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WILD CHERRY

Prunus serotina

Common Name	Wild cherry, black cherry, American cherry
Family	Roseaceae
TCM Name	N/A
Ayurvedic Name	N/A
Parts Used	Bark (from both root and branches)
Native To	Eastern and Central North America

Geographic Distribution

Eastern and Central North America, southwestern United States, Europe

Botanical Description

This tree grows to a height of 100 feet with a trunk that may be 4 feet in diameter (Lust, 1974). The bark is dark gray to black and on large trees is rough, peeling off in flakes that are described as “burnt potato chips”. The bark on smaller branches and young trees is dark, smooth, and shiny with horizontal lentils (Thayer, 2010). Fresh wild cherry wood, scraped inner bark, or a snapped twig all have a characteristic almond odor due to cyanogenic glycosides. The finely serrated, lanceolate green leaves are approximately 5 inches long with pointed tips. The white flowers, which bloom in May, are arranged on long terminal racemes, while the dark purple, pea-sized fruits, which ripen in August and September, are arranged in drupes (Grieve, 1931).



Key Constituents

Cyanogenic glycosides (prunasin and amygdalin), flavonoids, benzaldehyde, volatile oils, plant acids, tannins,

THE HERBARIUM

calcium, potassium, and iron (Hoffmann, 2003; Holmes, 1997; Piorier, 2013).

Sustainability Issues

None known. Invasive in Europe.

Harvesting Guidelines

The inner bark of the branches or root is harvested in the midsummer or fall (when the cyanogenic compounds are lower) and dried immediately for later use in a tea or extracted in a syrup or tincture. One can harvest branches of smaller trees and use a knife or vegetable peeler to peel off the thin outer and inner bark, as opposed to harming a larger tree by taking the bark off its trunk. The fermented bark and leaves of wild cherry are said to be toxic, so never harvest these from the ground. Once harvested, peel and dry bark immediately in a food dehydrator to ensure fermentation does not begin.

Uses

Wild cherry is a large tree in the rose family (Roseaceae). It is native to eastern and central North America and has expanded its range to the southwestern United States. It grows in hardwood forests and fields and along roadsides and fencerows, preferring rich, well-drained sandy loam (Thayer, 2010). It should be noted that chokecherry (*Prunus virginiana*) is sometimes confused with wild cherry, and while they are both members of the rose family and have some similar medicinal actions, they are not the same tree. This monograph focuses on wild cherry (*Prunus serotina*).

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THE HERBARIUM

and inner bark, as opposed to harming a larger tree by taking the bark off its trunk. The fermented bark and leaves of wild cherry are said to be toxic, so never harvest these from the ground. Once harvested, peel and dry bark immediately in a food dehydrator to ensure fermentation does not begin. Wild cherry bark tea and syrup are often prepared as a cold infusion of dried bark and water, although some herbalists decoct or boil the dried bark, or tincture it fresh or dried. It's worth researching the options and experimenting to determine which preparation method is most effective for you.

The active constituents in wild cherry include cyanogenic glycosides (prunasin and amygdalin), flavonoids, benzaldehyde, volatile oils, plant acids, tannins, calcium, potassium, and iron (Hoffmann, 2003; Holmes, 1997; Piorier, 2013).

Energetically, wild cherry is both cooling and warming as well as drying, with a sweet, bitter, and pungent taste. As a member of the rose family, wild cherry is an ally for the heart and sacral chakras, as it is sweet, loving, nurturing, and sensual. It helps open the heart, making space to lovingly communicate with and receive from others.

Wild cherry is indicated for an "excited tissue state" (Wood, 2008), meaning heat, redness, inflammation, and tenderness. Wild cherry is considered a general restorative in the case of chronic illness such as bronchitis or during convalescence from illness. As Peter Holmes explains, "wild cherry can speed recovery by recouping lost forces, strengthening the heart, kindling the appetite, and clearing any remaining heat in the skin" (Holmes, 1997).

Wild cherry has expectorant, antitussive, astringent, antispasmodic, anti-inflammatory, bitter, and nervine actions. Native American tribes used wild cherry for a variety of ailments. The Cherokee used it for coughs, colds, fevers, indigestion, to ease labor pains, as a blood tonic, and as an astringent wash for sores and ulcers. The Chippewa use it to expel worms, disinfect and dress burns, cuts, wounds, and ulcers, and treat cholera and tuberculosis. The Delaware used it for diarrhea, coughs, and as a tonic for general debility. The Iroquois used it for coughs, colds, fevers, headaches, bronchitis, lung inflammation, sore throats, blood purification, sores caused by "bad blood", and burns. The Ojibwa used it for chest pain and soreness (Moerman, 1998).

Wild cherry's popular use is as a remedy for coughs and for opening the lower respiratory system. Its sedative action is helpful for easing the cough reflex and calming irritating coughs (Hoffmann, 2003). It is a great remedy for respiratory infections when there is a lot of mucus, coughing, and constricted airways that making breathing



THE HERBARIUM

difficult. Due to its astringent, sedative, antispasmodic, and bronchodilator actions, it dries mucus, increases expectoration, eases coughing, and opens the airways. As Matthew Wood (2008) explains, “by soothing the respiratory apparatus it increases expectoration.” It is especially helpful for coughs that make it difficult to sleep through the night, and is nice in a cough syrup for this purpose. It can be used in the case of bronchitis, whooping cough, and croup. It is also helpful for relieving unproductive, irritating coughs that linger after an infection is over (Piorier, 2013). Its cooling and anti-inflammatory action is helpful for inflammatory conditions such as acute and chronic sinus inflammation and allergies. As a bronchodilator, it also helps relieve asthma, and “is appropriate for use in combination with other herbs to control asthma” (Hoffmann, 2003).

