenous Common Use:
Arapahoe: Mes
(Tierra, 19

Lakota: In
(National

Tarahuma
smelled c
pneumon
poisonous

Chiricah
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Zuni: Us
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Apache:

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Arapahoe and P
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Rarámuri:
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Yuki and Paiu

Zuni: C &
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Current Clinical Herbalist Usage:
Commonly used as single tinctures and cough syrups for respiratory complaints and immune support.

Mainstream Use/Preparations:
Tea, tincture, liniment, ointments, lotion

Folk Preparation:
Osha
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Dosage:
Tea- 1-2ts
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(All clinical information here is prioritized in human trials, then *in vivo* research)

Pharmacology and Constituents:

Monoterpenes:
Often having
found as esse
proinflammat
inhibit virus re

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Alkylphthalid
A bioactive co
levels by inhib

Alkylbenzene:

These arc
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Table below shows the constituents most prominent in L. porteri.

All constituents are found in the roots			
Antiflammatory			
Antifungal			
Antiviral			
Insecticide		x	
Antioxidant		x	x
Antimicrobial		x	
Antibacterial			
Analgesic			
Antiproliferative			
Antihypoglycemic			
Sedative			

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ENVIRONMENTAL/SUSTAINABILITY AWARENESS

Osha is on the United Plant Savers “Species at Risk list”. It is currently listed as “At Risk” with an overall scoring of 48 out of 75. 75 being the highest level of endangerment and susceptibility to overharvesting a species can be designated by the organization.

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REFERENCES

Brindis, F., Rodríguez, R., Bye, R., González-Andrade, M., & Mata, R. (2011).

(Z)-3-butylidenephthalide from Ligusticum porteri , an α-glucosidase inhibitor.

Journal of Natural Products, *74*(3), 314-320. 10.1021/np100447a

Brown, M., & Miller, E. (n.d.). *ANALYSIS OF SOUTHWESTERN COLORADO*

LIGUSTICUM PORTERI BY GAS CHROMATOGRAPHY – MASS