

Licorice Fern

Latin Name:

Polypodium Glycyrrhiza

(From Greek: poly: many; pod, pou: foot; and glukus: sweet; rhiza: root)

Related species: Polypodium Vulgare; var. P. occidentale (note: P. vulgare seems often confused with or id'd as P. glycyrrhiza: Pojar says aka, others say related)



Family name: Polypodiaceae

Some Native American names: Cowlitz: k'lwe.'lk; Klallam: kla'sip; Makah: xexi't, "crawling root on trees"; Quinault: tsumana'amats; Snohomish: kletcai (Gunther) Lushootseed: sq'ic'uh'y

Description: A "fern of the deep woods" (marin.cc); an epiphyte (not parasitic, but uses other plants for support); A small, (up to 12 inches) "delicate, fog-forest Fern" (Moore), feather like, fan shaped on two sides of a common axis. Often only one or two fronds grow from a creeping rhizome, usually 6 inches to a foot long, found hidden among the mosses growing on mostly deciduous tree trunks, logs, rocks, even cabin roofs. One third of height is naked stalk, and on upper two thirds grows small lanceolate pinnae, (leaves shaped like a lance); 10-20 offset pairs, toothed, pointed and diminishing in length towards the top, forming a pyramid shape. When the rhizome is scraped clean of the brown scaly fuzz and outer layer, it is translucent green, soft and fleshy, and has a sweet and distinctly licorice taste. (P. vulgare is said to have an "unpleasant, gagging aftertaste, and is much less elegant" (Moore)). Considered evergreen (Pojar), though where rainfall is low, goes dormant in summer (oakpoint).

Habitat: Moist, temperate Rain Forests of Pacific Coast, especially coastal and river fogs; low elevations; prefers moss covered anything, especially Big Leaf Maples and Alders.



Ecological relationships: Licorice Fern helps stabilize forest canopy soil and substrate with network of rhizomes, supporting place for mosses and lichens to grow; food for herbivorous insects (academic.evergreen)

Propogation: Wind blown spore sacs – sori – oval to round, 1 row on either side of main vein on underside of leaves; lacking indusium (membrane enclosing spores).



Harvest: In autumn gather rhizomes: Follow stem to rhizome usually buried in moss, follow along and gently lift up from wherever it's growing. Don't take everything, only as needed, and be nice...sing a song, go from tree to tree rather than clearing all off one tree; careful not to strip off all moss in the process, push back once rhizome has been released/broken off. Scrape off fuzz, cut while still moist, and dry.

Properties: Steroidal glycosides; polypodine B; polypodoside A; (+) catechin; (+) afzelechin; steroid saponin; osladin; No glycyrrhizic acid (sweet and pred. bioactive compound in licorice (glycyrrhiza glabra); may contain salicylates (Moore); Osladin is a steroidal compound 3000 times sweeter than sucrose (ubcbotanical).

Western uses: Licorice Fern is not cited as a medicinal herb in most western herbals. According to Moore: Decreases inflammatory effects of mild, allergy induced irritations (mild hives, bee stings, sore lungs, hemorrhoids); best for lung irritations, stomach and colon irritability, inflamed throat, mouth and gums; has helped with cervix and prostate irritability, especially if inflammatory response continues after other treatments; has no side effects, does not aggravate sodium retention; HOWEVER: lacking info, avoid during pregnancy, and due to possible salicylate constituents, caution is called for if have aspirin allergy, taking anticoagulants, or have clotting disorder. Fresh root can cause nausea.

An alternative to antihistamines (ucsc.edu)

Native uses: According to Gunther: Rhizome is roasted by the Makah, peeled, chewed and the juice swallowed for coughs; Cowlitz crush the rhizome, mix it with young fir needles, boil it, and drink the infusion for measles; the Quinault either bake the root on coals or use it raw as a cough medicine.

Chewed for flavour and used as medicine for colds and sore throats; also used with bitter medicine as a sweetener (Pojar).

Method: Strong Decoction from rhizomes, 2-4 ozs, up to 3x daily (Moore); make Licorice syrup by adding honey to the decoction (Tierra).

Personal Experience:

In spring, nibbling on a bit of fresh root, I have felt warmth begin to travel through my body; also have felt relief from thirst, nibbling having activated my saliva glands.

Finding so little recorded use of Licorice Fern, I chose to adopt the Licorice Syrup recipe in the Kid's Herb Book. It is hard to know how similar *P. glycyrrhiza* is to *Glycyrrhiza glabra* (licorice root), however, both have been mentioned as being useful for colds, coughs and sore throats.

I harvested Licorice Fern rhizomes from dense moist woods near the coastal waters of the Puget Sound region, in particular, the woods near Evergreen campus. I only took enough to make a small amount of strong decoction: chopped and dried I had about 1/3 cup. I simmered this in 1 & 1/2 cups of water for 1/2 an hour, and when it was nearly cooled I added 2 Tablespoons raw honey. It tastes delicious, but until I know someone who actually has a sore throat to test it on, I cannot say as to its efficacy.



Works Cited

Pojar, Jim, and MacKinnon, Andy. Plants of the Pacific Northwest Coast. B.C., Canada: BC Ministry of Forests and Lone Pine Publishing, 1994.

Moore, Michael. Medicinal Plants of the Pacific West. Santa Fe, New Mexico: Red Crane Books, 1993

Gunther, Erna. Ethnobotany of Western Washington. 1945. Seattle and London: University of Washington Press, 1970.

Tierra, Lesley. A Kids Herb Book. Bandon, Or.: Robert D. Reed Publishers, 2000.

<http://academic.evergreen.edu/n/nadkarnn/trf/fernadv.htm>

<http://www.ubcbotanicalgarden.org/education/polypodium.php>

<http://www.lushootseed.net/plants.htm>

<http://www.marin.cc.ca.us/cnps/Fernstudykit.html>

<http://oakpointnursery.com>