Not surprising for a member of the rose family, wild cherry is also a nourishing, tonifying, and strengthening remedy for the heart, also alleviating cardiac irregularities and palpitations. Herbalist Matthew Wood declares that “Wild Cherry is the American Indian version of Crataegus (Hawthorn), which is also a member of the Prunaceae family used in heart and digestive problems.” Wild cherry’s nervine, sedative action helps slow circulation and heart rate, relieving palpitations and arrhythmia. By repairing irritation in the capillaries, the anti-inflammatory flavonoids in wild cherry eliminate circulatory congestion and heat, redness, tenderness, and rapid heartbeat; together with cyanogens, which reduce cellular heat, flavonoids exert a noticeable cooling effect (Wood, 2008). This temperature regulation action can also be helpful in the case of fever. Wild cherry has a dual nature in that it can also be warming to those with cold skin and poor circulation to the extremities (Wood, 2008).

Wild cherry is also a remedy for digestive upset thanks to its antispasmodic action, ability to soothe irritated mucosal tissues, and its digestion-stimulating bitter taste. Herbalist Matthew Wood emphasizes its action on the small intestine, explaining, “it acts as a sedative in cases where there are food sensitivities and as a bitter where there is lack of secretion” and indicates wild cherry for digestive conditions related to nervous irritation of the stomach and intestines, indigestion, and diarrhea (Wood, 2008). Its sedative, anti-inflammatory, and astringent actions are helpful with these conditions as well, calming the digestive tract, reducing inflammation and irritation, and reducing water volume in stool.

The cooling and anti-inflammatory action of wild cherry also recommends it as an external wash for sores, ulcers, herpes, and shingles.

Scientific studies indicate wild cherry bark exhibits anti-proliferative activity in human colorectal, pancreatic, prostate, and breast cancer cells by modulating nonsteroidal anti-inflammatory drug activated gene-1 (NAG-1) (Yamaguchi et al., 2006; Yang et al., 2014). Another scientific study shows that wild cherry exhibits antibacterial action, inhibiting growth of *Neisseria gonorrhoeae* (Ng) isolates (Cybulska et al., 2011).

References

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THE HERBARIUM

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Adult Dose

Tincture: 1-2 ml (1:5 in 40%) 3x per day*

Hot Decoction: 1 teaspoon dried bark per cup boiling water, simmer 10-15 minutes, 3x per day*

Cold Infusion: To prepare a cold infusion, add 1 ounce of bark to 2 cups of cold water and let stand a few hours. Take 1 to 4 fluid ounces, 4 or 5x per day**

Dosage information from *Medical Herbalism by David Hoffmann and **King's American Dispensatory by H.W. Felter and J.U. Lloyd

Safety

The fermented bark and leaves of wild cherry are toxic, so never harvest these from the ground. Once harvested, peel and dry bark immediately in a food dehydrator to ensure fermentation does not begin. David Hoffmann (2003) states "theoretically, large doses of wild cherry bark are toxic," presumably due to the cyanogenic glycosides, which are metabolized into hydrocyanic acid (cyanide). Cyanogenic glycosides are present in many rose family plants, including apple seeds, peach pits, hawthorn seeds, and cherry bark, however, the body is able to readily detoxify low levels of hydrocyanic acid and thus wild cherry can be used safely, even in children (Piorier, 2013).

Ways to Use



Cold infusion



Decoction



Tincture



Syrup

Actions

Expectorant Antitussive Astringent Antispasmodic
Anti-inflammatory Cardiotonic Bitter Nervine
Sedative

Taste

Bitter Slightly sweet Pungent

Energy

Cooling Drying

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Scientific Research (*active links and the full list of research available in The Herbarium*)

Anti-proliferative effect of horehound leaf and wild cherry bark extracts on human colorectal cancer cells.

Comparison of kinetic and molecular properties of two forms of amygdalin hydrolase from black cherry (*Prunus serotina* Ehrh.) seeds.

Development of the Potential for Cyanogenesis in Maturing Black Cherry (*Prunus serotina* Ehrh.) Fruits.

Evaluation of the hydroxynitrile lyase activity in cell cultures of capulin (*Prunus serotina*).

Extracts of Canadian first nations medicinal plants, used as natural products, inhibit neisseria gonorrhoeae isolates with different antibiotic resistance profiles.

Flavonoids from *Prunus serotina* Ehrh.

High-performance liquid chromatographic identification of flavonoid monoglycosides from *Prunus serotina* ehrh.

Identification of monomeric and polymeric 5,7,3'4'-tetrahydroxyflavan-3,4-diol from tannin extract of wild cherry bark USP, *Prunus serotina* Erhart, family Rosaceae.

Immunocytochemical Localization of Mandelonitrile Lyase in Mature Black Cherry (*Prunus serotina* Ehrh.) Seeds.

Articles on the HANE Blog

Where to Buy

Dried root from Mountain Rose Herbs

Dried root from Amazon

The Herbarium is a wonderful resource for any herbalist or herbal enthusiast!

It consists of an ever-growing database including detailed medicinal uses of each plant, beautiful images and botanical prints, quick facts, and scientific research and articles for further reading. By combining traditional herbal wisdom, hands-on experience, and modern scientific research, the monograph collection includes some of the most complete information to date.

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